

Phase II Environmental Site Assessment

**South CRANDIC
Parcel #1008102002
Coralville, Johnson County, Iowa
ACRES ID No. 133581**

September 30, 2011
Terracon Project No. 06097004L

EPA Region 7 Brownfields Assessment Grant
Cooperative Agreement # BF-98796101-0 and #BF-98796201-0

Prepared for:
City of Coralville
Coralville, Iowa

Prepared by:
Terracon Consultants, Inc.
Cedar Rapids, Iowa

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September 30, 2011



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South CRANDIC - Parcel #1008102002 – ACRES ID No. 133581
Coralville, Iowa
Cooperative Agreement # BF-98796101-0 and # BF-98796201-0
Terracon Project No. 06097004L

Dear Mr. Isaacs:

Terracon Consultants, Inc. (Terracon) is pleased to submit this Phase II Environmental Site Assessment (ESA) report for the South CRANDIC site. This assessment was conducted using United States Environmental Protection Agency - Region 7 (EPA 7) Brownfields Program funding. This property was previously approved by EPA for expenditure of grant funds. This assessment implements a Property-Specific Sampling and Analysis Checklist (Checklist) approved by EPA.

This Phase II ESA report presents and evaluates data from recent field activities including the completion of soil borings and collection of soil and groundwater samples for chemical analyses. This Phase II ESA provides information specific to the needs of the City of Coralville as part of determining redevelopment potential of the site.

Terracon appreciates this opportunity to perform these services for the City of Coralville. Please contact either of the undersigned at (319) 366-8321 if you have any questions regarding this report.

Sincerely,
Terracon Consultants, Inc.



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Phase II Assessment Coordinator



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KRJ/JWH/JFB/DEKAPR3: N:\Projects\2009\06097004L\PROJECT DOCUMENTS (Reports-Letters-Drafts to Clients)\Phase II
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ACRONYMS AND ABBREVIATIONS

ATSDR	Agency for Toxic Substances and Disease Registry
Checklist.....	Property-Specific Sampling and Analysis Checklist
ECL	enclosed
EPA.....	United States Environmental Protection Agency
EPA 7	United States Environmental Protection Agency Region 7
EQL	estimated quantitation limit
ESA	Environmental Site Assessment
ESC.....	Environmental Science Corporation
eV.....	electron-volt
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
GW	groundwater
HAL	health advisory level
IAC	Iowa Administrative Code
IARC.....	International Agency for Research on Cancer
IDNR	Iowa Department of Natural Resources
LRP	Land Recycling Program
LUST	Leaking Underground Storage Tank
MCL.....	Maximum Contaminant Level
MDL.....	method detection limit
mg/kg	milligrams per kilogram, generally equivalent to ppm
mg/L	milligrams per liter, generally equivalent to ppm
MOA.....	Memorandum of Agreement
MS.....	matrix spike
MSD	matrix spike duplicate
MTBE	methyl tert-butyl ether
NA	not applicable
PAH.....	polycyclic aromatic hydrocarbons
PB	polybutylene
PCBs.....	polychlorinated biphenyls
PE	polyethylene
PID	photoionization detector
ppm	parts per million
ppmi	parts per million isobutylene equivalents
PVC.....	polyvinyl chloride
QAPP	Quality Assurance Project Plan
QA/QC.....	Quality Assurance/Quality Control
QC.....	Quality Control
RBCA	Risk-Based Corrective Action
RCRA.....	Resource Conservation and Recovery Act
REC.....	Recognized Environmental Condition
RPD.....	Relative percent difference
SCS.....	Soil Conservation Service
SDWA	Safe Drinking Water Act
Svc	service
SVOCs	semivolatile organic compounds
TDS.....	total dissolved solids
TEH.....	total extractable hydrocarbons
TMW.....	temporary monitor wells
TSOPs.....	Terracon Standard Operating Procedures
µg/L	micrograms per liter

ACRONYMS AND ABBREVIATIONS (CONTINUED)

USDA..... United States Department of Agriculture
USGS..... United States Geological Survey
VOCs..... volatile organic compounds

**PHASE II ENVIRONMENTAL SITE ASSESSMENT
SOUTH CRANDIC
CORALVILLE, JOHNSON COUNTY, IOWA**

**EPA Region 7 Brownfields Assessment Grant
Cooperative Agreement #BF-98796101-0 #BF-98796201-0**

**Terracon Project No. 06097004L
September 30, 2011**

1.0 INTRODUCTION

1.1 Purpose

The purpose of the Iowa River Landing Revitalization Project is to promote area development and commercial activity. This Phase II ESA is part of the City of Coralville's or the City's evaluation of redevelopment feasibility. This includes construction of new infrastructure within the community. The City, in keeping with City and state policies to acquire properties through fair purchase rather than eminent domain whenever possible, seeks to purchase the South CRANDIC property or the Site in support of continuing redevelopment efforts in the City's Brownfield Zone 4 in the Old Town area. The Phase I ESA of the Site identified RECs warranting Phase II assessment as part of conducting due diligence and all appropriate inquiries.

Terracon conducted Phase II ESA field activities at the Site on August 3 and 4, 2011. The objective of the Phase II ESA was to evaluate soil and groundwater at the Site for the presence of VOCs including MTBE, SVOCs, RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver), TEH constituents and PCBs above relative reporting limits as a result of potential releases from historical activities identified by Terracon's Phase I ESA report (May 6, 2011). The Phase II ESA compared soil and groundwater conditions to statewide standards established by the IDNR under 567 IAC Chapter 137: *Iowa Land Recycling Program and Response Action Standards*, and RBCA Tier 1 Values under 567 IAC Chapter 135, *Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks*. The IDNR implements the Chapter 137 regulations through the LRP and the Chapter 135 requirements through the LUST program.

The Phase II ESA was conducted in accordance with Terracon's Checklist dated July 21, 2011, and approved by EPA 7 on August 1, 2011. Funding for the work is provided by the EPA under Cooperative Agreement No. BF-98796101-0 and BF-98796201-0.

1.2 Problem Statement

Data collected using the EPA grant funds are subject to specific QA/QC requirements. The Phase II ESA must evaluate the observed chemical concentrations relative to the primary

project decision, "Is the property environmentally impacted?" The primary project decision consists of a comparison of Site conditions to statewide standards and Tier 1 Values.

This report discusses other secondary, but important, decisions affecting feasibility for redevelopment, including the following.

- Can the property be considered feasible for "normal" redevelopment without environmental remedy?
- Can the property be reasonably considered for redevelopment if environmental remedy is required?

Iowa has established rules and programs for evaluation of environmental impairment. These include RBCA programs and the LRP. The programs overlap in some instances regarding regulation of environmental impairment and releases to soil, groundwater, and air. In certain circumstances, environmental issues overlap regulatory programs. These overlaps must be resolved for evaluation. The IDNR has indicated a preference to conduct soil and groundwater evaluations for public risk under the LRP.

1.3 Background

Since the initial Grant award in 1998, significant planning, assessment, and preparation have occurred:

- On January 18, 2010, Terracon submitted the Quality Assurance Project Plan, Revision 5 (QAPP) for the Project. This document provides a baseline for planning and implementation of Phase II ESAs and evaluation activities. The QAPP received conditional approval by the EPA and was updated by Terracon with the recommendations made by EPA.
- On July 21, 2011, Terracon submitted a Checklist for investigation at this Site for review and comments to the EPA 7. This document guides the assessment of the Site using the procedures documented in the QAPP. The Checklist was approved by EPA 7 on August 1, 2011.

1.4 Historic Environmental Reports

On May 6, 2011, Terracon completed a Phase I ESA for the property consistent with the procedures described in ASTM E1527-05. The findings of the Phase I ESA were summarized as follows:

Subject Property

- The Site is a 1.25-acre tract of land that has been improved with a vegetated area on the eastern portion, fenced-in MidAmerican Energy switch on the northwestern portion, and the Hawkeye Ready Mix concrete disposal area and truck wash-out on the southwestern portion
- During the Site reconnaissance, the eastern portion of the Site was fenced-in and vegetated, the northwestern portion of the Site was fenced-in and contained a circuit switcher and voltage transformer, the southwestern portion of the Site was used by Hawkeye Ready Mix as a concrete disposal and truck wash out area. Based on unknown dumping and disposal practices, the Hawkeye Ready Mix disposal area constituted a REC for the Site. At the time of the Phase I ESA, Terracon did not have access to the northwest fenced-in portion of the Site that was leased by MidAmerican Energy.
- Based on review of the historical information, the Site was undeveloped until at least 1950. The Site was cleared and graded prior to 1960. The Site appears to be graded with uncontrolled filling activities occurring from the 1960s to the 1990s. The Site was developed with an electrical switch prior to 1990. The unknown source and contents of fill material brought on-Site during the 1960s to 1990s constituted a REC for the Site.
- The Site was not identified as a regulated facility in the EDR report. The EDR reported three CERCLIS/NFRAP facilities, ten LUST facilities, and six Brownfield sites within the applicable search radii.

Off-Site

- The property adjacent north is currently developed with an electrical substation which was constructed on the property between 1950 and 1960. The property adjacent east is occupied by the Iowa River. The property adjacent south and west has been used by Hawkeye Ready Mix since at least 1990. Hawkeye Ready Mix is located on the adjacent west property and Ruan Leasing Co. is located 200 feet west of the Site. The historical and present general industrial use (electrical substation, ready mix plant, and trucking facility) of the surrounding properties constituted a REC for the Site.
- The Hawkeye Ready-Mix Maintenance and Ruan Leasing Co. sites have documented VOC and petroleum contamination in groundwater. Based on the

distance from the Site and the apparent topographic gradient, this finding constituted a REC for the Site.

These historic conditions established the potential for hazardous substances or petroleum impacts on the Site relative to City's all appropriate inquiries in establishing an environmental liability defense under the Small Business Relief and Brownfields Revitalization Act of 2002.

2.0 PROPERTY DESCRIPTION

The property is located in the City's Brownfield Program Zone 4, An area bounded east by the Iowa River, west by 1st Avenue and the extension of 3rd Avenue, north by 5th Street Place East and south by Clear Creek. The area is generally characterized by former heavy industrial and power-related use, current commercial occupancy and a segment west of 1st Avenue that includes inactive commercial property and former use as a municipal dump or landfill. The eastern and southern portions abutting the Iowa River and Clear Creek appear to be comprised of historically "made land", the result of extensive filling. Property along the Iowa River has been observed to contain more than ten feet of fills comprised of undifferentiated rubble and concrete demolition debris and other unknown materials. The area is engaged in flood recovery and prevention. Zone 4 received heavy damages from the flooding of the Iowa River in 2008.

Since completion of the Phase I ESA, the fence and MidAmerican Energy switch previously located in the northwestern portion of the property were removed.

2.1 Site Location

The Site location is depicted on Exhibit 1 of Appendix A, which was reproduced from a portion of the USGS 7.5-minute series topographic map. A diagram of the Site with the Phase II ESA soil boring locations is included as Exhibit 2 of Appendix A.

2.2 Natural Setting

2.2.1 Flood Plains

Terracon confirmed the location of the Site with respect to flood plains using information provided on the FEMA Map Service Center website. The information on FEMA FIRM Panel 19103C0190E indicated that the Site is located in an area described as: areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

2.2.2 Soil Conditions

According to the “1983 Soil Survey of Johnson County, Iowa” (Survey) published by the USDA SCS, native soils at the Site are anticipated to consist of the Orthents and Perks series. Orthents series soils are nearly level to strongly sloping soils. They are moderately well drained or somewhat poorly drained. The texture is loam, clay loam, silt loam, or sandy loam. Soil material is derived from loess, glacial till, or a mixture of the two. Permeability varies, depending on the texture and density. Available water capacity is high or moderate. Runoff is slow to rapid. The content of organic matter is very low.

The Perks series soils consists of deep, excessively drained, rapidly permeable soils formed in alluvium on floodplains. Slopes range from 0 to 7 percent. Runoff is slow. During parts of the year a temporary water table can be present at 3 to 6 feet. These soils are subject to flooding unless protected by levees.

2.2.3 Geologic Conditions

According to “Iowa’s Geological Past” by Wayne I. Anderson published by the University of Iowa Press, 1998, the geologic conditions of the Site consist of the Coralville formation which is part of the Middle Devonian Series of the Paleozoic era. The Coralville formation consists of a variety of carbonates (limestone and dolomite), including fossiliferous units and coral and stromatoporoid biostromes. Laminated, brecciated, and evaporitic units overlie fossiliferous limestones. Landforms are composed primarily of glacial drift or alluvial deposits.

2.2.4 Hydrogeologic Conditions

According to “Groundwater Vulnerability Regions of Iowa” Special Map Series II, prepared by Bernard E. Hoyer and George R. Hallberg and published in 1991, the assessment area is characterized by alluvial aquifers. The map describes these areas as being underlain by sand and gravel aquifers situated beneath floodplains along stream valleys and include alluvial deposits associated with stream terraces and benches, contiguous wind-blown sand deposits, and glacial outwash deposits. Natural water quality is generally excellent, with less than 500 milligrams per liter (mg/L) total dissolved solids, and yields vary with texture and thickness of alluvium up to 100 gallons per minute. Most wells in the region are very shallow, and potential for aquifer and well contamination is high.

3.0 PHASE II ESA

The property-specific sampling design was set forth in the Checklist and previously approved by EPA 7. Terracon completed the following tasks as part of the Phase II ESA:

- Advancement of five borings designated B-1 through B-5 at the locations shown on Exhibit 2 in Appendix A.
- Field screening of the borings continuously using a PID.
- Collection of soil samples from borings for laboratory analysis. Soil samples were collected from a depth of zero to two feet below ground surface (bgs) and at a deeper interval based on the field screening results and field observations.
- Installation, development and sampling of five TMWs.
- Submittal of soil and groundwater samples to ESC for analysis.
- Surveying of all on-site TMWs.
- Removal and abandonment of the TMWs.

Consistent with EPA 7-approved Checklist, groundwater samples were not analyzed for concentrations of PCBs due to their very low solubility in water.

3.1 Methodology

Terracon followed TSOPs for sampling, physical measurements, equipment cleaning, and equipment calibration. The TSOPs that accompanied the sampling team incorporate industry protocols, internal procedures, and equipment operation manuals. The EPA 7 approved Checklist specified the appropriate TSOPs for use at the Site in accordance with the approved QAPP. Terracon recorded discrepancies, clarifications, and corrective actions for QA/QC, if applicable, in the field logbook.

3.2 Deviations from the Checklist

The Checklist indicated that soil samples would be collected using four foot dual core samplers. However, due to concrete debris in borings B-1, B-2, and B-3, Terracon utilized 3 ¾-inch diameter hollow stem auger drilling and 2-inch split barrel sampling procedures. This change did not affect the project outcome and allowed for the collection of sufficient field data.

4.0 ASSESSMENT RESULTS

4.1 Physical Measurements and Field Screening

4.1.1 Soil Lithology

Detailed lithologic descriptions are presented on the soil boring logs and monitoring well construction diagrams included in Appendix C.

4.1.2 Shallow Groundwater Gradient

The water table gradient and depth to shallow groundwater are likely variable due to seasonal influences. Based on surveyed monitoring well elevations and depth-to-water measurements made at the time of groundwater sampling, groundwater flow appears to be generally to the southeast toward the Iowa River and Clear Creek. Exhibit 3 of Appendix A provides a groundwater contour map based upon water level measurements taken at the time of field activities.

4.2 Field Activities

Field activities were conducted on August 3 and 4, 2011 by Terracon environmental personnel. As part of the approved scope of work, five borings were advanced on site in accordance with the Single-Point Judgmental Design prescribed in Section B1.5.1.2 of the approved QAPP. The borings were converted to TMWs.

Exhibit 1 presents the general area and topography of the Site on portions of the USGS topographic quadrangle map of Iowa City, Iowa (Appendix A). Exhibit 2 is a diagram of the Site showing Site boundaries as well as the location of borings/TMWs. Exhibit 3 shows the locations of the TMWs and groundwater contours (Appendix A).

Drilling services were performed by a State of Iowa licensed Water Well Contactor using a track-mounted Geoprobe® rig under the supervision of Terracon environmental personnel. Soil samples were collected using four foot dual core samplers in accordance with TSOP E.400 when possible. Due to concrete debris in borings B-1, B-2, and B-3, Terracon utilized 3 ¾-inch inside diameter hollow stem augers and 2-inch diameter split barrel samplers in accordance TSOP E.320 and E.465, respectively. Drilling and sampling equipment was cleaned using an Alconox® wash and potable water prior to the beginning of the project and before collecting each soil sample. Additionally, hollow stem augers were cleaned as described above prior to performance of each of the borings.

The five soil borings were converted to TMWs. The TMWs were completed in accordance with TSOP E.700 using the following methodology:

- Installation of 10 feet of 1-inch diameter, 0.010-inch machine slotted polyvinyl chloride (PVC) screen with a threaded end cap;
- Installation of 10 to 15 feet of 1-inch diameter, threaded, flush joint PVC riser pipe to ground surface.

The TMWs were developed in accordance with TSOP E.1300 using new dedicated, disposable polyethylene bailers until groundwater was relatively free of fine-grained

sediment. Following collection of groundwater samples, monitor well screens were removed and borings were backfilled with bentonite chips in accordance with TSOP E.1500.

4.2.1 Field Screening

Terracon field-screened the soil samples for organic vapors using a Mini Rae 2000 PID in accordance with TSOP E.550. This device provides a direct reading in parts per million isobutylene equivalents (ppmi) of volatile organic vapors. The PID is a nonspecific total vapor detector and cannot be used to identify unknown substances; it can only provide a relative qualitative indicator of ionizable compounds in air.

Terracon calibrated the PID in accordance with the manufacturer's recommendations before and after the field activities with 100 ppm isobutylene. Upon removal of the sampler from the borehole, Terracon cut a portion of each sample and sealed it in a plastic soil bag. After a stabilization period, Terracon screened the headspace above the soil using the PID equipped with a 10.2 eV ultraviolet lamp. The boring logs provided in Appendix C include the field screening results for each boring.

4.2.2 Soil and Groundwater Sampling

Terracon's soil sampling program involved submitting soil samples from each soil boring for laboratory analysis. Soil samples were collected in accordance with TSOP E.468 from zero to two feet and greater than two-foot depths based on the field screening results and field observations. A duplicate soil sample was collected from soil boring B-5 at a depth between 9 and 12 feet. If elevated PID readings were not detected, soil samples were collected from the capillary fringe zone, from the interval exhibiting a change in lithology, or from the bottom of the boring, based on field personnel's judgment. Soil sample intervals for each boring are provided on the boring logs included in Appendix C.

Groundwater samples were collected from each TMW, and a duplicate sample was collected from monitoring well TMW-4. Prior to sample collection, each monitoring well was purged a minimum of five well volumes. Groundwater samples were collected using a low flow peristaltic pump and new, disposable polyethylene tubing in accordance with TSOP E.2000. Groundwater samples to be analyzed for the RCRA metals were field filtered using a 0.45-micron disposable filter.

Soil and groundwater samples were collected in accordance with TSOP E.468 and E.470, respectively and placed in laboratory prepared glassware, labeled with time and date and sample designation and placed on ice in a cooler which was secured with a custody seal. The sample coolers and completed chain-of-custody forms were relinquished to ESC analytical laboratory in Mt. Juliet, Tennessee for standard laboratory analysis.

4.3 Laboratory Measurements

The following table summarizes the chemical analysis for each soil and groundwater sample.

Table 4-1 Summary of Laboratory Measurements

Sample Location or Identification	Media	Depth Interval (feet)	VOCs	SVOCs	PCBs	RCRA Metals	Iowa OA-2
B1	Soil	0-2	X	X	X	X	X
B1	Soil	>2	X	X	X	X	X
B2	Soil	0-2	X	X	X	X	X
B2	Soil	>2	X	X	X	X	X
B3	Soil	0-2	X	X	X	X	X
B3	Soil	>2	X	X	X	X	X
B4	Soil	0-2	X	X	X	X	X
B4	Soil	>2	X	X	X	X	X
B5	Soil	0-2	X	X	X	X	X
B5	Soil	>2	X	X	X	X	X
DUP-1 (B5)	Soil	>2	X	X	X	X	X
TMW1	Groundwater	NA	X	X		X	X
TMW2	Groundwater	NA	X	X		X	X
TMW3	Groundwater	NA	X	X		X	X
TMW4	Groundwater	NA	X	X		X	X
TMW5	Groundwater	NA	X	X		X	X
DUP-1 (TMW4)	Groundwater	NA	X	X		X	X

Appendix B contains tables summarizing the laboratory analytical results. The executed chain-of-custody forms and laboratory report are provided in Appendix D.

4.3.1 Laboratory Reporting Limits and Non-Detect Values

Laboratory technology cannot detect to concentrations of zero. As defined by the EPA SW-846 analytical methods, MDLs, are defined as the lower limit to which the procedures can accurately and repeatedly "see" (i.e., distinguish from the analytical instrument background noise). The MDL is a minimum concentration of a substance that can be measured and reported with 99% confidence that the compound concentration is greater than zero. The MDL is determined from analysis within the given matrix of the sample and affected by matrix materials and/or other compounds within the matrix. EQLs are matrix-dependent and represent the minimum concentrations that can be routinely identified and measured within specified limits of precision and accuracy under normal laboratory operating conditions.

When the laboratory reports that a concentration of a chemical is “non-detect,” or lower than the EQL, it does not mean that the chemical is not present in the sample. These compounds may actually be present but at levels lower than what the laboratory can accurately measure.

Some of the compounds have extremely low primary action limits, even below the reporting capabilities of typical laboratory equipment. This is especially true for the primary action limits for groundwater. In addition, the EQLs for some of the analyses for some of the samples were elevated due to matrix interferences and other, not atypical, difficulties with the sample analyses. Assuming MDLs as indicators of chemical impact would result in the theoretical assumption of impact across the entire Site. To avoid an overly conservative approach that assumes impact above primary action limits (i.e., residential limits for soil samples, groundwater limits for water samples) for the entire Site, Terracon’s evaluation progressed in the following fashion.

1. Was a concentration for the chemical reported by the laboratory (includes J-Flagged results, i.e., estimated results greater than the MDL but less than the EQL)?
 - If no, further evaluation of the chemical was not conducted.
 - If yes, proceed to step 2.
2. Was the chemical detected above the primary action limit?
 - If no, further evaluation of the chemical was not conducted.
 - If yes, proceed to step 3.
3. Were there instances where the EQL exceeded the (primary or secondary) action limit?
 - If no, only detections above the action limit were evaluated as impacted areas.
 - If yes, the chemical was assumed present at the EQL when the EQL exceeded the action limit.

4.3.2 VOC Analyses

4.3.2.1 Background

VOCs readily evaporate to produce vapor. Many are often used as solvents in industry and manufacturing. Sampling and analysis require special care in the field and laboratory to guard against “losing” some of the materials from the soil/fill or groundwater samples before measurement takes place. The project methods provided this level of care.

The ATSDR describes VOCs as substances containing carbon and varying proportions of other elements such as hydrogen, oxygen, fluorine, chlorine, bromine, sulfur, or nitrogen. These substances easily become vapors or gases at room temperatures. A significant number of the VOCs are commonly used as solvents (paint thinners, lacquer thinner, degreasers, and dry cleaning fluids) or in petroleum hydrocarbon fuels (e.g., gasoline). Other information sources generally describe VOCs as organic compounds that evaporate easily.

When released into the atmosphere, VOCs contribute to the formation of ozone and smog, which have been linked to human health issues. In addition, VOCs can have direct adverse effects on human health. VOCs in the atmosphere come from combustible engines, industry, fuel spills, etc. Certain other fumes, such as those released from industrial plants, coating operations, and print shops, can contain significant amounts of VOCs.

Many VOCs have been classified as toxic and carcinogenic (cancer causing) and it is therefore unsafe to be exposed to these compounds in large quantities or over extended periods. Some health effects from overexposure to VOCs are dizziness, headaches, and nausea. Long-term exposure to certain VOCs, such as benzene, has also been shown to cause cancer.

4.3.2.2 Results

VOCs were not identified in shallow soil samples. Table 4-2 below summarizes the frequency of detection and maximum concentrations for each VOC identified in the deep soils samples.

Table 4-2 Summary of VOCs Detected in Deep Soil Samples

Chemical	Frequency of Detection	Maximum Detected Concentration, mg/kg	Location of Maximum Concentration
Acetone	1 of 12	0.13	B-2
Chlorobenzene	1 of 12	0.0018	B-5
p-Isopropyltoluene	1 of 12	0.0036	B-2
1,2,4-Trimethylbenzene	1 of 12	0.009	B-2
1,2,3-Trimethylbenzene	1 of 12	0.0052	B-2
1,3,5-Trimethylbenzene	1 of 12	0.0034	B-2
Xylenes, Total	1 of 12	0.0032	B-2

VOC concentrations reported for the deep soil samples from soil borings SB-2 and SB-5 were below their respective statewide standards.

Table 4-3 below summarizes the frequency of detection and maximum concentrations for each VOC identified in groundwater samples.

Table 4-3 Summary of VOCs Detected in Groundwater Samples

Chemical	Frequency of Detection	Maximum Detected Concentration, mg/L	Location of Maximum Concentration
Acetone	3 of 6	0.270	TMW-3
Benzene	5 of 6	0.0016	TMW-3, TMW-4
Chlorobenzene	1 of 6	0.00073	TMW-5
1,3-Dichlorobenzene	1 of 6	0.00051	TMW-5
Ethylbenzene	2 of 6	0.00048	TMW-2
p-Isopropyltoluene	1 of 6	0.002	TMW-1
2-Butanone (MEK)	2 of 6	0.008	TMW-3
4-Methyl-2-pentanone (MIBK)	2 of 6	0.0031	TMW-3
Naphthalene	5 of 6	0.010	TMW-1
n-Propylbenzene	2 of 6	0.00034	DUP-1
Toluene	5 of 6	0.00067	TMW-3
1,2,4-Trimethylbenzene	5 of 6	0.0025	TMW-4
1,2,3-Trimethylbenzene	4 of 6	0.0018	TMW-4, DUP-1
1,3,5-Trimethylbenzene	3 of 6	0.00058	TMW-4
Xylenes, Total	3 of 6	0.0021	TMW-2

VOC concentrations reported for the groundwater samples were below their respective statewide standards for a Protected Groundwater Source and were not therefore further evaluated with respect to statewide standards for a Non-protected Groundwater Source. Definitions of Protected and Non-protected Groundwater Sources are defined at 567 IAC 137.2. The concentrations of benzene, ethylbenzene, toluene, and total xylenes were also below Tier 1 Values.

4.3.3 SVOC Analyses

4.3.3.1 Background

SVOCs are chemicals that evaporate less readily than VOCs and are commonly found in industry in a variety of uses. Many of the compounds are also less soluble in water or other materials than are VOCs. Sampling and analyses do not require the same stringent care as for VOCs in the field and laboratory necessary to guard against vaporization of the materials from the soil/fill or groundwater samples before measurement takes place.

SVOCs, like VOCs, are organic compounds containing carbon, hydrogen, and oxygen, and varying proportions of other elements such as, fluorine, chlorine, bromine, sulfur, or nitrogen.

A common group of SVOCs is PAHs. The ATSDR describes PAHs as a group of over 100 different chemicals, some of which are formed during the incomplete burning of coal, oil and

gas, garbage, or other organic substances like tobacco or charbroiled meat. PAHs are usually found as a mixture containing two or more of these compounds, such as in soot.

Some PAHs are manufactured. These pure PAHs usually exist as colorless, white, or pale yellow-green solids. PAHs are found in coal tar, crude oil, creosote, and roofing tar, but a few are used in medicines or to make dyes, plastics, and pesticides.

Animal studies have shown that PAHs can cause harmful effects on the skin, body fluids, and ability to fight disease after both short- and long-term exposure. These effects, however, have not been seen in people. Some PAHs have caused cancer in laboratory animals when breathed, ingested in food, or applied to their skin. Both the EPA and the IARC have determined that some PAHs are probable human carcinogens.

4.3.3.2 Results

Tables 4-4 and 4-5 below summarize the frequency of detection and maximum concentrations for each SVOC detected in the shallow and deep soil samples, respectively.

Table 4-4 Summary of SVOCs Detected in Shallow Soil Samples

Chemical	Frequency of Detection	Maximum Detected Concentration, mg/kg	Location of Maximum Concentration
Acenaphthene	1 of 5	0.057	B-3
Anthracene	1 of 5	0.15	B-3
Benzo(a)anthracene	2 of 5	0.5	B-3
Benzo(b)fluoranthene	1 of 5	0.64	B-3
Benzo(k)fluoranthene	1 of 5	0.23	B-3
Benzo(g,h,i)perylene	1 of 5	0.19	B-3
Benzo(a)pyrene	1 of 5	0.46	B-3
Chrysene	2 of 5	0.45	B-3
Dibenz(a,h)anthracene	1 of 5	0.056	B-3
Fluoranthene	3 of 5	1.3	B-3
Fluorene	1 of 5	0.048	B-3
Indeno(1,2,3-cd)pyrene	1 of 5	0.18	B-3
Naphthalene	1 of 5	0.012	B-3
Phenanthrene	2 of 5	0.71	B-3
Pyrene	2 of 5	0.88	B-3
Phenol	1 of 5	0.01	B-3
PCB 1254	1 of 5	0.01	SB-1

Of the SVOCs detected in shallow soil samples, benzo(a)pyrene was reported at a concentration above the statewide standard.

Table 4-5 Summary of SVOCs Detected in Deep Soil Samples

Chemical	Frequency of Detection	Maximum Detected Concentration, mg/kg	Location of Maximum Concentration
Anthracene	1 of 7	0.012	B-1
Benzo(a)anthracene	3 of 7	0.0099	B-1
Benzo(a)pyrene	1 of 7	0.0059	B-3
Chrysene	2 of 7	0.011	B-1
Fluoranthene	2 of 7	0.019	B-1
Naphthalene	2 of 7	0.014	B-1
Phenanthrene	2 of 7	0.021	B-1
Bis(2-ethylhexyl)phthalate	1 of 7	0.012	B-1
Pyrene	2 of 7	0.02	B-1
Phenol	1 of 7	0.01	B-3
PCB 1254	1 of 7	0.01	B-1

SVOCs detected in deep soil samples were reported at concentrations below the statewide standards.

Table 4-6 below summarizes the frequency of detection and maximum concentrations for each SVOC identified in groundwater samples.

Table 4-6 Summary of SVOCs Detected in Groundwater Samples

Chemical	Frequency of Detection	Maximum Detected Concentration, mg/L	Location of Maximum Concentration
Acenaphthene	3 of 6	0.0011	TMW-4
Bis(2-chloroethyl)ether	1 of 6	0.00047	TMW-2
Naphthalene	4 of 6	0.0059	TMW-1
Phenanthrene	1 of 6	0.00064	TMW-2
Pentachlorophenol	2 of 6	0.018	TMW-3
Phenol	5 of 6	0.026	TMW-1

Bis(2-chloroethyl)ether and pentachlorophenol were reported at concentrations above their respective statewide standards for a Protected Groundwater Source but below their respective statewide standards for a Non-protected Groundwater Source. The balance of the VOCs detected in the groundwater samples were reported at concentrations below their respective statewide standards.

4.3.4 Total Extractable Hydrocarbons

4.3.4.1 Background

According to the ASTDR, total petroleum hydrocarbon is defined as the measurable amount of petroleum-based hydrocarbon in an environmental media. Petroleum hydrocarbon is widely used to refer to the hydrogen- and carbon-containing compounds originating from

crude oil, but petroleum hydrocarbons should be distinguished from total petroleum hydrocarbons, which refer to specific environmental sampling and analytical results. This Phase II ESA analyzed petroleum hydrocarbons using Iowa Method OA2 for total extractable hydrocarbons. TEH constituents include gasoline, diesel, and oil range organics.

Despite the large number of hydrocarbons found in petroleum products and the widespread nature of petroleum use and contamination, only a relatively small number of the compounds are well characterized for toxicity. Systemic and carcinogenic effects are known to be associated with petroleum hydrocarbons, but the ATSDR does not develop health guidance values for carcinogenic end points.¹

4.3.4.2 Results

Tables 4-7 and 4-8 below summarize the frequency of detection and maximum concentrations for TEHs identified in the shallow and deep soils samples.

Table 4-7 Summary of TEH Detected in Shallow Soil Samples

Chemical	Frequency of Detection	Maximum Detected Concentration, mg/kg	Location of Maximum Concentration
Gasoline Range	3 of 5	11	B-4
Diesel Range	3 of 5	7.8	B-1
Oil Range	3 of 5	72	B-1

Table 4-8 Summary of TEH Detected in Deep Soil Samples

Chemical	Frequency of Detection	Maximum Detected Concentration, mg/kg	Location of Maximum Concentration
Gasoline Range	1 of 7	6.8	B-3
Diesel Range	2 of 7	16	B-2
Oil Range	3 of 7	390	B-1

Reported concentrations of diesel range organics in both shallow and deep soil samples were below Tier 1 Values. Tier 1 Values have not been established for gasoline and oil range organics in soils.

Table 4-9 below summarizes the frequency of detection and maximum concentrations for TEHs identified in groundwater samples.

Table 4-9 Summary of TEH Detected in Groundwater Samples

Chemical	Frequency of Detection	Maximum Detected Concentration, mg/kg	Location of Maximum Concentration
Diesel Range	5 of 6	0.22	TMW-4
Oil Range	1 of 6	0.099	TMW-1

¹ Overview of Total Petroleum Hydrocarbons: <http://www.atsdr.cdc.gov/toxprofiles/tp123-c2.pdf>

Reported concentrations of diesel range and oil range organics in groundwater were below Tier 1 Values. Gasoline range organics were not identified in groundwater samples.

4.3.5 Inorganic Analyses

4.3.5.1 Background

Inorganics are generally considered reasonably stable, non-hydrocarbon based chemicals of concern, typically elemental metals. This is not to say that some metals do not have other properties of volatilization or solubility (e.g., mercury, lead).

Metals occur naturally, but can also result from activities related to our lifestyles (e.g., automobile exhaust, industrial activity, etc.). Heavy metals are generally the greatest concern because even low doses can be toxic. Municipal and industrial wastes and air emissions are the main sources. Heavy metals include mercury, lead, and cadmium. In most cases, we are exposed to these metals from the air and the food we eat, however, they can also be inhaled as dust particulates in the air we breathe or absorbed through the skin.

This assessment evaluated the eight metals addressed by RCRA. These metals can cause a variety of health effects, including neurologic damage, gastrointestinal disturbances, muscular weakness, kidney, liver, bone, and blood damage, and other ill effects.

4.3.5.2 Results

Tables 4-10 and 4-11 below summarize the frequency of detection and maximum concentrations for each metal identified in the shallow and deep soil samples.

Table 4-10 Summary of RCRA Metals Detected in Shallow Soil Samples

Chemical	Frequency of Detection	Maximum Detected Concentration, mg/kg	Location of Maximum Concentration
Mercury	5 of 5	0.11	B-1
Arsenic	1 of 5	1.7	B-5
Barium	5 of 5	110.0	B-5
Cadmium	5 of 5	0.24	B-5
Chromium	5 of 5	13.0	B-3
Lead	5 of 5	21.0	B-1

Table 4-11 Summary of RCRA Metals Detected in Deep Soil Samples

Chemical	Frequency of Detection	Maximum Detected Concentration, mg/kg	Location of Maximum Concentration
Mercury	7 of 7	0.37	B-1
Arsenic	5 of 7	5.8	Dup (B-5)
Barium	7 of 7	150	Dup (B-5)
Cadmium	7 of 7	1.0	B-1
Chromium	7 of 7	16	B-1, B-3, Dup (B-5)
Lead	7 of 7	28	B-1
Silver	5 of 7	0.91	B-1

RCRA metals were identified in both shallow and deep soil samples at reported concentrations below statewide standards.

Table 4-12 below summarizes the frequency of detection and maximum concentrations for each metal identified in groundwater samples.

Table 4-12 Summary of RCRA Metals Detected in Groundwater Samples

Chemical	Frequency of Detection	Maximum Detected Concentration, mg/L	Location of Maximum Concentration
Mercury	3 of 6	0.0027	TMW-1
Arsenic	6 of 6	0.035	TMW-4
Barium	6 of 6	0.44	TMW-1
Chromium	1 of 6	0.002	TMW-1
Lead	6 of 6	0.037	TMW-1
Selenium	6 of 6	0.047	TMW-2

With the exception of arsenic and lead, dissolved RCRA metals identified in groundwater samples were below statewide standards. With respect to arsenic, reported concentrations for TMW-1, TMW-3 and TMW-4 exceeded the statewide standard for a Protected Groundwater Source but were below the statewide standard for a Non-protected Groundwater Source. The lead concentration in the groundwater sample collected from TMW-1 exceeded the statewide standard for a Protected Groundwater Source but was below the statewide standard for a Non-protected Groundwater Source.

5.0 FIELD DATA QUALITY

To assess whether quality assurance (QA) objectives for this Phase II ESA have been achieved, the following QA parameters were considered: precision, accuracy, representativeness, comparability, completeness, and sensitivity.

5.1 Field Audit

In accordance with the QAPP, a field methods audit was performed at random and unannounced during the field services. The field methods audit was performed on August 3, 2011. The field methods audit resulted in one completed Form C.12 (Quality Control Field Audit Corrective Action Report). The field audit did not indicate deviations from the TSOPs included in the Checklist, except that drilling with hollow stem augers and split-barrel samplers in accordance with TSOP E.320 and TSOP E.465 became necessary due to debris encountered in the subsurface. A copy of the completed Form C.12 is attached in Appendix E.

5.2 Precision and Accuracy

As described in Section A7.2.1.1 of the QAPP, technical precision for target analytes will rely on laboratory demonstrations of precision using laboratory MS/MSD analyses. MS/MSD analyses will be in accordance with laboratory specific standard operating procedures. Matrix precision is evaluated using the RPD between an actual sample and a duplicate sample. Accuracy is evaluated using a measured value in a known sample to the actual value of the known sample, such as the percent recovery of a spiked sample. Laboratory accuracy controls were documented in accordance with the laboratory's internal QA Manual, and the laboratory followed SW-846 and Iowa procedures, as applicable. Accuracy is a function of the laboratory method, and parameters regarding accuracy are included in the data quality package provided by the laboratory.

Duplicate soil and groundwater samples were collected for laboratory analysis to evaluate field precision. The RPD between the analyses of soil sample B-5 9-12 and the duplicate soil sample was within acceptance criteria for VOCs and SVOCs, but outside acceptance criteria for TEH and RCRA metals. Given the similar analytical results for VOCs and SVOCs, the disparity in results for TEH and metals are attributed to the heterogeneity of the soil matrix. The RPD between the groundwater sample collected from TMW-4 and the duplicate groundwater sample was within acceptance criteria for all analytes.

5.3 Representativeness

Terracon has evaluated the Phase II ESA activities to document the degree to which the sample data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, or an environmental condition.

VOCs were not reported at concentrations above the analytical detection limits in the trip blank indicating that cross-contamination between samples in the field or during transport did not occur.

Stainless steel soil sampling equipment was decontaminated prior to collection of each soil sample. One equipment decontamination blank reportedly contained a trace concentration of barium, and another decontamination blank contained trace concentrations of barium, chromium and lead. It is unlikely that these reported trace concentrations of metals associated with decontaminated sampling equipment would impart significant concentrations of metals to soil samples.

One of the soil sampling equipment decontamination blanks contained measurable concentrations of bis (2-ethylhexyl) phthalate and TEH diesel range organics. Bis (2-ethylhexyl) phthalate was reported at the detection limit in one soil sample, and was undetected in other soil and groundwater samples. Bis (2-ethylhexyl) phthalate is a common plasticizer and could have been imparted to the sampling equipment from the plastic sample liner or could have been imparted to the decontamination blank water from nitrile gloves. The occurrence of bis (2-ethylhexyl) phthalate in the decontamination blank and one of the soil samples suggests that it may have been imparted to the soil sample during the sampling process, however bis (2-ethylhexyl) phthalate cannot be ruled out as an environmental contaminant based on available information. Nevertheless, the concentration of bis (2-ethylhexyl) phthalate in the soil sample was below the statewide standard, and its occurrence did not therefore affect the project decisions.

The occurrence of TEH diesel range organics in the equipment decontamination blank indicates insufficient cleaning at the time the equipment blank was prepared, however the reported concentration of TEH diesel range organics was low and it is unlikely to have been imparted to soil samples from the sampling equipment at significant concentrations. The occurrence of TEH diesel range organics in the equipment blank did not therefore affect the project decisions.

The second equipment decontamination blank contained a detectable concentration of chloroform. Chloroform is commonly associated with tap water, and tap water was used in the decontamination process. Chloroform was not reported for any of the soil or groundwater samples, and its occurrence in the decontamination blank did not therefore affect the project decisions.

5.3.1 Representativeness of Field Data

The QA goal was to have the samples and measurements representative of the media sampled. Representativeness was achieved by adhering to the EPA-approved design of the sampling program and was accomplished by providing documentation that the approved QAPP, the approved Checklist, and relevant TSOPs were followed.

Assessment produced adequate Brownfields site representation by project data through adherence to TSOPs. Further uniformity was produced by using the same Terracon field

sampling teams whenever possible, the same equipment, and the same procedures repeatedly and consistently. To emphasize the importance of representativeness, TSOP *E.50 Sampling – Environmental Representativeness* was incorporated into field activities.

5.3.2 Representativeness of Laboratory Data

As stated in the EPA-approved QAPP, representativeness of laboratory data cannot be quantified. However, adherence to the prescribed analytical methods and procedures, including holding times, blanks, and duplicates, produced laboratory data representative of Site conditions and adequate to the IDNR LRP project decisions.

5.4 Completeness

According to Section A7.2.4 of the QAPP, although a completeness goal of 100 percent is desirable, an overall completeness goal of 90 percent may be realistically achieved under normal field sampling and laboratory analysis conditions. Laboratory analysis was completed on each of the samples collected in the field and submitted for analysis. Laboratory completeness was determined to be 100%.

5.5 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.

5.6 Sensitivity

As noted in Section 4.3.1, the laboratory reporting limits were in some cases insufficient to report concentrations below the statewide standards. If the analytes were not identified in the soil and groundwater samples elsewhere at the Site above statewide standards, they were not evaluated further consistent with the rationale described in Section 4.3.1 above.

6.0 LABORATORY DATA QUALITY

The laboratory completed verification of laboratory processes and data and delivered a data quality package to the Terracon Project Manager. The laboratory report and the QC information contained therein document compliance with the approved QAPP. Terracon reviewed the information and deemed the laboratory information of sufficient quality to support the project decisions.

For shallow soil samples from the five soil borings and the deep soil sample from soil boring SB-3, the RPD for benzidine and bis(2-chloroethyl)ether concentrations in the laboratory

control sample duplicate were outside established criteria. For the shallow soil sample from soil boring SB-1, the RPD for 1,1,2,2-tetrachloroethane concentrations in the matrix spike duplicate was outside established criteria. Benzidine, bis(2-chloroethyl)ether and 1,1,2,2-tetrachloroethane were not detected in any of the soil samples, and the detection limits for these constituents were more than 10 times lower than their respective statewide standards. The disparity between the analytical results for the laboratory control and matrix spike samples and their duplicates did not therefore affect the project decisions.

For the equipment decontamination blank, the RPD of di-n-butyl phthalate and diethyl phthalate concentrations in the laboratory control sample duplicate were outside established criteria. The detection limits for these constituents were more than a thousand times lower than their respective statewide standards, and the questionable analytical precision did not therefore affect the project decisions.

For soil and groundwater samples, the percent recovery for styrene was lower than the established limit for the laboratory control sample, the laboratory control sample duplicate, the matrix spike and the matrix spike duplicate. The detection limits for styrene in soil and groundwater samples were more than 100 times less than the statewide standard, and the questionable analytical accuracy for styrene did not therefore affect the project decisions.

For shallow soil samples and the deep soil sample from SB-3, the percent recovery for benzidine was lower than the established limit for the laboratory control sample and the laboratory control sample duplicate. The detection limit for benzidine in soil samples was more than 100 times less than the statewide standard, and the questionable analytical accuracy for benzidine did not therefore affect the project decisions.

For groundwater samples and the equipment decontamination blanks, the percent recoveries for vinyl chloride and 1,1-dichloropropene were lower than the established limits for the laboratory control sample and the laboratory control sample duplicate. The detection limit for vinyl chloride in water samples was nearly 10 times less than the statewide standard, and the questionable analytical accuracy for vinyl chloride did not therefore affect the project decisions. A statewide standard has not been established for 1,1-dichloropropene in groundwater.

The deep soil sample from soil boring SB-2 was diluted twentyfold prior to analysis for SVOCs due to matrix interference, thereby raising the detection limits for SVOCs. This also resulted in dilution of the concentrations of surrogates added to the sample prior to extraction so that surrogate recovery could not be evaluated. The elevated detection limits were below the statewide standards for SVOCs in soil and did not therefore affect the project decisions. The lack of surrogate recovery precludes evaluation of analytical accuracy for this soil sample, however all SVOC concentrations were below detection limits and unquantified accuracy does not therefore affect the project decisions.

In the context of a project decision relative to comparisons to acceptable procedures and chemical thresholds in the IDNR LUST and LRP programs, the level of variance and data flags was not dissimilar to that observed by Terracon in these programs. The data appears of sufficient quality with documented variance and data flags to make state-level program comparisons and is therefore sufficient to the project decisions.

7.0 COMPARISONS USED IN MAKING THE PROJECT DECISIONS

The Phase II ESA soil and groundwater analytical results were evaluated for public risk using the IDNR LRP risk based statewide standards and the Tier 1 Values.

7.1 Regulatory Setting

7.1.1 IDNR Land Recycling Program

The LRP is a voluntary, risk-based cleanup program for properties with environmental impacts. The LRP is designed to meet the dual objectives of addressing contaminated sites and promoting the redevelopment of these sites. The primary means of meeting these objectives are by encouraging voluntary participation to address contamination by establishing a set of risk-based response action standards, and by providing a measure of liability protection to participants and future property owners. Iowa has finalized a MOA with the EPA. Under the MOA, the EPA agrees not to act at sites enrolled in the LRP.

7.1.2 Iowa Statewide Comparison

The LRP establishes statewide standards that represent concentrations of contaminants in specific media of an affected area. These are values at which normal, unrestricted exposure through a specific exposure pathway are considered unlikely to pose a threat to human health, safety, or the environment. Risk-based contaminant concentrations for soil and groundwater are calculated using a formula that takes into account chemical specific properties concerning toxicity and assumptions about human exposure. The formula is used for each contaminant at a site, except for lead, which has default values specified in the regulations.

The comparison of reported chemical concentrations to the statewide standards is the primary project decision.

7.1.3 Statewide Soil Standards

Equation (1) is used to calculate the risk-based concentrations for compounds (other than lead).

$$C = \frac{RF \times AT \times 365 \text{ days / year}}{Abs \times [(ER_c \times EF_c \times ED_c) \div BW_c + (ER_a \times EF_a \times ED_a) \div BW_a] \times CF} \quad (1)$$

Where:

C = Risk-based concentration of contaminant
RF = Risk factor, which differs for carcinogenic and noncarcinogenic effects
AT = Averaging time (in years)
Abs = Absorption factor
ER_c = Exposure rate by a child
EF_c = Exposure frequency by a child
ED_c = Exposure duration by a child
BW_c = Body weight of exposed child
ER_a = Exposure rate by an adult
EF_a = Exposure frequency by an adult
ED_a = Exposure duration by an adult
BW_a = Body weight of exposed adult
CF = Conversion Factor

For lead, the IDNR has established a statewide standard of 400 mg/kg and a non-residential, site-specific standard of 1,100 mg/kg for soil less than two feet in depth. For non-residential site-specific standards for soil deeper than two feet and residential site-specific standards for soil deeper than ten feet, the IDNR standard is based on EPA's Exposure Model for Assessing Risk Associated with Adult Exposures to Lead in Soil. Terracon conservatively used the 1,100 mg/kg site-specific standard for depths greater than two feet.

7.1.4 Statewide Groundwater Standards

Statewide groundwater standards are determined as being the:

- The SDWA MCL established by the EPA, if one exists, or
- If no enforceable MCL exists, the lifetime HAL, or
- If no MCL or HAL exists, the standard is calculated using Equation (1) with input variables specified in the rule.

The statewide groundwater standard for a Non-protected Groundwater Source is based on a series of tests and iterations of the formula used for soil standards, with input values that are dependent on the properties of the specific compound being evaluated.

A Protected Groundwater Source is defined as "...a saturated bed, formation, or group of formations which has a hydraulic conductivity of at least 0.44 m/day and a TDS concentration of less than 2,500 mg/L." A Non-protected Groundwater Source is, by definition, a saturated bed, formation, or group of formations that has a hydraulic conductivity of less than 0.44 m/day or a TDS concentration in excess of 2,500 mg/L. The

aquifer at the Site is conservatively assumed to be a Protected Groundwater Source; however, Terracon compared the Site chemistry in groundwater to statewide standards for both Protected and Non-protected Groundwater Sources.

The LRP requires multiple sampling and testing events before making the comparisons of groundwater chemistry to standards for final determination of compliance. The period of monitoring may vary dependent on IDNR approvals if enrolled in the LRP. A “favorable” comparison is not necessarily sufficient for enrollment and closure in the LRP.

7.1.5 Iowa Underground Storage Tank Standards

For selected petroleum constituents (diesel and waste oil range organics), the comparison of the site-specific analytical results to IDNR’s Tier 1 Values (567 IAC 135.8), reproduced below, represents the primary project decision. For benzene and other individual petroleum components for which a statewide standard has been established, a comparison of the site-specific analytical results to the applicable statewide standards represents the primary project decision.

Iowa Tier 1 Look-Up Table

Media	Exposure Pathway	Receptor	Group 1				Group 2: TEH	
			Benzene	Toluene	Ethylbenzene	Xylenes	Diesel	Waste Oil
GW (ug/L)	Groundwater Ingestion	Actual	5	1,000	700	10,000	1,200	400
		Potential	290	7,300	3,700	73,000	75,000	40,000
	Groundwater Vapor	All	1,540	20,190	46,000	NA	2,200,000	NA
	Groundwater to Water Line	PVC or Gasket Main	7,500	6,250	40,000	48,000	75,000	40,000
		PVC of Gasket Srvc	3,750	3,120	20,000	24,000	75,000	40,000
		PE/PB/Mains or Srvc	200	3,120	3,400	19,000	75,000	40,000
	Surface Water	All	290	1,000	3,700	73,000	75,000	40,000
	Soil Leaching to GW	All	0.54	42	15	NA	3,800	NA
Soil (mg/kg)	Soil Vapor to ECL Space	All	1.16	48	79	NA	47,500	NA
	Soil to Water Line	All	2	3.2	45	52	10,500	NA

Although petroleum components that may be present at a site may have resulted from releases from vehicles or aboveground storage tanks, and not from an UST release, the look-up table provides a defensible screening tool for these substances.

7.2 Iowa Site-Specific Comparison – Cumulative Risk Calculator

The statewide standards assume that the property will be restored to unrestricted land use. They are protective of the most sensitive member of the population for the public exposures defined in the LRP rules. In general, this is sufficient for redevelopment or restoration for residential land use and residential occupancy by children.

The City may not require restoration to levels of chemical risk so that future residence by families can occur. Land use for commercial/industrial use must also be considered, and is in fact often the primary consideration for reuse. The LRP rules recognize these considerations and include processes whereby site-specific standards can be determined for property-specific conditions of residential or non-residential land use. For sites in the LRP, IDNR requires parties to use its on-line cumulative risk calculator (<http://programs.iowadnr.com/riskcalc/pages/calculator.aspx>) to achieve compliance. The risk calculator allows for calculation of cumulative risk for residents, site workers, and site construction workers resulting from hypothetical exposure to contaminated groundwater, soil, or air. Site-specific data are entered into the calculator, and if the values of the "cumulative cancer risk" or non-carcinogenic "sum" are less than or equal to 1.00, the site is within acceptable risk levels. If the values exceed 1.00, IDNR allows parties to establish institutional and/or technological controls under subrules 567 IAC 137.6(10) and (11) to prevent exposure to contaminants.

7.3 Application of the Standards

The user of this document must understand the limited applicability of the standards adopted under the authority of the LRP. The standards were developed within the narrow focus and constraints of the LRP. While the standards are based on a consideration of risk, they are different from other "risk-based" approaches.

The LRP does not contain standards that are established based on the migration of contaminants from one medium to another, which then becomes the basis for subsequent exposure. This does not mean the IDNR has no concern for these cross-media transfers. IDNR chooses to address them through direct measurement of the medium in which the exposure takes place or through the calculation of such cross-media transfer standards only when it is determined that such an approach is appropriate in a site-specific context. The intent is to avoid the application of needlessly restrictive standards to situations where they are not a relevant concern. Implicit in the final application of the standards is IDNR concurrence that the standards applied in any given situation address all exposure pathways that are deemed to be of concern. This can only take place when the IDNR is adequately informed of the particulars of a situation. Without IDNR concurrence there should be no presumption that a standard is sufficiently protective or that it will meet the requirements of the LRP.

Most of the standards entail very specific exposure assumptions. Site-specific standards assume that institutional controls will be put in place in order to preserve those exposure assumptions (e.g., a prohibition of residential use or well installation). Implicit in the use of such standards is the assumption that the IDNR has evaluated the exposure assumptions,

along with necessary institutional controls, and determined that they are appropriate to the situation.

As a result of the integral role of IDNR in determining and approving the appropriate use of the standards, they should not routinely be used for purposes outside of the LRP, including screening to determine whether a situation is a significant problem or whether it is reportable. Exceptions to this are the statewide standards for a Protected Groundwater Source. These standards may be used in lieu of action levels set by 567 IAC Chapter 133: *Rules for Determining Cleanup Actions and Responsible Parties*. This does not prevent IDNR from making use of the standards outside of the LRP when applicable and appropriate to projects under their supervision.

8.0 PRIMARY PROJECT DECISIONS

The City intended to determine whether this property is or is not impacted relative to the IDNR statewide standards. Based on the outcome of the decision, there are two Project actions. They are as follows:

- The property is “clean” and poses, due to measured conditions of environmental impairment, no reasonable impediment to consideration for redevelopment than would normally be exercised.

or,

- The property is impacted and poses, based on measured conditions of environmental impairment, a need for additional evaluation above that normally exercised in considering a property as feasible for redevelopment.

8.1 Primary Project Decision – Soils

Benzo(a)pyrene was measured above the statewide standard (i.e., primary project decision level) in the shallow soil sample collected from SB-3. Based on measured parameters in soil, Site conditions are not suitable at this time for unrestricted land use.

8.2 Primary Project Decision - Groundwater

The SVOCs bis(2-chloroethyl)ether and pentachlorophenol were identified for TMW-2 and TMW-3, respectively, at concentrations in excess of statewide standards. Also, reported concentrations of dissolved arsenic and lead at TMW-1, TMW-3, and TMW-4 exceeded the statewide standard. Based on measured parameters in groundwater, the Site conditions are not suitable at this time for unrestricted redevelopment.

9.0 SECONDARY PROJECT DECISIONS

As discussed at Section A7.3 of the approved QAPP, a secondary project decision is made relative to LRP Site-specific standards or IAC 135 Tier 2 levels. The provisions of 567 IAC 137.6 identify the procedures for developing site-specific standards in the LRP. These standards may include a calculated numerical value based on land use, sample depth, or groundwater designation for direct comparison to reported on-site concentrations in soil and groundwater. As discussed in Section 7.2, Terracon used a cumulative risk demonstration for the secondary project decision.

9.1 Selected Approach

Maximum reported concentrations for detected analytes were entered into IDNR's cumulative risk calculator, and the results evaluated for the following conditions.

- Impacts in shallow soil and groundwater considering site residents.
- Impacts in shallow soil and groundwater considering site workers.
- Impacts in shallow soil considering construction workers. The IDNR risk calculator does not apply to construction worker exposure to groundwater because IDNR presumes that construction workers will not be drinking groundwater from the Site.

The comparisons were made with the following considerations:

- The property is not enrolled in the LRP, and this comparison is for planning purposes only.
- The property at the time of assessment does not have restricted access to control exposures; there are no existing significant security structures, engineered barriers, or remoteness of location pursuant to the LRP rules.
- One institutional control limiting exposure to groundwater contaminants has been established in the City: the IDNR has approved City Ordinance No. 90.07 which prohibits any type of well if public water is available at any abutting street, alley, or ROW.

9.2 Secondary Project Decisions – Soils

The cumulative cancer risk for maximum contaminant concentrations in soils under the site resident exposure scenario was 0.1, below the 1.00 threshold for unacceptable cumulative risk. The cumulative non-cancer risk for target organs under the site resident exposure scenario for soils was 0.02, below the 1.00 threshold for unacceptable cumulative risk.

The cumulative cancer risk for shallow soils under the site worker exposure scenario for the identified analytes was 0.02, below the 1.00 threshold for unacceptable cumulative risk. The

cumulative non-cancer risk for target organs under the site worker exposure scenario for shallow soils was zero, below the 1.00 threshold for unacceptable cumulative risk.

The cumulative cancer risk for shallow soils under the construction worker exposure scenario for identified analytes was zero, below the 1.00 threshold for unacceptable cumulative risk. The cumulative non-cancer risk for target organs under the construction worker exposure scenario for shallow soils was zero, below the 1.00 threshold for unacceptable cumulative risk.

Based on this evaluation, Site conditions related to shallow soil appear to be suitable at this time for unrestricted land use. Copies of the cumulative risk calculator outputs are included in Appendix F.

9.3 Secondary Project Decision - Groundwater

Without Site-specific consideration, shallow groundwater at the Site could be classified technically as a Protected Groundwater Source. However, specific to this property, groundwater is considered non-used water in a Protected Groundwater Source under the restrictions of City Ordinance 90.07.

The cumulative cancer risk for maximum contaminant concentrations in groundwater under the site resident exposure scenario for the identified analytes was 3.92, above the 1.00 threshold for unacceptable cumulative risk. The cumulative non-cancer risk value for target organs under the site resident exposure scenario for groundwater was 4.76, above the 1.00 threshold for unacceptable cumulative risk.

The cumulative cancer risk for groundwater under the site worker exposure scenario for the identified analytes was 1.74, above the 1.00 threshold for unacceptable cumulative risk. The cumulative non-cancer risk for target organs under the site worker exposure scenario for groundwater was, 1.19, above the 1.00 threshold for unacceptable cumulative risk.

Based on the analytical results and the problem statement current groundwater conditions are unsuitable for unrestricted land use. No water wells exist on the property; therefore the groundwater ingestion potential exposure pathway is severed. The property may be considered by the City for redevelopment with environmental remedy or other consideration.

10.0 SUMMARY OF PROJECT DECISIONS

The primary decision criteria have determined, based on measured parameters in soil and groundwater, Site conditions are not suitable at this time for unrestricted land use based on the following:

- Analytes were identified in soil and groundwater samples. Laboratory reporting limits for several analytes exceeded groundwater statewide standards. Analytes were assumed to be present at the reporting limit if they were identified onsite above the statewide standards. If the analytes were not elevated or measured in any other soil or groundwater samples, they were considered not to be present and were not evaluated further.
- The SVOC benzo(a)pyrene was identified in a shallow soil sample at a concentration above the statewide standard.
- The SVOCs bis(2-chloroethyl)ether and pentachlorophenol were identified in groundwater samples at concentrations above the statewide standards.
- The RCRA metals arsenic and lead were identified in groundwater at concentrations above statewide standards.

The data collection and analysis have been conducted to levels sufficient to support the secondary project decision.

- The secondary project decision (IDNR cumulative risk calculator) for groundwater has determined this property is environmentally impaired above site-specific target levels, primarily due to the concentrations of arsenic reported in groundwater samples.

Soil Risk

Benzo(a)pyrene was measured above the statewide standard (i.e., primary project decision level) in the shallow soil sample collected from SB-3. Maximum concentrations of identified analytes were entered into the cumulative risk calculator under the site resident, site worker, and construction worker scenarios. The cancer and non-cancer risks for exposure to soil were estimated to be below thresholds of unacceptable cumulative risk.

Groundwater Risk

The SVOCs bis(2-chloroethyl)ether and pentachlorophenol and the RCRA metals arsenic and lead exceeded the primary decision criteria (the statewide standards) in groundwater. Maximum concentrations of identified analytes were entered into the cumulative risk calculator under the site resident, site worker, and construction worker scenarios. The IDNR risk calculator does not apply to construction worker exposure to groundwater because IDNR presumes that construction workers will not be drinking groundwater from the Site.

The cancer and non-cancer risks for residential occupancy and site workers (non-construction) were estimated to be above the thresholds for unacceptable cumulative risk.

Groundwater at the Site may be classified as a Protected Groundwater Source. The groundwater may be considered non-used water in a Protected Groundwater Source under certain restrictions, such as City Ordinance 90.07 or an environmental easement or deed restriction.

Chemically, potential excess risk was driven by concentrations of arsenic reported in groundwater samples. The property is currently zoned I-3 General Industrial, and the intended reuse of the Brownfields is open space/recreation area; therefore, the site residency exposure pathway is severed. The property has undergone clearance/demolition, and no previously constructed water wells exist on the property for potable or non-potable use; therefore, the current exposure pathway of groundwater ingestion is severed. No pre-existing water wells exist on abutting properties for potable or non-potable use; therefore, the current exposure pathway of groundwater ingestion is severed. While City water utility connections are not available at the property, City Ordinance No. 90.07 would sever the future exposure pathway of groundwater ingestion by site residents in a potential changed mixed use commercial with residential occupancy scenario.

11.0 FINDINGS AND CONCLUSIONS

Terracon has conducted field work and evaluation for the Phase II ESA portion of the Project for this property. Terracon makes the following conclusions:

- The Phase II ESA has been conducted consistent with the QAPP and the Checklist, both approved by EPA.
- This Phase II ESA has produced data of a quality sufficient to make the project decisions set forth in the approved QAPP.
- Consistent with the findings of the Phase I ESA, this Phase II ESA did not identify conditions of imminent threat or public hazard from hazardous substances or petroleum.
- This Phase II ESA has determined that the RECs identified in the May 6, 2011 Phase I ESA are realized as measurable chemical impacts on the Site.
- The primary project decision has determined this property exhibits chemical impacts in soil but poses, due to measured conditions of regulated chemicals, no reasonable

environmental impediment to consideration for redevelopment than would normally be exercised in redeveloping the property for non-residential use.

- The primary project decision has determined this property is impacted by regulated chemicals in groundwater.
- The secondary project decision has determined that groundwater at this property is environmentally impacted. Due to measured conditions of environmental impact, conditions appear to pose no reasonable impediment to consideration for redevelopment than would normally be exercised unless the redevelopment involves residential or site worker occupancy where groundwater is used for drinking water in violation of City Ordinance No. 90.07.
- Measured chemical impacts warrant consideration of purchase of this property as a bona fide prospective purchaser relative to the Small Business Liability Relief and Brownfields Revitalization Act of 2002. The Phase I and II ESAs constitute due diligence as part of 'all appropriate inquiries'. Continuing obligations could be met through preparation of a Media Management Plan for soil and groundwater.
- The Phase II ESA supports the City's due diligence efforts to avail themselves of the Brownfields liability defenses for a bona fide prospective purchaser as set forth in the Small Business Liability Relief and Brownfields Revitalization Act of 2002.
- Phase II ESA identifies minor continuing obligations required of the City in support of these defenses such as zoning and/or land use controls.

12.0 GENERAL COMMENTS

Terracon has performed this Phase II ESA in general compliance with the scope and limitations of the Engineering Services Agreement between Terracon and the City of Coralville.

The analysis presented in this report is based upon data obtained from field activities and from other information discussed in this report. This report does not reflect any variations in subsurface stratigraphy that may occur between borings or across the Site. Actual subsurface conditions may vary. The extent of such variations may not become evident without additional exploration.

This report is prepared for the exclusive use of our client for the specific application to the project discussed and has been prepared in accordance with generally accepted environmental engineering practices. No warranties, express or implied, are intended or

made. In the event any changes in nature or location of subsurface conditions as outlined in this report are observed, the conclusions contained in this report cannot be considered valid unless the changes are reviewed and the conclusions of this report are modified or verified in writing by the environmental engineer.

12.1 Additional Scope Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the onsite 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, and we cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this Phase II ESA. 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.

12.2 Reliance

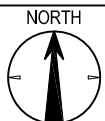
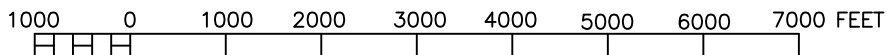
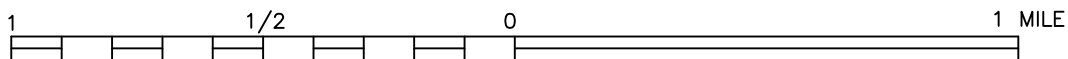
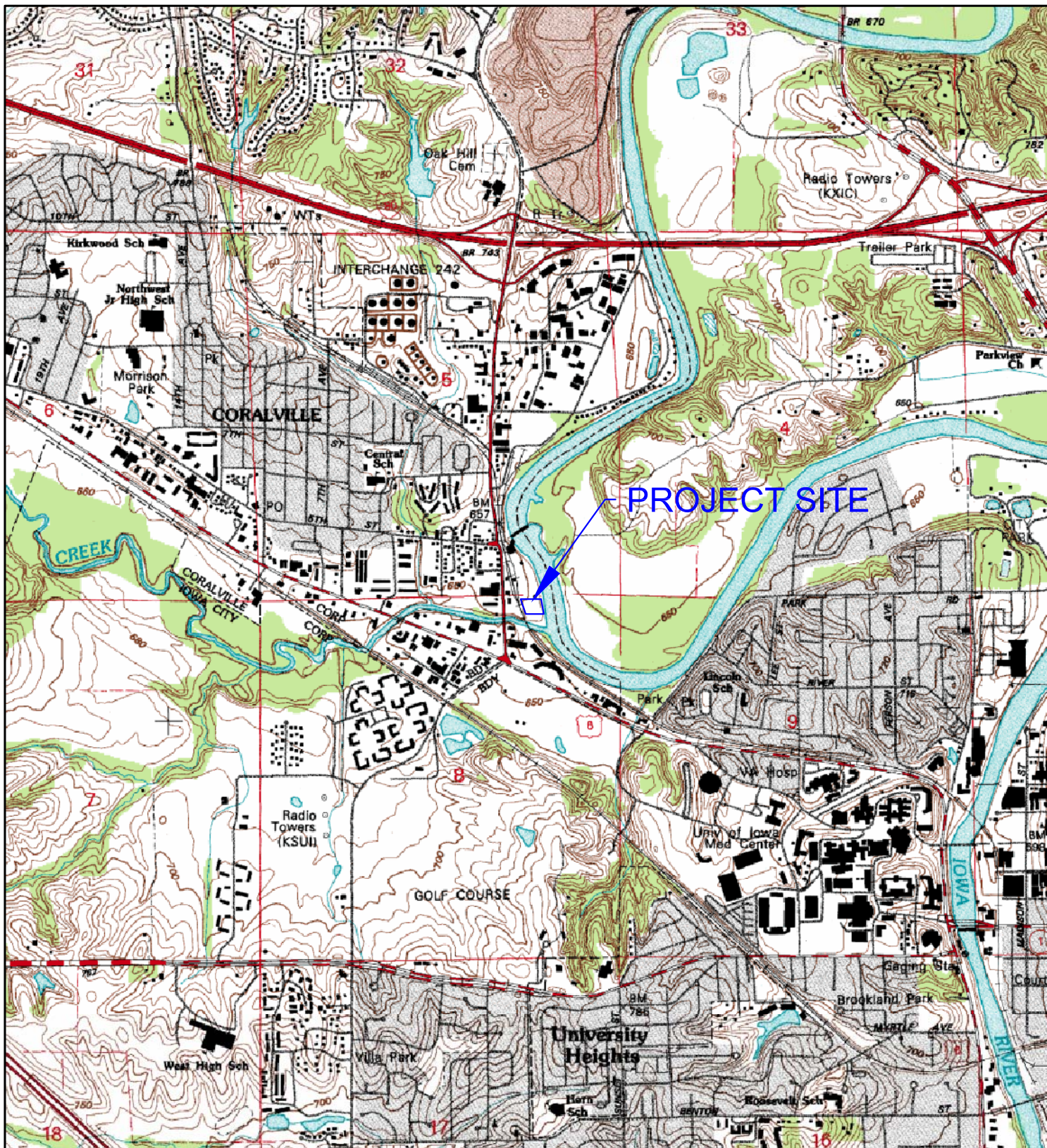
The City is the principal end user of this information. Although the report is available for review by the public, further reliance by others is beyond the scope of the grant and EPA funding.

The City will make primary use of the data to aid in decision-making relative to considering properties for redevelopment. The data will not constitute the sole or final factor in the positive or negative feasibility determination for redevelopment. It is anticipated that this Phase II ESA is for preliminary characterization and, if needed, will be used as the basis for secondary phases of remedial investigation.

The information contained in this report is for the sole benefit of the City in determining feasibility for redevelopment and restoration of the property. The information and funding expended to produce the information does not provide windfall or extraneous benefits to property owners.

Appendix A

Exhibits



Project No. 06097004L
 Project Mgr: SKZ
 File Name: 06097004L.Figures.dwg
 Layout Name: EXHIBIT 1
 Date: APR 2011
 Drawn By: RJC

Terracon
 Consulting Engineers and Scientists

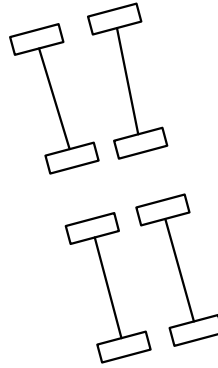
2640 12TH STREET SW CEDAR RAPIDS, IOWA 52404
 PH. (319) 366-8321 FAX. (319) 366-0032

TOPOGRAPHIC MAP
 PHASE II ESA
 SOUTH CRANDIC 2011
 PARCEL # 1008102002
 CORALVILLE, JOHNSON COUNTY, IOWA

EXHIBIT

1

MIDAMERICAN ENERGY SUB STATION



HAWKEYE READY MIX

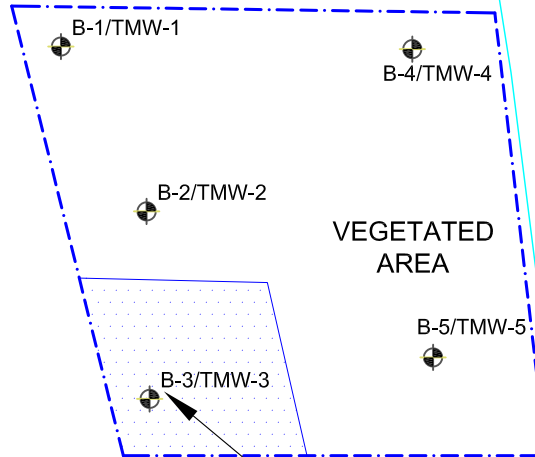
231 1ST
AVENUE

CRANDIC RAILROAD

IOWA RIVER

CLEAR CREEK

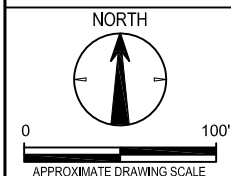
VACANT LAND



CONCRETE
WASHOUT
AREAS

LEGEND

- - - - - - APPROXIMATE SITE BOUNDARY
- PORTION OF SITE USED FOR CONCRETE DISPOSAL
- ⊕ - SOIL BORING/TEMPORARY MONITORING WELL LOCATION



Project No.	Date:
06097004L	APR 2011
Project Mgr:	Drawn By:
SKZ	RJC
File Name:	
06097004L.Figures.dwg	
Layout Name:	
EXHIBIT 2	

Terracon
Consulting Engineers and Scientists

2640 12TH STREET SW CEDAR RAPIDS, IOWA 52404
PH. (319) 366-8321 FAX. (319) 366-0032

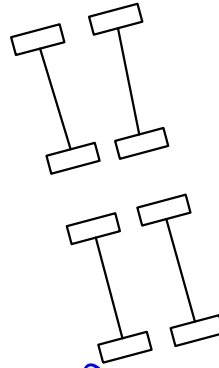
SOIL BORING/TMW LOCATION MAP

PHASE II ESA
SOUTH CRANDIC 2011
PARCEL # 1008102002
CORALVILLE, JOHNSON COUNTY, IOWA

EXHIBIT

2

MIDAMERICAN ENERGY SUB STATION



HAWKEYE READY MIX

231 1ST
AVENUE

CRANDIC RAILROAD

IOWA RIVER

VEGETATED
AREA

CONCRETE
WASHOUT
AREAS

CLEAR CREEK

VACANT LAND

LEGEND

--- - APPROXIMATE SITE BOUNDARY

--- - PORTION OF SITE USED FOR CONCRETE DISPOSAL

⊕ - GROUNDWATER ELEVATION

TMW-1
89.95

TMW-4
83.91

TMW-2
86.25

TMW-5
84.59

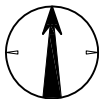
TMW-3
84.39

90.0

85.0

80.0

NORTH



0 100'
APPROXIMATE DRAWING SCALE

Project No. 06097004L Date: AUGUST 2011
Project Mgr: SKZ Drawn By: HMM
File Name: 06097004L.Figures.dwg
Layout Name: EXHIBIT 3

Terracon
Consulting Engineers and Scientists

2640 12TH STREET SW CEDAR RAPIDS, IOWA 52404
PH. (319) 366-8321 FAX. (319) 366-0032

GROUNDWATER CONTOUR MAP

PHASE II ESA
SOUTH CRANDIC 2011
PARCEL # 1008102002
CORALVILLE, JOHNSON COUNTY, IOWA

EXHIBIT

3

Appendix B

Tables

CAS #	Compound	SB-1		SB-2		SB-3			SB-4		SB-5		Dup (SB-5)	Number of Deletions	Maximum Value	Mean Value	Number of Data Points (n)	Standard Deviation	Coefficient of Variation	Statewide Standard	Tier 1 Value	Maximum Value Exceeds?
		8/3/2011	8/3/2011	8/3/2011	8/3/2011	8/3/2011	8/3/2011	8/3/2011	8/4/2011	8/4/2011	8/3/2011	8/3/2011	8/3/2011									
		0-2	10-12	0-2	5-7	0-3	7-10	14-16	0-2	15-17	0-2	9-12	9-12									
67-64-1	Acetone	<0.12	<0.12	<0.12	0.13	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	1	0.13	0.1208	12	0.04	31%	68000	NE	NO
107-13-1	Acrylonitrile	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	0	0.016	0.016	12	0.00	0%	5.7	NE	NO
71-43-2	Benzene	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	0	0.0017	0.0017	12	0.00	0%	88	0.54	NO
108-86-1	Bromobenzene	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	0	0.0017	0.0017	12	0.00	0%	NE	NE	NA
75-27-4	Bromodichloromethane	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	0	0.0016	0.0016	12	0.00	0%	50	NE	NO
75-25-2	Bromoform	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	0	0.0018	0.0018	12	0.00	0%	390	NE	NO
74-83-9	Bromomethane	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	0	0.0088	0.0088	12	0.00	0%	110	NE	NO
104-51-8	n-Butylbenzene	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	0	0.0017	0.0017	12	0.00	0%	23000	NE	NO
135-98-8	sec-Butylbenzene	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	0	0.0016	0.0016	12	0.00	0%	NE	NE	NA
98-06-6	tert-Butylbenzene	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	0	0.0016	0.0016	12	0.00	0%	NE	NE	NA
56-23-5	Carbon tetrachloride	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	0	0.0019	0.0019	12	0.00	0%	24	NE	NO
108-90-7	Chlorobenzene	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	0.0018	<0.0016	1	0.0018	0.0016	12	0.00	32%	1500	NE	NO
124-48-1	Chlorodibromomethane	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	0	0.0018	0.0018	12	0.00	0%	NE	NE	NA
75-00-3	Chloroethane	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	0	0.0058	0.0058	12	0.00	0%	30000	NE	NA
110-75-8	2-Chloroethyl vinyl ether	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	0	0.0088	0.0088	12	0.00	0%	NE	NE	NA
67-66-3	Chloroform	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	0	0.0021	0.0021	12	0.00	0%	510	NE	NO
74-87-3	Chloromethane	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	0	0.0035	0.0035	12	0.00	0%	240	NE	NO
95-49-8	2-Chlorotoluene	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	0	0.0016	0.0016	12	0.00	0%	1500	NE	NO
106-43-4	4-Chlorotoluene	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	0	0.0014	0.0014	12	0.00	0%	1500	NE	NO
96-12-8	1,2-Dibromo-3-Chloropropane	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0	0.01	0.01	12	0.00	0%	2.2	NE	NO
106-93-4	1,2-Dibromethane	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	0	0.0019	0.0019	12	0.00	0%	1.5	NE	NO
74-95-3	Dibromomethane	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	0	0.0018	0.0018	12	0.00	0%	760	NE	NO
95-50-1	1,2-Dichlorobenzene	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	0	0.0017	0.0017	12	0.00	0%	5500	NE	NO
541-73-1	1,3-Dichlorobenzene	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	0	0.0017	0.0017	12	0.00	0%	5500	NE	NO
106-46-7	1,4-Dichlorobenzene	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	0	0.0016	0.0016	12	0.00	0%	610	NE	NO
75-71-8	Dichlorodifluoromethane	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	0	0.0038	0.0038	12	0.00	0%	15000	NE	NO
75-34-3	1,1-Dichloroethane	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0	0.002	0.002	12	0.00	0%	15000	NE	NO
107-06-2	1,2-Dichloroethane	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0	0.002	0.002	12	0.00	0%	34	NE	NO
75-35-4	1,1-Dichloroethene	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	0	0.0031	0.0031	12	0.00	0%	380	NE	NO
156-59-2	cis-1,2-Dichloroethene	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	0	0.0018	0.0018	12	0.00	0%	760	NE	NO
156-60-5	trans-1,2-Dichloroethene	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0	0.002	0.002	12	0.00	0%	1500	NE	NO
78-87-5	1,2-Dichloropropane	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	0	0.0032	0.0032	12	0.00	0%	46	NE	NO
563-58-6	1,1-Dichloropropene	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	0	0.0019	0.0019	12	0.00	0%	NE	NE	NA
142-28-9	1,3-Dichloropropene	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	0	0.0017	0.0017	12	0.00	0%	NE	NE	NA
10061-01-5	cis-1,3-Dichloropropene	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	0	0.0019	0.0019	12	0.00	0%	31	NE	NO
10061-02-6	trans-1,3-Dichloropropene	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	0	0.0017	0.0017	12	0.00	0%	31	NE	NO
594-20-7	2,2-Dichloropropane	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0	0.002	0.002	12	0.00	0%	NE	NE	NA
108-20-3	Diisopropyl ether	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	0	0.0018	0.0018	12	0.00	0%	NE	NE	NA
100-41-4	Ethylbenzene	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	0	0.0019	0.0019	12	0.00	0%	7600	15	NO
87-68-3	Hexachlorobutadiene	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	0	0.0019	0.0019	12	0.00	0%	31	NE	NO
98-82-8	Isopropylbenzene	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	0	0.0016	0.0016	12	0.00	0%	NE	NE	NA
99-87-6	p-Isopropyltoluene	<0.0016	<0.0016	<0.0016	0.0036	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	1	0.0036	0.0018	12	0.00	59%	NE	NE	NA
78-93-3	2-Butanone (MEK)	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	0	0.014	0.014	12	0.00	0%	46000	NE	NO
75-09-2	Methylene Chloride	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	0	0.0065	0.0065	12	0.00	0%	410	NE	NO
108-10-1	4-Methyl-2-pentanone (MIBK)	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	0	0.014	0.014	12	0.00	0%	6100	NE	NO
1634-04-4	Methyl tert-butyl ether	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016	0	0.0016	0.0016	12	0.00	0%	2300	NE	NO
91-20-3	Naphthalene	<0.0028	<0.0028	<0.0028	<0.0028	<0.0028	<0.0028	<0.0028	<0.0028	<0.0028	<0.0028	<0.0028	<0.0028	0	0.0028	0.0028	12					

All concentrations are in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
 < indicates the compound was not detected above the laboratory reporting limit
 NA = Not Applicable
 NE = Not Established
Bold indicates an analyte was identified.

Table 2 - Soil Sample Analytical Results
Semi-Volatile Organic Compounds, mg/kg

CAS #	Compound	SB-1		SB-2		SB-3			SB-4		SB-5		Dup (SB-5)	Number of Detections	Maximum Value	Mean Value	Number of Data Points (n)	Standard Deviation	Coefficient of Variation	Statewide Standard	Maximum Value Exceeds?
		8/3/2011	8/3/2011	8/3/2011	8/3/2011	8/3/2011	8/3/2011	8/3/2011	8/4/2011	8/4/2011	8/3/2011	8/3/2011	8/3/2011								
		0-2	10-12	0-2	5-7	0-3	7-10	14-16	0-2	15-17	0-2	9-12	9-12								
83-32-9	Acenaphthene	<0.064	<0.0064	<0.0064	<0.13	0.057	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	1	0.057	0.124	12	0.02	13%	3400	NO
208-96-8	Acenaphthylene	<0.067	<0.0067	<0.0067	<0.13	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	<0.0067	0	0.130	0.130	12	0.00	0%	1700	NO
120-12-7	Anthracene	<0.063	0.012	<0.0063	<0.13	0.15	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	2	0.150	0.122	12	0.04	35%	17000	NO
92-87-5	Benzidine	<0.64	<0.064	<0.064	<1.3	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	<0.064	0	1.300	1.300	12	0.00	0%	110	NO
56-55-3	Benzo(a)anthracene	<0.043	0.0099	<0.0043	<0.086	0.5	0.0062	<0.0043	<0.0043	<0.0043	0.0048	0.0044	<0.0043	5	0.500	0.094	12	0.14	153%	3.1	NO
205-99-2	Benzo(b)fluoranthene	<0.070	<0.0070	<0.0070	<0.14	0.64	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	1	0.640	0.182	12	0.18	102%	3.1	NO
207-08-9	Benzo(k)fluoranthene	<0.058	<0.0058	<0.0058	<0.12	0.23	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	1	0.230	0.129	12	0.07	51%	31	NO
191-24-2	Benzo(g,h,i)perylene	<0.072	<0.0072	<0.0072	<0.14	0.19	<0.0072	<0.0072	<0.0072	<0.0072	<0.0072	<0.0072	<0.0072	1	0.190	0.144	12	0.05	38%	170	NO
50-32-8	Benzo(a)pyrene	<0.055	<0.0055	<0.0055	<0.11	0.46	0.0059	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	2	0.460	0.130	12	0.13	102%	0.31	YES
111-91-1	Bis(2-chlorethoxy)methane	<0.077	<0.0077	<0.0077	<0.15	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	0	0.150	0.150	12	0.00	0%	NE	NA
111-44-4	Bis(2-chloroethyl)ether	<0.090	<0.0090	<0.0090	<0.18	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	0	0.180	0.180	12	0.00	0%	2.2	NO
108-60-1	Bis(2-chloroisopropyl)ether	<0.076	<0.0076	<0.0076	<0.15	<0.0076	<0.0076	<0.0076	<0.0076	<0.0076	<0.0076	<0.0076	<0.0076	0	0.150	0.150	12	0.00	0%	2400	NO
101-55-3	4-Bromophenyl-phenylether	<0.11	<0.011	<0.011	<0.23	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	0	0.230	0.230	12	0.00	0%	NE	NA
91-58-7	2-Chloronaphthalene	<0.064	<0.0064	<0.0064	<0.13	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	0	0.130	0.130	12	0.00	0%	4900	NO
7005-72-3	4-Chlorophenyl-phenylether	<0.063	<0.0063	<0.0063	<0.12	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	0	0.120	0.120	12	0.00	0%	NE	NA
218-01-9	Chrysene	<0.056	0.011	<0.0056	<0.11	0.45	0.0059	<0.0056	<0.0056	0.0058	<0.0056	<0.0056	<0.0056	4	0.450	0.113	12	0.13	115%	310	NO
53-70-3	Dibenz(a,h)anthracene	<0.082	<0.0082	<0.0082	<0.16	0.056	<0.0082	<0.0082	<0.0082	<0.0082	<0.0082	<0.0082	<0.0082	1	0.056	0.151	12	0.02	11%	0.31	NO
91-94-1	3,3-Dichlorobenzidine	<0.79	<0.079	<0.079	<1.6	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	<0.079	0	1.600	1.600	12	0.00	0%	5.4	NO
121-14-2	2,4-Dinitrotoluene	<0.061	<0.0061	<0.0061	<0.12	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	<0.0061	0	0.120	0.120	12	0.00	0%	3.6	NO
606-20-2	2,6-Dinitrotoluene	<0.074	<0.0074	<0.0074	<0.15	<0.0074	<0.0074	<0.0074	<0.0074	<0.0074	<0.0074	<0.0074	<0.0074	0	0.150	0.150	12	0.00	0%	3.6	NO
206-44-0	Fluoranthene	0.15	0.019	<0.0050	<0.099	1.3	0.013	<0.0050	<0.0050	<0.0050	0.0078	<0.0050	<0.0050	5	1.300	0.182	12	0.37	205%	2300	NO
86-73-7	Fluorene	<0.068	<0.0068	<0.0068	<0.14	0.048	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	1	0.048	0.132	12	0.01	10%	2300	NO
118-74-1	Hexachlorobenzene	<0.086	<0.0086	<0.0086	<0.17	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	0	0.170	0.170	12	0.00	0%	1.5	NO
87-68-3	Hexachloro-1,3-butadiene	<0.10	<0.010	<0.010	<0.20	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0	0.200	0.200	12	0.00	0%	31	NO
77-47-4	Hexachlorocyclopentadiene	<0.59	<0.059	<0.059	<1.2	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	<0.059	0	1.200	1.200	12	0.00	0%	370	NO
67-72-1	Hexachloroethane	<0.13	<0.013	<0.013	<0.27	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	0	0.270	0.270	12	0.00	0%	170	NO
193-39-5	Indeno(1,2,3-cd)pyrene	<0.077	<0.0077	<0.0077	<0.15	0.18	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	<0.0077	1	0.180	0.153	12	0.05	34%	3.1	NO
78-59-1	Isophorone	<0.052	<0.0052	<0.0052	<0.10	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	<0.0052	0	0.100	0.100	12	0.00	0%	2600	NO
91-20-3	Naphthalene	<0.089	0.014	<0.0089	<0.18	0.012	<0.0089	0.0092	<0.0089	<0.0089	<0.0089	<0.0089	<0.0089	3	0.014	0.138	12	0.01	4%	1100	NO
98-95-3	Nitrobenzene	<0.070	<0.0070	<0.0070	<0.14	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	<0.0070	0	0.140	0.140	12	0.00	0%	31	NO
62-75-9	n-Nitrosodimethylamine	<0.65	<0.065	<0.065	<1.3	<0.065	<0.065	<0.065	<0.065	<0.065	<0.065	<0.065	<0.065	0	1.300	1.300	12	0.00	0%	NE	NA
86-30-6	n-Nitrosodiphenylamine	<0.059	<0.0059	<0.0059	<0.12	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	0	0.120	0.120	12	0.00	0%	500	NO
621-64-7	n-Nitrosodi-n-propylamine	<0.091	<0.0091	<0.0091	<0.18	<0.0091	<0.0091	<0.0091	<0.0091	<0.0091	<0.0091	<0.0091	<0.0091	0	0.180	0.180	12	0.00	0%	NE	NA
85-01-8	Phenanthrene	0.14	0.021	<0.0053	<0.10	0.71	0.01	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	<0.0053	4	0.710	0.140	12	0.20	146%	1700	NO
85-68-7	Benzylbutyl phthalate	<0.10	<0.010	<0.010	<0.21	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0	0.210	0.210	12	0.00	0%	1300	NO
117-81-7	Bis(2-ethylhexyl)phthalate	<0.12	0.012	<0.012	<0.24	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	1	0.012	0.221	12	0.00	2%	170	NO
84-74-2	Di-n-butyl phthalate	<0.11	<0.011	<0.011	<0.22	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	0	0.220	0.220	12	0.00	0%	6100	NO
84-66-2	Diethyl phthalate	<0.069	<0.0069	<0.0069	<0.14	<0.0069	<0.0069	<0.0069	<0.0069	<0.0069	<0.0069	<0.0069	<0.0069	0	0.140	0.140	12	0.00	0%	49000	NO
131-11-3	Dimethyl phthalate	<0.054	<0.0054	<0.0054	<0.11	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	<0.0054	0	0.110	0.110	12	0.00	0%	NE	NA
117-84-0	Di-n-octyl phthalate	<0.091	<0.0091	<0.0091	<0.18	<0.0091	<0.0091	<0.0091	<0.0091	<0.0091	<0.0091	<0.0091	<0.0091	0	0.180	0.180	12	0.00	0%	1200	NO
129-00-0	Pyrene	0.12	0.02	<0.012	<0.25	0.88	0.013	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	4	0.880	0.253	12	0.25	100%	1700	NO
120-82-1	1,2,4-Trichlorobenzene	<0.088	<0.0088	<0.0088	<0.18	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	<0.0088	0	0.180	0.180	12	0.00	0%	760	NO
59-50-7	4-Chloro-3-methylphenol	<0.048	<0.0048	<><																	

Table 3 - Soil Sample Analytical Results
Petroleum Compounds, mg/kg

CAS #	Compound	SB-1		SB-2		SB-3			SB-4		SB-5		Dup (SB-5)	Number of Detections	Maximum Value	Mean Value	Number of Data Points (n)	Standard Deviation	Coefficient of Variation	Pathway 1 Standard	Maximum Value Exceeds?	Pathway 2 Standard	Maximum Value Exceeds?	Pathway 3 Standard	Maximum Value Exceeds?
		8/3/2011	8/3/2011	8/3/2011	8/3/2011	8/3/2011	8/3/2011	8/3/2011	8/4/2011	8/4/2011	8/3/2011	8/3/2011	8/3/2011												
		0-2	10-12	0-2	5-7	0-3	7-10	14-16	0-2	15-17	0-2	9-12	9-12												
10	Gasoline Range (C7-C10)	<1.3	<1.3	3.2	<6.6	6	6.8	<1.3	11	<1.3	<1.3	<1.3	<1.3	4	11.0	4.9	12	3.73	76%	NE	NA	NE	NA	NE	NA
20	Diesel Range (C10-C20)	7.8	5.1	<1.3	16	7.7	<1.3	<1.3	<1.3	<1.3	2	<1.3	<1.3	5	16.0	5.6	12	5.06	91%	3,800	NO	47,500	NO	10,500	NO
30	Oil Range (C20-C40)	72	390	<3.3	170	36	<3.3	<3.3	<3.3	<3.3	6.8	4.7	<3.3	6	390.0	61.6	12	116.41	189%	NE	NA	NE	NA	NE	NA
40	Total (C7-C40)	80	400	<3.3	190	50	<3.3	<3.3	11	<3.3	<3.3	<3.3	<3.3	5	400.0	66.8	12	120.83	181%	NE	NA	NE	NA	NE	NA

All concentrations are in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
< indicates the compound was not detected above the laboratory reporting limit
NA = Not Applicable
NE = Not Established
Bold indicates an analyte was identified.

Pathway 1 = Soil leaching to groundwater
Pathway 2 = Soil vapor to enclosed space
Pathway 3 = Soil to water line

Table 4 - Soil Sample Analytical Results
RCRA Metals, mg/kg

CAS #	Compound	SB-1		SB-2		SB-3			SB-4		SB-5		Dup (SB-5)	Number of Detections	Maximum Value	Mean Value	Number of Data Points (n)	Standard Deviation	Coefficient of Variation	Statewide Standard	Maximum Value Exceeds?
		8/3/2011	8/3/2011	8/3/2011	8/3/2011	8/3/2011	8/3/2011	8/3/2011	8/4/2011	8/4/2011	8/3/2011	8/3/2011	8/3/2011								
		0-2	10-12	0-2	5-7	0-3	7-10	14-16	0-2	15-17	0-2	9-12	9-12								
7439-97-6	Mercury (²⁰² Hg), Total	0.011	0.37	0.0076	0.041	0.0072	0.0093	0.019	0.0027	0.017	0.0063	0.029	0.031	12	0.37	0.045	12	0.10	228%	23	NO
7440-38-2	Arsenic (⁷⁵ As), Total	<1.6	4.5	<1.6	<1.6	<1.6	<1.6	3	<1.6	3.4	1.7	2.9	5.8	6	5.80	4.275	12	2.09	49%	17	NO
7440-39-3	Barium (¹³⁷ Ba), Total	47	140	85	45	92	38	110	37	77	110	99	150	12	150.00	81.917	12	38.56	47%	15000	NO
7440-43-9	Cadmium (¹¹¹ Cd), Total	0.19	1	0.13	0.17	0.15	0.14	0.39	0.12	0.39	0.24	0.48	0.74	12	1.00	0.345	12	0.28	81%	70	NO
7440-47-3	Chromium (⁵³ Cr), Total	8.4	16	8.8	12	13	16	10	8.6	9.4	11	12	16	12	16.00	11.067	12	2.94	27%	97000	NO
7439-92-1	Lead (²⁰⁸ Pb), Total	21	28	4	10	5.2	1.6	7.4	1.9	6.5	4	19	12	12	28.00	10.050	12	8.42	84%	400	NO
7782-49-2	Selenium (⁸² Se), Total	<1.6	<0.32	<1.6	<1.6	<1.6	<1.6	<0.32	<1.6	<0.32	<1.6	<0.32	<0.32	0	5.00	5.455	12	0.00	0%	390	NO
7440-22-4	Silver (¹⁰⁷ Ag), Total	<0.16	0.91	<0.16	<0.16	<0.16	<0.16	0.49	<0.16	0.39	<0.16	0.46	0.84	5	0.91	0.549	12	0.35	64%	370	NO

All concentrations are in milligrams per kilogram (mg/kg), equivalent to parts per million (ppm)
< indicates the compound was not detected above the laboratory reporting limit
NA = Not Applicable
Bold indicates an analyte was identified.

Table 5 - Groundwater Sample Analytical Results
Volatile Organic Compounds, mg/L

CAS #	Compound	TMW-1	TMW-2	TMW-3	TMW-4	TMW-5	Dup 1 (TMW-4)	Number of Detections	Maximum Value	Mean Value	Number of Data Points (n)	Standard Deviation	Coefficient of Variation	Statewide Standard (Protected GW)	Tier 1 Value	Maximum Value Exceeds?
		8/4/2011	8/4/2011	8/4/2011	8/4/2011	8/4/2011	8/4/2011									
67-64-1	Acetone	0.014	0.1	0.27	<0.011	<0.011	<0.011	3	0.2700	0.0695	6	0.11	156%	6.3	NE	NO
107-02-8	Acrolein	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	0	0.0310	0.0310	6	0.00	0%	NE	NE	NO
107-13-1	Acrylonitrile	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	0	0.0017	0.0017	6	0.00	0%	0.00032	0.005	NO
71-43-2	Benzene	0.00057	0.00077	0.0016	0.0016	<0.00018	0.0016	5	0.0016	0.0011	6	0.00	65%	0.005	NE	NO
108-86-1	Bromobenzene	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	0	0.0003	0.0003	6	0.00	0%	NE	NE	NO
75-27-4	Bromodichloromethane	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	0	0.0002	0.0002	6	0.00	0%	0.08	NE	NO
75-25-2	Bromoform	<0.00046	<0.00046	<0.00046	<0.00046	<0.00046	<0.00046	0	0.0005	0.0005	6	0.00	0%	0.08	NE	NO
74-83-9	Bromomethane	<0.00057	<0.00057	<0.00057	<0.00057	<0.00057	<0.00057	0	0.0006	0.0006	6	0.00	0%	0.01	NE	NO
104-51-8	n-Butylbenzene	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0	0.0002	0.0002	6	0.00	0%	2.1	NE	NO
135-98-8	sec-Butylbenzene	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	0	0.0002	0.0002	6	0.00	0%	NE	NE	NO
98-06-6	tert-Butylbenzene	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	0	0.0002	0.0002	6	0.00	0%	NE	NE	NO
56-23-5	Carbon tetrachloride	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	0	0.0004	0.0004	6	0.00	0%	0.005	NE	NO
108-90-7	Chlorobenzene	<0.00025	<0.00025	<0.00025	<0.00025	0.00073	<0.00025	1	0.0007	0.0003	6	0.00	90%	0.1	NE	NO
124-48-1	Chlorodibromomethane	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	0	0.0003	0.0003	6	0.00	0%	NE	NE	NO
75-00-3	Chloroethane	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	0	0.0014	0.0014	6	0.00	0%	2.8	NE	NO
110-75-8	2-Chloroethyl vinyl ether	<0.0027	<0.0027	<0.0027	<0.0027	<0.0027	<0.0027	0	0.0027	0.0027	6	0.00	0%	NE	NE	NO
67-66-3	Chloroform	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	0	0.0002	0.0002	6	0.00	0%	0.08	NE	NO
74-87-3	Chloromethane	<0.00046	<0.00046	<0.00046	<0.00046	<0.00046	<0.00046	0	0.0005	0.0005	6	0.00	0%	0.03	NE	NO
95-49-8	2-Chlorotoluene	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	0	0.0002	0.0002	6	0.00	0%	0.1	NE	NO
106-43-4	4-Chlorotoluene	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0	0.0002	0.0002	6	0.00	0%	0.1	NE	NO
96-12-8	1,2-Dibromo-3-Chloropropane	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	0	0.0011	0.0011	6	0.00	0%	0.0002	NE	NO
106-93-4	1,2-Dibromoethane	<0.00044	<0.00044	<0.00044	<0.00044	<0.00044	<0.00044	0	0.0004	0.0004	6	0.00	0%	0.00005	NE	NO
74-95-3	Dibromomethane	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	0	0.0005	0.0005	6	0.00	0%	0.07	NE	NO
95-50-1	1,2-Dichlorobenzene	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	0	0.0003	0.0003	6	0.00	0%	0.6	NE	NO
541-73-1	1,3-Dichlorobenzene	<0.00025	<0.00025	<0.00025	<0.00025	0.00051	<0.00025	1	0.0005	0.0003	6	0.00	71%	0.6	NE	NO
106-46-7	1,4-Dichlorobenzene	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0	0.0002	0.0002	6	0.00	0%	0.075	NE	NO
75-71-8	Dichlorodifluoromethane	<0.00057	<0.00057	<0.00057	<0.00057	<0.00057	<0.00057	0	0.0006	0.0006	6	0.00	0%	1	NE	NO
75-34-3	1,1-Dichloroethane	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	0	0.0003	0.0003	6	0.00	0%	0.14	NE	NO
107-06-2	1,2-Dichloroethane	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	<0.00026	0	0.0003	0.0003	6	0.00	0%	0.005	NE	NO
75-35-4	1,1-Dichloroethene	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	0	0.0004	0.0004	6	0.00	0%	0.007	NE	NO
156-59-2	cis-1,2-Dichloroethene	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	0	0.0003	0.0003	6	0.00	0%	0.07	NE	NO
156-60-5	trans-1,2-Dichloroethene	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	0	0.0003	0.0003	6	0.00	0%	0.1	NE	NO
78-87-5	1,2-Dichloropropane	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	<0.00047	0	0.0005	0.0005	6	0.00	0%	0.005	NE	NO
563-58-6	1,1-Dichloropropene	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	0	0.0003	0.0003	6	0.00	0%	NE	NE	NO
142-28-9	1,3-Dichloropropane	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	0	0.0004	0.0004	6	0.00	0%	NE	NE	NO
10061-01-5	cis-1,3-Dichloropropene	<0.00023	<0.00023	<0.00023	<0.00023	<0.00023	<0.00023	0	0.0002	0.0002	6	0.00	0%	0.0018	NE	NO
10061-02-6	trans-1,3-Dichloropropene	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	0	0.0004	0.0004	6	0.00	0%	0.0018	NE	NO
594-20-7	2,2-Dichloropropane	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035	<0.00035	0	0.0004	0.0004	6	0.00	0%	NE	NE	NO
108-20-3	Di-isopropyl ether	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	0	0.0002	0.0002	6	0.00	0%	NE	NE	NO
100-41-4	Ethylbenzene	<0.00027	0.00048	<0.00027	0.0003	<0.00027	<0.00027	2	0.0005	0.0003	6	0.00	68%	0.7	0.7	NO
87-68-3	Hexachlorobutadiene	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	0	0.0004	0.0004	6	0.00	0%	0.001	NE	NO
98-82-8	Isopropylbenzene	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	<0.00018	0	0.0002	0.0002	6	0.00	0%	0.7	NE	NO
99-87-6	p-Isopropyltoluene	0.002	<0.00017	<0.00017	<0.00017	<0.00017	<0.00017	1	0.0020	0.0005	6	0.00	172%	NE	NE	NO
78-93-3	2-Butanone (MEK)	<0.003	0.0058	0.008	<0.003	<0.003	<0.003	2	0.0080	0.0043	6	0.00	84%	4	NE	NO
75-09-2	Methylene Chloride	<0.00079	<0.00079	<0.00079	<0.00079	<0.00079	<0.00079	0	0.0008	0.0008	6	0.00	0%	0.005	NE	NO
108-10-1	4-Methyl-2-pentanone (MIBK)	<0.00080	0.0021	0.0031	<0.00080	<0.00080	<0.00080	2	0.0031	0.0014	6	0.00	99%	0.56	NE	NO
1634-04-4	Methyl tert-butyl ether	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	<0.00027	0	0.0003	0.0003	6	0.00	0%	0.021	NE	NO
91-20-3	Naphthalene	0.01	0.002	0.002	0.0077	<0.00069	0.0076	5	0.0100	0.0050	6	0.00	81%	0.1	NE	NO
103-65-1	n-Propylbenzene	<0.00018	<0.00018	<0.00018	0.00033	<0.00018	0.00034	2	0.0003	0.0002	6	0.00	75%	0.7	NE	NO
100-42-5	Styrene	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	0	0.0003	0.0003	6	0.00	0%	0.1	NE	NO
630-20-6	1,1,1,2-Tetrachloroethane	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	<0.00031	0	0.0003	0.0003	6	0.00	0%	0.07	NE	NO
79-34-5	1,1,2,2-Tetrachloroethane	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	<0.00029	0	0.0003	0.0003	6	0.00	0%	0.0003	NE	NO
76-13-1	trifluoroethane	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	0	0.0004	0.0004	6	0.00	0%	2.1	NE	NO
127-18-4	Tetrachloroethene	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	<0.00024	0	0.0002	0.0002	6	0.00	0%	0.005	NE	NO
108-88-3	Toluene	0.00064	0.00056	0.00067	0.00061	<0.00016	0.00061	5	0.0007	0.0005	6	0.00	47%	1	1	NO
87-61-6	1,2,3-Trichlorobenzene	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030	0	0.0003	0.0003	6	0.00	0%	NE	NE	NO
120-82-1	1,2,4-Trichlorobenzene	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	0	0.0002	0.0002	6	0.00	0%	0.07	NE	NO
71-55-6	1,1,1-Trich															

Table 6 - Groundwater Sample Analytical Results
Semi-Volatile Organic Compounds, mg/L

CAS #	Compound	TMW-1	TMW-2	TMW-3	TMW-4	TMW-5	Dup 1 (TMW 4)	Number of Detections	Maximum Value	Mean Value	Number of Data Points (n)	Standard Deviation	Coefficient of Variation	Statewide Standard (Protected GW)	Maximum Value Exceeds?
		8/4/2011	8/4/2011	8/4/2011	8/4/2011	8/4/2011	8/4/2011								
83-32-9	Acenaphthene	<0.0018	0.00042	<0.00090	0.0011	<0.00018	0.00097	3	0.0011	0.0009	6	0.00	56%	0.42	NO
208-96-8	Acenaphthylene	<0.0021	<0.00021	<0.0010	<0.0010	<0.00021	<0.0010	0	0.0010	0.0010	6	0.00	0%	0.21	NO
120-12-7	Anthracene	<0.0017	<0.00017	<0.00083	<0.00083	<0.00017	<0.00083	0	0.0010	0.0010	6	0.00	0%	2.1	NO
92-87-5	Benzidine	<0.021	<0.0021	<0.010	<0.010	<0.0021	<0.010	0	0.0100	0.0100	6	0.00	0%	0.0076	NO
56-55-3	Benzo(a)anthracene	<0.0019	<0.00019	<0.00093	<0.00093	<0.00019	<0.00093	0	0.0010	0.0010	6	0.00	0%	0.00024	NO
205-99-2	Benzo(b)fluoranthene	<0.0038	<0.00038	<0.0019	<0.0019	<0.00038	<0.0019	0	0.0010	0.0010	6	0.00	0%	0.00024	NO
207-08-9	Benzo(k)fluoranthene	<0.0026	<0.00026	<0.0013	<0.0013	<0.00026	<0.0013	0	0.0010	0.0010	6	0.00	0%	0.0024	NO
191-24-2	Benzo(g,h,i)perylene	<0.0037	<0.00037	<0.0018	<0.0018	<0.00037	<0.0018	0	0.0010	0.0010	6	0.00	0%	0.021	NO
50-32-8	Benzo(a)pyrene	<0.0027	<0.00027	<0.0013	<0.0013	<0.00027	<0.0013	0	0.0010	0.0010	6	0.00	0%	0.0002	NO
111-91-1	Bis(2-chlorethoxy)methane	<0.0021	<0.00021	<0.0011	<0.0011	<0.00021	<0.0011	0	0.0100	0.0100	6	0.00	0%	NE	NO
111-44-4	Bis(2-chloroethyl)ether	<0.0021	0.00047	<0.0011	<0.0011	<0.00021	<0.0011	1	0.0005	0.0084	6	0.00	2%	0.00016	YES
108-60-1	Bis(2-chloroisopropyl)ether	<0.0031	<0.00031	<0.0015	<0.0015	<0.00031	<0.0015	0	0.0100	0.0100	6	0.00	0%	0.3	NO
101-55-3	4-Bromophenyl-phenylether	<0.0018	<0.00018	<0.00090	<0.00090	<0.00018	<0.00090	0	0.0100	0.0100	6	0.00	0%	NE	NO
91-58-7	2-Chloronaphthalene	<0.0020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0	0.0010	0.0010	6	0.00	0%	0.56	NO
7005-72-3	4-Chlorophenyl-phenylether	<0.0017	<0.00017	<0.00085	<0.00085	<0.00017	<0.00085	0	0.0100	0.0100	6	0.00	0%	NE	NO
218-01-9	Chrysene	<0.0013	<0.00013	<0.00066	<0.00066	<0.00013	<0.00066	0	0.0010	0.0010	6	0.00	0%	0.024	NO
53-70-3	Dibenz(a,h)anthracene	<0.0025	<0.00025	<0.0012	<0.0012	<0.00025	<0.0012	0	0.0010	0.0010	6	0.00	0%	0.000024	NO
91-94-1	3,3-Dichlorobenzidine	<0.017	<0.0017	<0.0084	<0.0084	<0.0017	<0.0084	0	0.0100	0.0100	6	0.00	0%	0.00039	NO
121-14-2	2,4-Dinitrotoluene	<0.0022	<0.00022	<0.0011	<0.0011	<0.00022	<0.0011	0	0.0100	0.0100	6	0.00	0%	0.00026	NO
606-20-2	2,6-Dinitrotoluene	<0.014	<0.0014	<0.0072	<0.0072	<0.0014	<0.0072	0	0.0100	0.0100	6	0.00	0%	0.00026	NO
206-44-0	Fluoranthene	<0.0034	<0.00034	<0.0017	<0.0017	<0.00034	<0.0017	0	0.0010	0.0010	6	0.00	0%	0.28	NO
86-73-7	Fluorene	<0.0018	<0.00018	<0.00088	<0.00088	<0.00018	<0.00088	0	0.0010	0.0010	6	0.00	0%	0.28	NO
118-74-1	Hexachlorobenzene	<0.0023	<0.00023	<0.0011	<0.0011	<0.00023	<0.0011	0	0.0010	0.0010	6	0.00	0%	0.001	NO
87-68-3	Hexachloro-1,3-butadiene	<0.026	<0.0026	<0.013	<0.013	<0.0026	<0.013	0	0.0100	0.0100	6	0.00	0%	0.001	NO
77-47-4	Hexachlorocyclopentadiene	<0.018	<0.0018	<0.0090	<0.0090	<0.0018	<0.0090	0	0.0100	0.0100	6	0.00	0%	0.05	NO
67-72-1	Hexachloroethane	<0.031	<0.0031	<0.016	<0.016	<0.0031	<0.016	0	0.0100	0.0100	6	0.00	0%	0.001	NO
193-39-5	Indeno(1,2,3-cd)pyrene	<0.0033	<0.00033	<0.0017	<0.0017	<0.00033	<0.0017	0	0.0010	0.0010	6	0.00	0%	0.00024	NO
78-59-1	Isophorone	<0.0024	<0.00024	<0.0012	<0.0012	<0.00024	<0.0012	0	0.0100	0.0100	6	0.00	0%	0.1	NO
91-20-3	Naphthalene	0.0059	0.0012	<0.0021	0.0057	<0.00041	0.0048	4	0.0059	0.0033	6	0.00	87%	0.1	NO
98-95-3	Nitrobenzene	<0.0020	<0.00020	<0.0010	<0.0010	<0.00020	<0.0010	0	0.0100	0.0100	6	0.00	0%	0.0035	NO
62-75-9	n-Nitrosodimethylamine	<0.026	<0.0026	<0.013	<0.013	<0.0026	<0.013	0	0.0100	0.0100	6	0.00	0%	NE	NO
86-30-6	n-Nitrosodiphenylamine	<0.0014	<0.00014	<0.00068	<0.00068	<0.00014	<0.00068	0	0.0100	0.0100	6	0.00	0%	0.036	NO
621-64-7	n-Nitrosodi-n-propylamine	<0.0031	<0.00031	<0.0016	<0.0016	<0.00031	<0.0016	0	0.0100	0.0100	6	0.00	0%	NE	NO
85-01-8	Phenanthrene	<0.0020	0.00064	<0.0010	<0.0010	<0.00020	<0.0010	1	0.0006	0.0009	6	0.00	28%	0.21	NO
85-68-7	Benzylbutyl phthalate	<0.0040	<0.00040	<0.0020	<0.0020	<0.00040	<0.0020	0	0.0010	0.0010	6	0.00	0%	0.14	NO
117-81-7	Bis(2-ethylhexyl)phthalate	<0.0050	<0.00050	<0.0025	<0.0025	<0.00050	<0.0025	0	0.0010	0.0010	6	0.00	0%	0.006	NO
84-74-2	Di-n-butyl phthalate	<0.0028	<0.00028	<0.0014	<0.0014	<0.00028	<0.0014	0	0.0010	0.0010	6	0.00	0%	0.7	NO
84-66-2	Diethyl phthalate	<0.0036	<0.00036	<0.0018	<0.0018	<0.00036	<0.0018	0	0.0010	0.0010	6	0.00	0%	5.6	NO
131-11-3	Dimethyl phthalate	<0.0034	<0.00034	<0.0017	<0.0017	<0.00034	<0.0017	0	0.0010	0.0010	6	0.00	0%	NE	NO
117-84-0	Di-n-octyl phthalate	<0.0028	<0.00028	<0.0014	<0.0014	<0.00028	<0.0014	0	0.0010	0.0010	6	0.00	0%	0.14	NO
129-00-0	Pyrene	<0.0030	<0.00030	<0.0015	<0.0015	<0.00030	<0.0015	0	0.0010	0.0010	6	0.00	0%	0.21	NO
120-82-1	1,2,4-Trichlorobenzene	<0.0035	<0.00035	<0.0018	<0.0018	<0.00035	<0.0018	0	0.0100	0.0100	6	0.00	0%	0.07	NO
59-50-7	4-Chloro-3-methylphenol	<0.0023	<0.00023	<0.0011	<0.0011	<0.00023	<0.0011	0	0.0100	0.0100	6	0.00	0%	NE	NO
95-57-8	2-Chlorophenol	<0.0019	<0.00019	<0.00095	<0.00095	<0.00019	<0.00095	0	0.0100	0.0100	6	0.00	0%	0.04	NO
120-83-2	2,4-Dichlorophenol	<0.0097	<0.00097	<0.0049	<0.0049	<0.00097	<0.0049	0	0.0100	0.0100	6	0.00	0%	0.02	NO
105-67-9	2,4-Dimethylphenol	<0.013	<0.0013	<0.0067	<0.0067	<0.0013	<0.0067	0	0.0100	0.0100	6	0.00	0%	0.14	NO
534-52-1	4,6-Dinitro-2-methylphenol	<0.026	<0.0026	<0.013	<0.013	<0.0026	<0.013	0	0.0100	0.0100	6	0.00	0%	NE	NO
51-28-5	2,4-Dinitrophenol	<0.023	<0.0023	<0.012	<0.012	<0.0023	<0.012	0	0.0100	0.0100	6	0.00	0%	0.014	NO
88-75-5	2-Nitrophenol	<0.0028	<0.00028	<0.0014	<0.0014	<0.00028	<0.0014	0	0.0100	0.0100	6	0.00	0%	NE	NO
100-02-7	4-Nitrophenol	<0.027	<0.0027	<0.014	<0.014	<0.0027	<0.014	0	0.0100	0.0100	6	0.00	0%	0.06	NO
87-86-5	Pentachlorophenol	<0.0041	0.00066	0.018	<0.0020	<0.00041	<0.0020	2	0.0180	0.0098	6	0.01	75%	0.001	YES
108-95-2	Phenol	0.026	0.019	0.011	0.016	<0.0011	0.015	5	0.0260	0.0162	6	0.01	54%	2	NO
88-06-2	2,4,6-Trichlorophenol	<0.0028	<0.00028	<0.0014	<0.0014	<0.00028	<0.0014	0	0.0100	0.0100	6	0.00	0%	0.016	NO

< indicates the compound was not detected above the laboratory reporting limit
NA = Not Applicable
NE = Not Established
Bold indicates an analyte was identified.

Table 7 - Groundwater Sample Analytical Results
Petroleum Compounds, mg/L

CAS #	Compound	TMW-1	TMW-2	TMW-3	TMW-4	TMW-5	Dup 1 (TMW-4)	Number of Detections	Maximum Value	Mean Value	Number of Data Points (n)	Standard Deviation	Coefficient of Variation	Pathway 1 Standard	Maximum Value Exceeds?	Pathway 2 Standard	Maximum Value Exceeds?	Pathway 3 Standard	Maximum Value Exceeds?	Pathway 4 Standard	Maximum Value Exceeds?
		8/4/2011	8/4/2011	8/4/2011	8/4/2011	8/4/2011	8/4/2011														
NA	Gasoline Range (C7-C10)	<0.035	<0.035	<0.035	<0.036	<0.036	<0.036	0	0.110	0.132	6	0.00	0%	NE	NA	NE	NA	NE	NA	NE	NA
NA	Diesel Range (C10-C20)	0.16	0.13	0.13	0.22	<0.036	0.18	5	0.220	0.154	6	0.08	49%	1.2	NO	2,200	NO	75	NO	75	NO
NA	Oil Range (C20-C40)	0.099	<0.087	<0.087	<0.091	<0.091	<0.091	1	0.099	0.260	6	0.04	16%	0.4	NO	NE	NA	40	NO	40	NO
NA	Total (C7-C40)	0.26	0.13	0.13	0.22	<0.091	0.18	5	0.260	0.184	6	0.09	49%	NE	NA	NE	NA	NE	NA	NE	NA

< indicates the compound was not detected above the laboratory reporting limit
NA = Not Applicable
NE = Not Established
Bold indicates an analyte was identified.

Pathway 1 = Groundwater ingestion
Pathway 2 = Groundwater vapor
Pathway 3 = Groundwater to plastic water line
Pathway 4 = Surface water

Table 8 - Groundwater Sample Analytical Results
RCRA Metals, mg/L

CAS #	Compound	TMW-1	TMW-2	TMW-3	TMW-4	TMW-5	Dup 1 (TMW-4)	Number of Detections	Maximum Value	Mean Value	Number of Data Points (n)	Standard Deviation	Coefficient of Variation	Statewide Standard (Protected GW)	Maximum Value Exceeds?
		8/4/2011	8/4/2011	8/4/2011	8/4/2011	8/4/2011	8/4/2011								
7439-97-6	Mercury (²⁰² Hg), Dissolved	0.00027	0.00004	0.00002	<0.000017	<0.000017	<0.000017	3	0.0003	0.0002	6	0.00	69%	0.002	NO
7440-38-2	Arsenic (⁷⁵ As), Dissolved	0.015	0.0061	0.018	0.035	0.0065	0.035	6	0.0350	0.0193	6	0.01	68%	0.01	YES
7440-39-3	Barium (¹³⁷ Ba), Dissolved	0.44	0.4	0.089	0.043	0.092	0.043	6	0.4400	0.1845	6	0.18	100%	2	NO
7440-43-9	Cadmium (¹¹¹ Cd), Dissolved	<0.0008	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080	0	0.0050	0.0050	6	0.00	0%	0.005	NO
7440-47-3	Chromium (⁵³ Cr), Dissolved	0.002	<0.0017	<0.0017	<0.0017	<0.0017	<0.0017	1	0.0020	0.0087	6	0.00	9%	0.1	NO
7439-92-1	Lead (²⁰⁸ Pb), Dissolved	0.037	0.0082	0.0038	0.004	0.004	0.0042	6	0.0370	0.0102	6	0.01	130%	0.015	YES
7782-49-2	Selenium (⁸² Se), Dissolved	0.032	0.047	0.02	0.016	0.0074	0.014	6	0.0470	0.0227	6	0.01	63%	0.05	NO
7440-22-4	Silver (¹⁰⁷ Ag), Dissolved	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	0	0.0100	0.0100	6	0.00	0%	0.1	NO

All concentrations are in milligrams per liter (mg/L), generally equivalent to parts per million (ppm)
< indicates the compound was not detected above the laboratory reporting limit
NA = Not Applicable
Bold indicates an analyte was identified.

Appendix C
Soil Boring Logs and Monitoring Well Construction Diagrams

SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring / Well Number: B-1		Facility Name: South Crandic		Facility Street Address: Parcel #1008102002, Coralville, Iowa			
Boring Depth (ft) X Diameter (in): 20.0 x 5				Drilling Method: Geoprobe			
Well Contractor Name: Gary Everman Registration Number: 2396				Logged by: HM			
Ground Surface Elevation (ASL): 98.44			Top of Casing Elevation (ASL): 98.78				
Date: 8/3/11 Start Time: 9:00		Date: 8/3/11 End Time: 11:00		UST Number: LUST Number:			
Depth (feet)	Well Construction Details	Inches of recovery	Sample **To Lab	Type	PID (ppm) Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.)	
		24	**		1.6	Fill, light brown silt and medium to coarse grained sand with gravel.	
					0.0	Fill, light brown/tan very fine grained sand, some silts.	
		6			2.1		
		6			1.3		
		6			2.1	Fill, light brown/tan very fine to coarse grained sand with gravel.	
		12			1.9	Fill, dark brown medium to coarse grained sand with gravel, slight petroleum odor. Augered through debris.	
		18		**		1.6	
					1.2	CL	
					1.0	Fill, brown fine to medium grained sand with gravel, odorous.	
		48			0.9	SP SC	Fill, silt and clay, soft, slightly plastic, odorous. Contains debris (glass).
					1.1	SC	Dark brown clay with trace silts, odorous.
		48			2.0		Dark brown fine to medium grained sand. Dark brown clay with medium grained sand.

WD (while drilling); BOW (bottom of well); BOH (bottom of hole); bgs (below ground surface); PA (power auger)

Observations	Date:					
Water Level (ASL)	Level:	▽ 89.95				
Static Water Level Symbol	Time:					

SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring / Well Number: B-1		Facility Name: South Crandic		Facility Street Address: Parcel #1008102002, Coralville, Iowa			
Boring Depth (ft) X Diameter (in): 20.0 x 5				Drilling Method: Geoprobe			
Well Contractor Name: Gary Everman Registration Number: 2396				Logged by: HM			
Ground Surface Elevation (ASL): 98.44				Top of Casing Elevation (ASL): 98.78			
Date: 8/3/11 Start Time: 9:00		Date: 8/3/11 End Time: 11:00		UST Number:		LUST Number:	
Depth (feet)	Well Construction Details	Inches of recovery	Sample **To Lab	Type	PID (ppm) Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.)	
						Dark brown medium grained sand with clay, slight odor. Dark brown clay with fine to medium grained sand. BOH@ 20 feet.	

WD (while drilling); BOW (bottom of well); BOH (bottom of hole); bgs (below ground surface); PA (power auger)

Observations	Date:					
Water Level (ASL)	Level:	▽ 89.95				
Static Water Level Symbol	Time:					

IOWA DNR 06097004L.GPJ IOWADNR.GDT 9/30/11

SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring / Well Number: B-2		Facility Name: South Crandic		Facility Street Address: Parcel #1008102002, Coralville, Iowa		
Boring Depth (ft) X Diameter (in): 20.0 x 5				Drilling Method: Geoprobe		
Well Contractor Name: Gary Everman Registration Number: 2396				Logged by: HM		
Ground Surface Elevation (ASL): 98.18			Top of Casing Elevation (ASL): 98.90			
Date: 8/3/11 Start Time: 11:20		Date: 8/3/11 End Time: 13:45		UST Number: LUST Number:		
Depth (feet)	Well Construction Details	Inches of recovery	Sample **To Lab	Type	PID (ppm) Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.)
			**		73.9	Fill, tan gravel with fine grained sand and silt.
		24			49.0	Fill, tan fine to medium grained sand with trace gravels.
		24		**	70.3	Fill, fine gravel with trace of silty sand and debris (railroad tie). Strong hydrocarbon odor.
		3			211	Fill, fine gravel with silty sand, strong hydrocarbon odor.
		6			491	Very fine sand and gravel, odorous.
		12			148	SP CL Dark brown clay with fine gravel, odorous.
		3			176	
		3			88.6	
		12			113	
		3			16.0	SC Dark brown clay with fine sand.
		18			2.8	SP Medium grained sand with trace clay.
		18			4.3	
				0.8		BOH@ 20 feet.

WD (while drilling); BOW (bottom of well); BOH (bottom of hole); bgs (below ground surface); PA (power auger)

Observations	Date:				
Water Level (ASL)	Level:	▽ 86.25			
Static Water Level Symbol	Time:				

SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring / Well Number: B-3		Facility Name: South Crandic		Facility Street Address: Parcel #1008102002, Coralville, Iowa		
Boring Depth (ft) X Diameter (in): 21.0 x 5				Drilling Method: Geoprobe		
Well Contractor Name: Gary Everman Registration Number: 2396				Logged by: HM		
Ground Surface Elevation (ASL): 99.04			Top of Casing Elevation (ASL): 99.54			
Date: 8/3/11 Start Time: 14:20		Date: 8/3/11 End Time: 15:25		UST Number: LUST Number:		
Depth (feet)	Well Construction Details	Inches of recovery	Sample **To Lab	Type	PID (ppm) Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.)
		18	**		32.8	Fill, tan fine to medium grained sand with gravel.
		12			25.2	Fill, brown fine to medium grained sand with gravel.
		6			17.8	Fill, light brown fine to medium grained sand with gravel.
		12			73.7	Fill, light brown very fine to coarse grained sand.
		36		**	203	Fill, very fine to medium grained sand with trace clay.
		36			14.8	Fill, cream colored crushed limestone.
		36			16.7	CL Dark brown clay, odorous.
		42			20.1	
		36			73.7	SC Dark gray medium grained sand with trace clay.
		36			3.8	
				35.4		BOH@ 21 feet.

WD (while drilling); BOW (bottom of well); BOH (bottom of hole); bgs (below ground surface); PA (power auger)

Observations	Date:				
Water Level (ASL)	Level:	▽ 84.39			
Static Water Level Symbol	Time:				

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SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring / Well Number: B-4		Facility Name: South Crandic		Facility Street Address: Parcel #1008102002, Coralville, Iowa		
Boring Depth (ft) X Diameter (in): 17.0 x 5				Drilling Method: Geoprobe		
Well Contractor Name: Gary Everman Registration Number: 2396				Logged by: HM		
Ground Surface Elevation (ASL): 92.3			Top of Casing Elevation (ASL): 92.9			
Date: 8/4/11 Start Time: 8:00		Date: 8/4/11 End Time: 8:45		UST Number: LUST Number:		
Depth (feet)	Well Construction Details	Inches of recovery	Sample **To Lab	Type	PID (ppm) Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.)
			**		64.1	Fill, medium brown clay and silt with medium grained sand with grass and sticks.
		36			122	SM SC Dark brown fine to medium grained sand and silt, odorous. Crumbly.
					0.0	Dark brown clay with fine grained sand.
		24			0.0	
					0.0	
		36			0.0	SP Gray fine to coarse grained sand.
				**		10.3
	36				67.8	BOH@ 17 feet.

WD (while drilling); BOW (bottom of well); BOH (bottom of hole); bgs (below ground surface); PA (power auger)

Observations	Date:				
Water Level (ASL)	Level:	83.91			
Static Water Level Symbol	Time:				

SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring / Well Number: B-5		Facility Name: South Crandic		Facility Street Address: Parcel #1008102002, Coralville, Iowa		
Boring Depth (ft) X Diameter (in): 21.0 x 5				Drilling Method: Geoprobe		
Well Contractor Name: Gary Everman Registration Number: 2396				Logged by: HM		
Ground Surface Elevation (ASL): 96.76			Top of Casing Elevation (ASL): 97.3			
Date: 8/3/11 Start Time: 15:40		Date: 8/3/11 End Time: 16:20		UST Number: LUST Number:		
Depth (feet)	Well Construction Details	Inches of recovery	Sample **To Lab	Type	PID (ppm) Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.)
		6	**		260	Fill, orange/brown very fine to medium grained sand.
		12			32.5	Fill, light tan concrete.
		12			99.9	Fill, tan/black very fine to medium grained sand with silt.
		12			22.8	Fill, gray silty clay and sand, odorous. Black oil staining and debris (brick).
		12			11.7	SP Black fine and coarse grained sand, odorous.
				**	7.2	
		30			1.0	CL Black clay with trace silt, odorous.
					2.1	SM Black clay with gravel and silt.
		24			0.5	SW Black stained medium to coarse grained sand, odorous.
					0.0	
		36			0.0	BOH@ 21 feet.

WD (while drilling); BOW (bottom of well); BOH (bottom of hole); bgs (below ground surface); PA (power auger)

Observations	Date:					
Water Level (ASL)	Level:	▽ 84.59				
Static Water Level Symbol	Time:					

IOWA DNR 06097004L.GPJ IOWADNR.GDT 9/30/11

Appendix D
Analytical Results and Chain of Custody



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Est. 1970

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

Report Summary

Thursday August 11, 2011

Report Number: L529577

Samples Received: 08/05/11

Client Project: 06097004L

Description: South Crandic - Coralville, IA

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, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-01

Sample ID : B-1 0-2FT

Site ID :

Collected By : HM
Collection Date : 08/03/11 10:00

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Mercury	0.011	0.0015	0.020	mg/kg	J	7471	08/07/11	1
Arsenic	U	1.6	5.0	mg/kg	0	6010B	08/07/11	5
Barium	47.	0.050	0.25	mg/kg		6010B	08/06/11	1
Cadmium	0.19	0.040	0.25	mg/kg	J	6010B	08/06/11	1
Chromium	8.4	0.085	0.50	mg/kg		6010B	08/06/11	1
Lead	21.	0.090	0.25	mg/kg		6010B	08/06/11	1
Selenium	U	1.6	5.0	mg/kg	0	6010B	08/07/11	5
Silver	U	0.16	0.50	mg/kg		6010B	08/06/11	1
Volatile Organics								
Acetone	U	0.12	0.25	mg/kg		8260B	08/05/11	5
Acrylonitrile	U	0.016	0.050	mg/kg		8260B	08/05/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromodichloromethane	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Bromoform	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Bromomethane	U	0.0088	0.025	mg/kg		8260B	08/05/11	5
n-Butylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
sec-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
tert-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Carbon tetrachloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Chlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Chlorodibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Chloroethane	U	0.0058	0.025	mg/kg		8260B	08/05/11	5
2-Chloroethyl vinyl ether	U	0.0088	0.25	mg/kg		8260B	08/05/11	5
Chloroform	U	0.0021	0.025	mg/kg		8260B	08/05/11	5
Chloromethane	U	0.0035	0.013	mg/kg		8260B	08/05/11	5
2-Chlorotoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
4-Chlorotoluene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dibromo-3-Chloropropane	U	0.010	0.025	mg/kg		8260B	08/05/11	5
1,2-Dibromoethane	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Dibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,4-Dichlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Dichlorodifluoromethane	U	0.0038	0.025	mg/kg		8260B	08/05/11	5
1,1-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1-Dichloroethene	U	0.0031	0.0050	mg/kg		8260B	08/05/11	5
cis-1,2-Dichloroethene	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
trans-1,2-Dichloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloropropane	U	0.0032	0.0050	mg/kg		8260B	08/05/11	5

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

RDL = Reported Detection Limit = LOQ = PQL = EQL

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 08/11/11 14:19 Printed: 08/11/11 14:20

L529577-01 (SV8270BNA) - Previous run also had low SURR recovery. Matrix effect.



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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-01

Sample ID : B-1 0-2FT

Site ID :

Collected By : HM
Collection Date : 08/03/11 10:00

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,1-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichloropropane	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
cis-1,3-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
trans-1,3-Dichloropropene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
2,2-Dichloropropane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Di-isopropyl ether	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Hexachloro-1,3-butadiene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Isopropylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
p-Isopropyltoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
2-Butanone (MEK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methylene Chloride	U	0.0065	0.025	mg/kg		8260B	08/05/11	5
4-Methyl-2-pentanone (MIBK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methyl tert-butyl ether	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Naphthalene	U	0.0028	0.025	mg/kg		8260B	08/05/11	5
n-Propylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Styrene	U	0.0019	0.0050	mg/kg	J4	8260B	08/05/11	5
1,1,1,2-Tetrachloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1,2,2-Tetrachloroethane	U	0.0021	0.0050	mg/kg	J6J3	8260B	08/05/11	5
1,1,2-Trichloro-1,2,2-trifluoro	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Tetrachloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichlorobenzene	U	0.0022	0.0050	mg/kg		8260B	08/05/11	5
1,2,4-Trichlorobenzene	U	0.0015	0.0050	mg/kg		8260B	08/05/11	5
1,1,1-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Trichloroethene	U	0.0017	0.0050	mg/kg	J5	8260B	08/05/11	5
Trichlorofluoromethane	U	0.0045	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichloropropane	U	0.0056	0.013	mg/kg		8260B	08/05/11	5
1,2,4-Trimethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,2,3-Trimethylbenzene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,3,5-Trimethylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Vinyl chloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Xylenes, Total	U	0.0023	0.015	mg/kg		8260B	08/05/11	5
Surrogate Recovery								
Toluene-d8	97.3			% Rec.		8260B	08/05/11	5
Dibromofluoromethane	82.3			% Rec.		8260B	08/05/11	5
4-Bromofluorobenzene	95.6			% Rec.		8260B	08/05/11	5
Gasoline	U	1.3	4.0	mg/kg		OA2	08/08/11	1
Diesel	7.8	1.3	4.0	mg/kg		OA2	08/08/11	1
Motor Oil	72.	3.3	10.	mg/kg		OA2	08/08/11	1
Total (C7-C40)	80.	3.3	10.	mg/kg		OA2	08/08/11	1

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L529577-01 (SV8270BNA) - Previous run also had low SURR recovery. Matrix effect.



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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-1 0-2FT
Collected By : HM
Collection Date : 08/03/11 10:00

ESC Sample # : L529577-01

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Surrogate Recovery o-Terphenyl	87.4			% Rec.		OA2	08/08/11	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.017	mg/kg		8082	08/08/11	1
PCB 1221	U	0.0054	0.017	mg/kg		8082	08/08/11	1
PCB 1232	U	0.0042	0.017	mg/kg		8082	08/08/11	1
PCB 1242	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1248	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1254	0.010	0.0047	0.017	mg/kg	J	8082	08/08/11	1
PCB 1260	U	0.0049	0.017	mg/kg		8082	08/08/11	1
PCBs Surrogates								
Decachlorobiphenyl	78.9			% Rec.		8082	08/08/11	1
Tetrachloro-m-xylene	87.7			% Rec.		8082	08/08/11	1
Base/Neutral Extractables								
Acenaphthene	U	0.064	0.33	mg/kg		8270C	08/10/11	10
Acenaphthylene	U	0.067	0.33	mg/kg		8270C	08/10/11	10
Anthracene	U	0.063	0.33	mg/kg		8270C	08/10/11	10
Benzidine	U	0.64	3.3	mg/kg	J4J3	8270C	08/10/11	10
Benzo(a)anthracene	U	0.043	0.33	mg/kg		8270C	08/10/11	10
Benzo(b)fluoranthene	U	0.070	0.33	mg/kg		8270C	08/10/11	10
Benzo(k)fluoranthene	U	0.058	0.33	mg/kg		8270C	08/10/11	10
Benzo(g,h,i)perylene	U	0.072	0.33	mg/kg		8270C	08/10/11	10
Benzo(a)pyrene	U	0.055	0.33	mg/kg		8270C	08/10/11	10
Bis(2-chlorethoxy)methane	U	0.077	3.3	mg/kg		8270C	08/10/11	10
Bis(2-chloroethyl)ether	U	0.090	3.3	mg/kg	J3	8270C	08/10/11	10
Bis(2-chloroisopropyl)ether	U	0.076	3.3	mg/kg		8270C	08/10/11	10
4-Bromophenyl-phenylether	U	0.11	3.3	mg/kg		8270C	08/10/11	10
2-Chloronaphthalene	U	0.064	0.33	mg/kg		8270C	08/10/11	10
4-Chlorophenyl-phenylether	U	0.063	3.3	mg/kg		8270C	08/10/11	10
Chrysene	U	0.056	0.33	mg/kg		8270C	08/10/11	10
Dibenz(a,h)anthracene	U	0.082	0.33	mg/kg		8270C	08/10/11	10
3,3-Dichlorobenzidine	U	0.79	3.3	mg/kg		8270C	08/10/11	10
2,4-Dinitrotoluene	U	0.061	3.3	mg/kg		8270C	08/10/11	10
2,6-Dinitrotoluene	U	0.074	3.3	mg/kg		8270C	08/10/11	10
Fluoranthene	0.15	0.050	0.33	mg/kg	J	8270C	08/10/11	10
Fluorene	U	0.068	0.33	mg/kg		8270C	08/10/11	10
Hexachlorobenzene	U	0.086	3.3	mg/kg		8270C	08/10/11	10
Hexachloro-1,3-butadiene	U	0.10	3.3	mg/kg		8270C	08/10/11	10
Hexachlorocyclopentadiene	U	0.59	3.3	mg/kg		8270C	08/10/11	10
Hexachloroethane	U	0.13	3.3	mg/kg		8270C	08/10/11	10
Indeno(1,2,3-cd)pyrene	U	0.077	0.33	mg/kg		8270C	08/10/11	10

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-01

Sample ID : B-1 0-2FT

Site ID :

Collected By : HM
Collection Date : 08/03/11 10:00

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Isophorone	U	0.052	3.3	mg/kg		8270C	08/10/11	10
Naphthalene	U	0.089	0.33	mg/kg		8270C	08/10/11	10
Nitrobenzene	U	0.070	3.3	mg/kg		8270C	08/10/11	10
n-Nitrosodimethylamine	U	0.65	3.3	mg/kg		8270C	08/10/11	10
n-Nitrosodiphenylamine	U	0.059	3.3	mg/kg		8270C	08/10/11	10
n-Nitrosodi-n-propylamine	U	0.091	3.3	mg/kg		8270C	08/10/11	10
Phenanthrene	0.14	0.053	0.33	mg/kg	J	8270C	08/10/11	10
Benzylbutyl phthalate	U	0.10	3.3	mg/kg		8270C	08/10/11	10
Bis(2-ethylhexyl)phthalate	U	0.12	3.3	mg/kg		8270C	08/10/11	10
Di-n-butyl phthalate	U	0.11	3.3	mg/kg		8270C	08/10/11	10
Diethyl phthalate	U	0.069	3.3	mg/kg		8270C	08/10/11	10
Dimethyl phthalate	U	0.054	3.3	mg/kg		8270C	08/10/11	10
Di-n-octyl phthalate	U	0.091	3.3	mg/kg		8270C	08/10/11	10
Pyrene	0.12	0.12	0.33	mg/kg	J	8270C	08/10/11	10
1,2,4-Trichlorobenzene	U	0.088	3.3	mg/kg		8270C	08/10/11	10
Acid Extractables								
4-Chloro-3-methylphenol	U	0.048	3.3	mg/kg		8270C	08/10/11	10
2-Chlorophenol	U	0.083	3.3	mg/kg		8270C	08/10/11	10
2,4-Dichlorophenol	U	0.075	3.3	mg/kg		8270C	08/10/11	10
2,4-Dimethylphenol	U	0.47	3.3	mg/kg		8270C	08/10/11	10
4,6-Dinitro-2-methylphenol	U	1.2	3.3	mg/kg		8270C	08/10/11	10
2,4-Dinitrophenol	U	0.98	3.3	mg/kg		8270C	08/10/11	10
2-Nitrophenol	U	0.13	3.3	mg/kg		8270C	08/10/11	10
4-Nitrophenol	U	0.52	3.3	mg/kg		8270C	08/10/11	10
Pentachlorophenol	U	0.48	3.3	mg/kg		8270C	08/10/11	10
Phenol	U	0.070	3.3	mg/kg		8270C	08/10/11	10
2,4,6-Trichlorophenol	U	0.078	3.3	mg/kg		8270C	08/10/11	10
Surrogate Recovery								
Nitrobenzene-d5	58.7			% Rec.		8270C	08/10/11	10
2-Fluorobiphenyl	58.6			% Rec.		8270C	08/10/11	10
p-Terphenyl-d14	66.3			% Rec.		8270C	08/10/11	10
Phenol-d5	51.1			% Rec.		8270C	08/10/11	10
2-Fluorophenol	16.6			% Rec.	J2	8270C	08/10/11	10
2,4,6-Tribromophenol	2.91			% Rec.	J2	8270C	08/10/11	10

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-1 10-12FT
Collected By : HM
Collection Date : 08/03/11 11:05

ESC Sample # : L529577-02

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Mercury	0.37	0.0015	0.020	mg/kg		7471	08/07/11	1
Arsenic	4.5	0.32	1.0	mg/kg		6010B	08/06/11	1
Barium	140	0.050	0.25	mg/kg		6010B	08/06/11	1
Cadmium	1.0	0.040	0.25	mg/kg		6010B	08/06/11	1
Chromium	16.	0.085	0.50	mg/kg		6010B	08/06/11	1
Lead	28.	0.090	0.25	mg/kg		6010B	08/06/11	1
Selenium	U	0.32	1.0	mg/kg		6010B	08/06/11	1
Silver	0.91	0.16	0.50	mg/kg		6010B	08/06/11	1
Volatile Organics								
Acetone	U	0.12	0.25	mg/kg		8260B	08/05/11	5
Acrylonitrile	U	0.016	0.050	mg/kg		8260B	08/05/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromodichloromethane	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Bromoform	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Bromomethane	U	0.0088	0.025	mg/kg		8260B	08/05/11	5
n-Butylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
sec-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
tert-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Carbon tetrachloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Chlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Chlorodibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Chloroethane	U	0.0058	0.025	mg/kg		8260B	08/05/11	5
2-Chloroethyl vinyl ether	U	0.0088	0.25	mg/kg		8260B	08/05/11	5
Chloroform	U	0.0021	0.025	mg/kg		8260B	08/05/11	5
Chloromethane	U	0.0035	0.013	mg/kg		8260B	08/05/11	5
2-Chlorotoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
4-Chlorotoluene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dibromo-3-Chloropropane	U	0.010	0.025	mg/kg		8260B	08/05/11	5
1,2-Dibromoethane	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Dibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,4-Dichlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Dichlorodifluoromethane	U	0.0038	0.025	mg/kg		8260B	08/05/11	5
1,1-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1-Dichloroethene	U	0.0031	0.0050	mg/kg		8260B	08/05/11	5
cis-1,2-Dichloroethene	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
trans-1,2-Dichloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloropropane	U	0.0032	0.0050	mg/kg		8260B	08/05/11	5

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-1 10-12FT
Collected By : HM
Collection Date : 08/03/11 11:05

ESC Sample # : L529577-02

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,1-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichloropropane	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
cis-1,3-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
trans-1,3-Dichloropropene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
2,2-Dichloropropane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Di-isopropyl ether	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Hexachloro-1,3-butadiene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Isopropylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
p-Isopropyltoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
2-Butanone (MEK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methylene Chloride	U	0.0065	0.025	mg/kg		8260B	08/05/11	5
4-Methyl-2-pentanone (MIBK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methyl tert-butyl ether	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Naphthalene	U	0.0028	0.025	mg/kg		8260B	08/05/11	5
n-Propylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Styrene	U	0.0019	0.0050	mg/kg	J4	8260B	08/05/11	5
1,1,1,2-Tetrachloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1,2,2-Tetrachloroethane	U	0.0021	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloro-1,2,2-trifluoro	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Tetrachloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichlorobenzene	U	0.0022	0.0050	mg/kg		8260B	08/05/11	5
1,2,4-Trichlorobenzene	U	0.0015	0.0050	mg/kg		8260B	08/05/11	5
1,1,1-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Trichloroethene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Trichlorofluoromethane	U	0.0045	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichloropropane	U	0.0056	0.013	mg/kg		8260B	08/05/11	5
1,2,4-Trimethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,2,3-Trimethylbenzene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,3,5-Trimethylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Vinyl chloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Xylenes, Total	U	0.0023	0.015	mg/kg		8260B	08/05/11	5
Surrogate Recovery								
Toluene-d8	98.8			% Rec.		8260B	08/05/11	5
Dibromofluoromethane	97.5			% Rec.		8260B	08/05/11	5
4-Bromofluorobenzene	99.3			% Rec.		8260B	08/05/11	5
Gasoline	U	1.3	4.0	mg/kg		OA2	08/08/11	1
Diesel	5.1	1.3	4.0	mg/kg		OA2	08/08/11	1
Motor Oil	390	16.	50.	mg/kg		OA2	08/08/11	5
Total (C7-C40)	400	16.	50.	mg/kg		OA2	08/08/11	5

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-1 10-12FT
Collected By : HM
Collection Date : 08/03/11 11:05

ESC Sample # : L529577-02

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Surrogate Recovery o-Terphenyl	71.1			% Rec.		OA2	08/08/11	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.017	mg/kg		8082	08/08/11	1
PCB 1221	U	0.0054	0.017	mg/kg		8082	08/08/11	1
PCB 1232	U	0.0042	0.017	mg/kg		8082	08/08/11	1
PCB 1242	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1248	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1254	U	0.0047	0.017	mg/kg		8082	08/08/11	1
PCB 1260	U	0.0049	0.017	mg/kg		8082	08/08/11	1
PCBs Surrogates								
Decachlorobiphenyl	83.2			% Rec.		8082	08/08/11	1
Tetrachloro-m-xylene	91.8			% Rec.		8082	08/08/11	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.033	mg/kg		8270C	08/08/11	1
Acenaphthylene	U	0.0067	0.033	mg/kg		8270C	08/08/11	1
Anthracene	0.012	0.0063	0.033	mg/kg	J	8270C	08/08/11	1
Benzidine	U	0.064	0.33	mg/kg		8270C	08/08/11	1
Benzo(a)anthracene	0.0099	0.0043	0.033	mg/kg	J	8270C	08/08/11	1
Benzo(b)fluoranthene	U	0.0070	0.033	mg/kg		8270C	08/08/11	1
Benzo(k)fluoranthene	U	0.0058	0.033	mg/kg		8270C	08/08/11	1
Benzo(g,h,i)perylene	U	0.0072	0.033	mg/kg		8270C	08/08/11	1
Benzo(a)pyrene	U	0.0055	0.033	mg/kg		8270C	08/08/11	1
Bis(2-chlorethoxy)methane	U	0.0077	0.33	mg/kg		8270C	08/08/11	1
Bis(2-chloroethyl)ether	U	0.0090	0.33	mg/kg		8270C	08/08/11	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.33	mg/kg		8270C	08/08/11	1
4-Bromophenyl-phenylether	U	0.011	0.33	mg/kg		8270C	08/08/11	1
2-Chloronaphthalene	U	0.0064	0.033	mg/kg		8270C	08/08/11	1
4-Chlorophenyl-phenylether	U	0.0063	0.33	mg/kg		8270C	08/08/11	1
Chrysene	0.011	0.0056	0.033	mg/kg	J	8270C	08/08/11	1
Dibenz(a,h)anthracene	U	0.0082	0.033	mg/kg		8270C	08/08/11	1
3,3-Dichlorobenzidine	U	0.079	0.33	mg/kg		8270C	08/08/11	1
2,4-Dinitrotoluene	U	0.0061	0.33	mg/kg		8270C	08/08/11	1
2,6-Dinitrotoluene	U	0.0074	0.33	mg/kg		8270C	08/08/11	1
Fluoranthene	0.019	0.0050	0.033	mg/kg	J	8270C	08/08/11	1
Fluorene	U	0.0068	0.033	mg/kg		8270C	08/08/11	1
Hexachlorobenzene	U	0.0086	0.33	mg/kg		8270C	08/08/11	1
Hexachloro-1,3-butadiene	U	0.010	0.33	mg/kg		8270C	08/08/11	1
Hexachlorocyclopentadiene	U	0.059	0.33	mg/kg		8270C	08/08/11	1
Hexachloroethane	U	0.013	0.33	mg/kg		8270C	08/08/11	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.033	mg/kg		8270C	08/08/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : B-1 10-12FT

Collected By : HM
Collection Date : 08/03/11 11:05

ESC Sample # : L529577-02

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Isophorone	U	0.0052	0.33	mg/kg		8270C	08/08/11	1
Naphthalene	0.014	0.0089	0.033	mg/kg	J	8270C	08/08/11	1
Nitrobenzene	U	0.0070	0.33	mg/kg		8270C	08/08/11	1
n-Nitrosodimethylamine	U	0.065	0.33	mg/kg		8270C	08/08/11	1
n-Nitrosodiphenylamine	U	0.0059	0.33	mg/kg		8270C	08/08/11	1
n-Nitrosodi-n-propylamine	U	0.0091	0.33	mg/kg		8270C	08/08/11	1
Phenanthrene	0.021	0.0053	0.033	mg/kg	J	8270C	08/08/11	1
Benzylbutyl phthalate	U	0.010	0.33	mg/kg		8270C	08/08/11	1
Bis(2-ethylhexyl)phthalate	0.012	0.012	0.33	mg/kg	J	8270C	08/08/11	1
Di-n-butyl phthalate	U	0.011	0.33	mg/kg		8270C	08/08/11	1
Diethyl phthalate	U	0.0069	0.33	mg/kg		8270C	08/08/11	1
Dimethyl phthalate	U	0.0054	0.33	mg/kg		8270C	08/08/11	1
Di-n-octyl phthalate	U	0.0091	0.33	mg/kg		8270C	08/08/11	1
Pyrene	0.020	0.012	0.033	mg/kg	J	8270C	08/08/11	1
1,2,4-Trichlorobenzene	U	0.0088	0.33	mg/kg		8270C	08/08/11	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.33	mg/kg		8270C	08/08/11	1
2-Chlorophenol	U	0.0083	0.33	mg/kg		8270C	08/08/11	1
2,4-Dichlorophenol	U	0.0075	0.33	mg/kg		8270C	08/08/11	1
2,4-Dimethylphenol	U	0.047	0.33	mg/kg		8270C	08/08/11	1
4,6-Dinitro-2-methylphenol	U	0.12	0.33	mg/kg		8270C	08/08/11	1
2,4-Dinitrophenol	U	0.098	0.33	mg/kg		8270C	08/08/11	1
2-Nitrophenol	U	0.013	0.33	mg/kg		8270C	08/08/11	1
4-Nitrophenol	U	0.052	0.33	mg/kg		8270C	08/08/11	1
Pentachlorophenol	U	0.048	0.33	mg/kg		8270C	08/08/11	1
Phenol	U	0.0070	0.33	mg/kg		8270C	08/08/11	1
2,4,6-Trichlorophenol	U	0.0078	0.33	mg/kg		8270C	08/08/11	1
Surrogate Recovery								
Nitrobenzene-d5	89.9			% Rec.		8270C	08/08/11	1
2-Fluorobiphenyl	92.0			% Rec.		8270C	08/08/11	1
p-Terphenyl-d14	98.8			% Rec.		8270C	08/08/11	1
Phenol-d5	102.			% Rec.		8270C	08/08/11	1
2-Fluorophenol	50.9			% Rec.		8270C	08/08/11	1
2,4,6-Tribromophenol	40.2			% Rec.		8270C	08/08/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-03

Sample ID : B-2 0-2FT

Site ID :

Collected By : HM
Collection Date : 08/03/11 11:40

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Mercury	0.0076	0.0015	0.020	mg/kg	J	7471	08/07/11	1
Arsenic	U	1.6	5.0	mg/kg	0	6010B	08/07/11	5
Barium	85.	0.050	0.25	mg/kg		6010B	08/06/11	1
Cadmium	0.13	0.040	0.25	mg/kg	J	6010B	08/06/11	1
Chromium	8.8	0.085	0.50	mg/kg		6010B	08/06/11	1
Lead	4.0	0.090	0.25	mg/kg		6010B	08/06/11	1
Selenium	U	1.6	5.0	mg/kg	0	6010B	08/07/11	5
Silver	U	0.16	0.50	mg/kg		6010B	08/06/11	1
Volatile Organics								
Acetone	U	0.12	0.25	mg/kg		8260B	08/05/11	5
Acrylonitrile	U	0.016	0.050	mg/kg		8260B	08/05/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromodichloromethane	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Bromoform	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Bromomethane	U	0.0088	0.025	mg/kg		8260B	08/05/11	5
n-Butylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
sec-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
tert-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Carbon tetrachloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Chlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Chlorodibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Chloroethane	U	0.0058	0.025	mg/kg		8260B	08/05/11	5
2-Chloroethyl vinyl ether	U	0.0088	0.25	mg/kg		8260B	08/05/11	5
Chloroform	U	0.0021	0.025	mg/kg		8260B	08/05/11	5
Chloromethane	U	0.0035	0.013	mg/kg		8260B	08/05/11	5
2-Chlorotoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
4-Chlorotoluene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dibromo-3-Chloropropane	U	0.010	0.025	mg/kg		8260B	08/05/11	5
1,2-Dibromoethane	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Dibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,4-Dichlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Dichlorodifluoromethane	U	0.0038	0.025	mg/kg		8260B	08/05/11	5
1,1-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1-Dichloroethene	U	0.0031	0.0050	mg/kg		8260B	08/05/11	5
cis-1,2-Dichloroethene	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
trans-1,2-Dichloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloropropane	U	0.0032	0.0050	mg/kg		8260B	08/05/11	5

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-03

Sample ID : B-2 0-2FT

Site ID :

Collected By : HM
Collection Date : 08/03/11 11:40

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,1-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichloropropane	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
cis-1,3-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
trans-1,3-Dichloropropene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
2,2-Dichloropropane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Di-isopropyl ether	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Hexachloro-1,3-butadiene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Isopropylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
p-Isopropyltoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
2-Butanone (MEK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methylene Chloride	U	0.0065	0.025	mg/kg		8260B	08/05/11	5
4-Methyl-2-pentanone (MIBK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methyl tert-butyl ether	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Naphthalene	U	0.0028	0.025	mg/kg		8260B	08/05/11	5
n-Propylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Styrene	U	0.0019	0.0050	mg/kg	J4	8260B	08/05/11	5
1,1,1,2-Tetrachloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1,2,2-Tetrachloroethane	U	0.0021	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloro-1,2,2-trifluoro	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Tetrachloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichlorobenzene	U	0.0022	0.0050	mg/kg		8260B	08/05/11	5
1,2,4-Trichlorobenzene	U	0.0015	0.0050	mg/kg		8260B	08/05/11	5
1,1,1-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Trichloroethene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Trichlorofluoromethane	U	0.0045	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichloropropane	U	0.0056	0.013	mg/kg		8260B	08/05/11	5
1,2,4-Trimethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,2,3-Trimethylbenzene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,3,5-Trimethylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Vinyl chloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Xylenes, Total	U	0.0023	0.015	mg/kg		8260B	08/05/11	5
Surrogate Recovery								
Toluene-d8	99.9			% Rec.		8260B	08/05/11	5
Dibromofluoromethane	88.5			% Rec.		8260B	08/05/11	5
4-Bromofluorobenzene	103.			% Rec.		8260B	08/05/11	5
Gasoline	3.2	1.3	4.0	mg/kg	J	OA2	08/08/11	1
Diesel	U	1.3	4.0	mg/kg		OA2	08/08/11	1
Motor Oil	U	3.3	10.	mg/kg		OA2	08/08/11	1
Total (C7-C40)	U	3.3	10.	mg/kg		OA2	08/08/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-2 0-2FT
Collected By : HM
Collection Date : 08/03/11 11:40

ESC Sample # : L529577-03

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Surrogate Recovery o-Terphenyl	96.8			% Rec.		0A2	08/08/11	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.017	mg/kg		8082	08/08/11	1
PCB 1221	U	0.0054	0.017	mg/kg		8082	08/08/11	1
PCB 1232	U	0.0042	0.017	mg/kg		8082	08/08/11	1
PCB 1242	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1248	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1254	U	0.0047	0.017	mg/kg		8082	08/08/11	1
PCB 1260	U	0.0049	0.017	mg/kg		8082	08/08/11	1
PCBs Surrogates								
Decachlorobiphenyl	100.			% Rec.		8082	08/08/11	1
Tetrachloro-m-xylene	93.2			% Rec.		8082	08/08/11	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.033	mg/kg		8270C	08/10/11	1
Acenaphthylene	U	0.0067	0.033	mg/kg		8270C	08/10/11	1
Anthracene	U	0.0063	0.033	mg/kg		8270C	08/10/11	1
Benzidine	U	0.064	0.33	mg/kg	J4J3	8270C	08/10/11	1
Benzo(a)anthracene	U	0.0043	0.033	mg/kg		8270C	08/10/11	1
Benzo(b)fluoranthene	U	0.0070	0.033	mg/kg		8270C	08/10/11	1
Benzo(k)fluoranthene	U	0.0058	0.033	mg/kg		8270C	08/10/11	1
Benzo(g,h,i)perylene	U	0.0072	0.033	mg/kg		8270C	08/10/11	1
Benzo(a)pyrene	U	0.0055	0.033	mg/kg		8270C	08/10/11	1
Bis(2-chlorethoxy)methane	U	0.0077	0.33	mg/kg		8270C	08/10/11	1
Bis(2-chloroethyl)ether	U	0.0090	0.33	mg/kg	J3	8270C	08/10/11	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.33	mg/kg		8270C	08/10/11	1
4-Bromophenyl-phenylether	U	0.011	0.33	mg/kg		8270C	08/10/11	1
2-Chloronaphthalene	U	0.0064	0.033	mg/kg		8270C	08/10/11	1
4-Chlorophenyl-phenylether	U	0.0063	0.33	mg/kg		8270C	08/10/11	1
Chrysene	U	0.0056	0.033	mg/kg		8270C	08/10/11	1
Dibenz(a,h)anthracene	U	0.0082	0.033	mg/kg		8270C	08/10/11	1
3,3-Dichlorobenzidine	U	0.079	0.33	mg/kg		8270C	08/10/11	1
2,4-Dinitrotoluene	U	0.0061	0.33	mg/kg		8270C	08/10/11	1
2,6-Dinitrotoluene	U	0.0074	0.33	mg/kg		8270C	08/10/11	1
Fluoranthene	U	0.0050	0.033	mg/kg		8270C	08/10/11	1
Fluorene	U	0.0068	0.033	mg/kg		8270C	08/10/11	1
Hexachlorobenzene	U	0.0086	0.33	mg/kg		8270C	08/10/11	1
Hexachloro-1,3-butadiene	U	0.010	0.33	mg/kg		8270C	08/10/11	1
Hexachlorocyclopentadiene	U	0.059	0.33	mg/kg		8270C	08/10/11	1
Hexachloroethane	U	0.013	0.33	mg/kg		8270C	08/10/11	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.033	mg/kg		8270C	08/10/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-03

Sample ID : B-2 0-2FT

Site ID :

Collected By : HM
Collection Date : 08/03/11 11:40

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Isophorone	U	0.0052	0.33	mg/kg		8270C	08/10/11	1
Naphthalene	U	0.0089	0.033	mg/kg		8270C	08/10/11	1
Nitrobenzene	U	0.0070	0.33	mg/kg		8270C	08/10/11	1
n-Nitrosodimethylamine	U	0.065	0.33	mg/kg		8270C	08/10/11	1
n-Nitrosodiphenylamine	U	0.0059	0.33	mg/kg		8270C	08/10/11	1
n-Nitrosodi-n-propylamine	U	0.0091	0.33	mg/kg		8270C	08/10/11	1
Phenanthrene	U	0.0053	0.033	mg/kg		8270C	08/10/11	1
Benzylbutyl phthalate	U	0.010	0.33	mg/kg		8270C	08/10/11	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.33	mg/kg		8270C	08/10/11	1
Di-n-butyl phthalate	U	0.011	0.33	mg/kg		8270C	08/10/11	1
Diethyl phthalate	U	0.0069	0.33	mg/kg		8270C	08/10/11	1
Dimethyl phthalate	U	0.0054	0.33	mg/kg		8270C	08/10/11	1
Di-n-octyl phthalate	U	0.0091	0.33	mg/kg		8270C	08/10/11	1
Pyrene	U	0.012	0.033	mg/kg		8270C	08/10/11	1
1,2,4-Trichlorobenzene	U	0.0088	0.33	mg/kg		8270C	08/10/11	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.33	mg/kg		8270C	08/10/11	1
2-Chlorophenol	U	0.0083	0.33	mg/kg		8270C	08/10/11	1
2,4-Dichlorophenol	U	0.0075	0.33	mg/kg		8270C	08/10/11	1
2,4-Dimethylphenol	U	0.047	0.33	mg/kg		8270C	08/10/11	1
4,6-Dinitro-2-methylphenol	U	0.12	0.33	mg/kg		8270C	08/10/11	1
2,4-Dinitrophenol	U	0.098	0.33	mg/kg		8270C	08/10/11	1
2-Nitrophenol	U	0.013	0.33	mg/kg		8270C	08/10/11	1
4-Nitrophenol	U	0.052	0.33	mg/kg		8270C	08/10/11	1
Pentachlorophenol	U	0.048	0.33	mg/kg		8270C	08/10/11	1
Phenol	U	0.0070	0.33	mg/kg		8270C	08/10/11	1
2,4,6-Trichlorophenol	U	0.0078	0.33	mg/kg		8270C	08/10/11	1
Surrogate Recovery								
Nitrobenzene-d5	72.7			% Rec.		8270C	08/10/11	1
2-Fluorobiphenyl	80.9			% Rec.		8270C	08/10/11	1
p-Terphenyl-d14	86.9			% Rec.		8270C	08/10/11	1
Phenol-d5	71.5			% Rec.		8270C	08/10/11	1
2-Fluorophenol	20.7			% Rec.	J2	8270C	08/10/11	1
2,4,6-Tribromophenol	10.2			% Rec.	J2	8270C	08/10/11	1

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MDL = Minimum Detection Limit = LOD

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-2 5-7FT
Collected By : HM
Collection Date : 08/03/11 13:45

ESC Sample # : L529577-04

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Mercury	0.041	0.0015	0.020	mg/kg		7471	08/07/11	1
Barium	45.	0.050	0.25	mg/kg		6010B	08/06/11	1
Cadmium	0.17	0.040	0.25	mg/kg	J	6010B	08/06/11	1
Chromium	12.	0.085	0.50	mg/kg		6010B	08/06/11	1
Lead	10.	0.090	0.25	mg/kg		6010B	08/06/11	1
Silver	U	0.16	0.50	mg/kg		6010B	08/06/11	1
Arsenic	U	1.6	5.0	mg/kg	0	6010B	08/07/11	5
Selenium	U	1.6	5.0	mg/kg	0	6010B	08/07/11	5
Volatile Organics								
Acetone	0.13	0.12	0.25	mg/kg	J	8260B	08/05/11	5
Acrylonitrile	U	0.016	0.050	mg/kg		8260B	08/05/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromodichloromethane	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Bromoform	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Bromomethane	U	0.0088	0.025	mg/kg		8260B	08/05/11	5
n-Butylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
sec-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
tert-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Carbon tetrachloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Chlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Chlorodibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Chloroethane	U	0.0058	0.025	mg/kg		8260B	08/05/11	5
2-Chloroethyl vinyl ether	U	0.0088	0.25	mg/kg		8260B	08/05/11	5
Chloroform	U	0.0021	0.025	mg/kg		8260B	08/05/11	5
Chloromethane	U	0.0035	0.013	mg/kg		8260B	08/05/11	5
2-Chlorotoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
4-Chlorotoluene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dibromo-3-Chloropropane	U	0.010	0.025	mg/kg		8260B	08/05/11	5
1,2-Dibromoethane	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Dibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,4-Dichlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Dichlorodifluoromethane	U	0.0038	0.025	mg/kg		8260B	08/05/11	5
1,1-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1-Dichloroethene	U	0.0031	0.0050	mg/kg		8260B	08/05/11	5
cis-1,2-Dichloroethene	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
trans-1,2-Dichloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5

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L529577-04 (SV8270BNA) - Diluted due to matrix



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2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-2 5-7FT
Collected By : HM
Collection Date : 08/03/11 13:45

ESC Sample # : L529577-04

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,2-Dichloropropane	U	0.0032	0.0050	mg/kg		8260B	08/05/11	5
1,1-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichloropropane	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
cis-1,3-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
trans-1,3-Dichloropropene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
2,2-Dichloropropane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Di-isopropyl ether	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Hexachloro-1,3-butadiene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Isopropylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
p-Isopropyltoluene	0.0036	0.0016	0.0050	mg/kg	J	8260B	08/05/11	5
2-Butanone (MEK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methylene Chloride	U	0.0065	0.025	mg/kg		8260B	08/05/11	5
4-Methyl-2-pentanone (MIBK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methyl tert-butyl ether	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Naphthalene	U	0.0028	0.025	mg/kg		8260B	08/05/11	5
n-Propylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Styrene	U	0.0019	0.0050	mg/kg	J4	8260B	08/05/11	5
1,1,1,2-Tetrachloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1,2,2-Tetrachloroethane	U	0.0021	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloro-1,2,2-trifluoro	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Tetrachloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichlorobenzene	U	0.0022	0.0050	mg/kg		8260B	08/05/11	5
1,2,4-Trichlorobenzene	U	0.0015	0.0050	mg/kg		8260B	08/05/11	5
1,1,1-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Trichloroethene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Trichlorofluoromethane	U	0.0045	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichloropropane	U	0.0056	0.013	mg/kg		8260B	08/05/11	5
1,2,4-Trimethylbenzene	0.0090	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,2,3-Trimethylbenzene	0.0052	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,3,5-Trimethylbenzene	0.0034	0.0017	0.0050	mg/kg	J	8260B	08/05/11	5
Vinyl chloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Xylenes, Total	0.0032	0.0023	0.015	mg/kg	J	8260B	08/05/11	5
Surrogate Recovery								
Toluene-d8	98.0			% Rec.		8260B	08/05/11	5
Dibromofluoromethane	46.2			% Rec.	J2	8260B	08/05/11	5
4-Bromofluorobenzene	102.			% Rec.		8260B	08/05/11	5
Gasoline	U	6.6	20.	mg/kg		OA2	08/08/11	5
Diesel	16.	6.6	20.	mg/kg	J	OA2	08/08/11	5
Motor Oil	170	16.	50.	mg/kg		OA2	08/08/11	5

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L529577-04 (SV8270BNA) - Diluted due to matrix



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2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-2 5-7FT
Collected By : HM
Collection Date : 08/03/11 13:45

ESC Sample # : L529577-04

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Total (C7-C40)	190	16.	50.	mg/kg		0A2	08/08/11	5
Surrogate Recovery								
o-Terphenyl	85.7			% Rec.		0A2	08/08/11	5
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.017	mg/kg		8082	08/08/11	1
PCB 1221	U	0.0054	0.017	mg/kg		8082	08/08/11	1
PCB 1232	U	0.0042	0.017	mg/kg		8082	08/08/11	1
PCB 1242	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1248	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1254	U	0.0047	0.017	mg/kg		8082	08/08/11	1
PCB 1260	U	0.0049	0.017	mg/kg		8082	08/08/11	1
PCBs Surrogates								
Decachlorobiphenyl	90.0			% Rec.		8082	08/08/11	1
Tetrachloro-m-xylene	94.4			% Rec.		8082	08/08/11	1
Base/Neutral Extractables								
Acenaphthene	U	0.13	0.66	mg/kg	0	8270C	08/08/11	20
Acenaphthylene	U	0.13	0.66	mg/kg	0	8270C	08/08/11	20
Anthracene	U	0.13	0.66	mg/kg	0	8270C	08/08/11	20
Benzidine	U	1.3	6.7	mg/kg	0	8270C	08/08/11	20
Benzo(a)anthracene	U	0.086	0.66	mg/kg	0	8270C	08/08/11	20
Benzo(b)fluoranthene	U	0.14	0.66	mg/kg	0	8270C	08/08/11	20
Benzo(k)fluoranthene	U	0.12	0.66	mg/kg	0	8270C	08/08/11	20
Benzo(g,h,i)perylene	U	0.14	0.66	mg/kg	0	8270C	08/08/11	20
Benzo(a)pyrene	U	0.11	0.66	mg/kg	0	8270C	08/08/11	20
Bis(2-chloroethoxy)methane	U	0.15	6.7	mg/kg	0	8270C	08/08/11	20
Bis(2-chloroethyl)ether	U	0.18	6.7	mg/kg	0	8270C	08/08/11	20
Bis(2-chloroisopropyl)ether	U	0.15	6.7	mg/kg	0	8270C	08/08/11	20
4-Bromophenyl-phenylether	U	0.23	6.7	mg/kg	0	8270C	08/08/11	20
2-Chloronaphthalene	U	0.13	0.66	mg/kg	0	8270C	08/08/11	20
4-Chlorophenyl-phenylether	U	0.12	6.7	mg/kg	0	8270C	08/08/11	20
Chrysene	U	0.11	0.66	mg/kg	0	8270C	08/08/11	20
Dibenz(a,h)anthracene	U	0.16	0.66	mg/kg	0	8270C	08/08/11	20
3,3-Dichlorobenzidine	U	1.6	6.7	mg/kg	0	8270C	08/08/11	20
2,4-Dinitrotoluene	U	0.12	6.7	mg/kg	0	8270C	08/08/11	20
2,6-Dinitrotoluene	U	0.15	6.7	mg/kg	0	8270C	08/08/11	20
Fluoranthene	U	0.099	0.66	mg/kg	0	8270C	08/08/11	20
Fluorene	U	0.14	0.66	mg/kg	0	8270C	08/08/11	20
Hexachlorobenzene	U	0.17	6.7	mg/kg	0	8270C	08/08/11	20
Hexachloro-1,3-butadiene	U	0.20	6.7	mg/kg	0	8270C	08/08/11	20
Hexachlorocyclopentadiene	U	1.2	6.7	mg/kg	0	8270C	08/08/11	20
Hexachloroethane	U	0.27	6.7	mg/kg	0	8270C	08/08/11	20

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August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-04

Sample ID : B-2 5-7FT

Site ID :

Collected By : HM
Collection Date : 08/03/11 13:45

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Indeno(1,2,3-cd)pyrene	U	0.15	0.66	mg/kg	0	8270C	08/08/11	20
Isophorone	U	0.10	6.7	mg/kg	0	8270C	08/08/11	20
Naphthalene	U	0.18	0.66	mg/kg	0	8270C	08/08/11	20
Nitrobenzene	U	0.14	6.7	mg/kg	0	8270C	08/08/11	20
n-Nitrosodimethylamine	U	1.3	6.7	mg/kg	0	8270C	08/08/11	20
n-Nitrosodiphenylamine	U	0.12	6.7	mg/kg	0	8270C	08/08/11	20
n-Nitrosodi-n-propylamine	U	0.18	6.7	mg/kg	0	8270C	08/08/11	20
Phenanthrene	U	0.10	0.66	mg/kg	0	8270C	08/08/11	20
Benzylbutyl phthalate	U	0.21	6.7	mg/kg	0	8270C	08/08/11	20
Bis(2-ethylhexyl)phthalate	U	0.24	6.7	mg/kg	0	8270C	08/08/11	20
Di-n-butyl phthalate	U	0.22	6.7	mg/kg	0	8270C	08/08/11	20
Diethyl phthalate	U	0.14	6.7	mg/kg	0	8270C	08/08/11	20
Dimethyl phthalate	U	0.11	6.7	mg/kg	0	8270C	08/08/11	20
Di-n-octyl phthalate	U	0.18	6.7	mg/kg	0	8270C	08/08/11	20
Pyrene	U	0.25	0.66	mg/kg	0	8270C	08/08/11	20
1,2,4-Trichlorobenzene	U	0.18	6.7	mg/kg	0	8270C	08/08/11	20
Acid Extractables								
4-Chloro-3-methylphenol	U	0.095	6.7	mg/kg	0	8270C	08/08/11	20
2-Chlorophenol	U	0.17	6.7	mg/kg	0	8270C	08/08/11	20
2,4-Dichlorophenol	U	0.15	6.7	mg/kg	0	8270C	08/08/11	20
2,4-Dimethylphenol	U	0.94	6.7	mg/kg	0	8270C	08/08/11	20
4,6-Dinitro-2-methylphenol	U	2.5	6.7	mg/kg	0	8270C	08/08/11	20
2,4-Dinitrophenol	U	2.0	6.7	mg/kg	0	8270C	08/08/11	20
2-Nitrophenol	U	0.26	6.7	mg/kg	0	8270C	08/08/11	20
4-Nitrophenol	U	1.0	6.7	mg/kg	0	8270C	08/08/11	20
Pentachlorophenol	U	0.96	6.7	mg/kg	0	8270C	08/08/11	20
Phenol	U	0.14	6.7	mg/kg	0	8270C	08/08/11	20
2,4,6-Trichlorophenol	U	0.16	6.7	mg/kg	0	8270C	08/08/11	20
Surrogate Recovery								
Nitrobenzene-d5	0.00			% Rec.	J7	8270C	08/08/11	20
2-Fluorobiphenyl	0.00			% Rec.	J7	8270C	08/08/11	20
p-Terphenyl-d14	0.00			% Rec.	J7	8270C	08/08/11	20
Phenol-d5	0.00			% Rec.	J7	8270C	08/08/11	20
2-Fluorophenol	0.00			% Rec.	J7	8270C	08/08/11	20
2,4,6-Tribromophenol	0.00			% Rec.	J7	8270C	08/08/11	20

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Reported: 08/11/11 14:19 Printed: 08/11/11 14:20
L529577-04 (SV8270BNA) - Diluted due to matrix



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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-3 0-3FT
Collected By : HM
Collection Date : 08/03/11 14:45

ESC Sample # : L529577-05

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Mercury	0.0072	0.0015	0.020	mg/kg	J	7471	08/07/11	1
Arsenic	U	1.6	5.0	mg/kg	0	6010B	08/07/11	5
Barium	92.	0.050	0.25	mg/kg		6010B	08/06/11	1
Cadmium	0.15	0.040	0.25	mg/kg	J	6010B	08/06/11	1
Chromium	13.	0.085	0.50	mg/kg		6010B	08/06/11	1
Lead	5.2	0.090	0.25	mg/kg		6010B	08/06/11	1
Selenium	U	1.6	5.0	mg/kg	0	6010B	08/07/11	5
Silver	U	0.16	0.50	mg/kg		6010B	08/06/11	1
Volatile Organics								
Acetone	U	0.12	0.25	mg/kg		8260B	08/05/11	5
Acrylonitrile	U	0.016	0.050	mg/kg		8260B	08/05/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromodichloromethane	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Bromoform	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Bromomethane	U	0.0088	0.025	mg/kg		8260B	08/05/11	5
n-Butylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
sec-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
tert-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Carbon tetrachloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Chlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Chlorodibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Chloroethane	U	0.0058	0.025	mg/kg		8260B	08/05/11	5
2-Chloroethyl vinyl ether	U	0.0088	0.25	mg/kg		8260B	08/05/11	5
Chloroform	U	0.0021	0.025	mg/kg		8260B	08/05/11	5
Chloromethane	U	0.0035	0.013	mg/kg		8260B	08/05/11	5
2-Chlorotoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
4-Chlorotoluene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dibromo-3-Chloropropane	U	0.010	0.025	mg/kg		8260B	08/05/11	5
1,2-Dibromoethane	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Dibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,4-Dichlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Dichlorodifluoromethane	U	0.0038	0.025	mg/kg		8260B	08/05/11	5
1,1-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1-Dichloroethene	U	0.0031	0.0050	mg/kg		8260B	08/05/11	5
cis-1,2-Dichloroethene	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
trans-1,2-Dichloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloropropane	U	0.0032	0.0050	mg/kg		8260B	08/05/11	5

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

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Reported: 08/11/11 14:19 Printed: 08/11/11 14:20

L529577-05 (SV8270BNA) - Previous run also had low SURR recovery. Matrix effect.



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Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : B-3 0-3FT

Collected By : HM
Collection Date : 08/03/11 14:45

ESC Sample # : L529577-05

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,1-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichloropropane	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
cis-1,3-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
trans-1,3-Dichloropropene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
2,2-Dichloropropane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Di-isopropyl ether	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Hexachloro-1,3-butadiene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Isopropylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
p-Isopropyltoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
2-Butanone (MEK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methylene Chloride	U	0.0065	0.025	mg/kg		8260B	08/05/11	5
4-Methyl-2-pentanone (MIBK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methyl tert-butyl ether	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Naphthalene	U	0.0028	0.025	mg/kg		8260B	08/05/11	5
n-Propylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Styrene	U	0.0019	0.0050	mg/kg	J4	8260B	08/05/11	5
1,1,1,2-Tetrachloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1,2,2-Tetrachloroethane	U	0.0021	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloro-1,2,2-trifluoro	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Tetrachloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichlorobenzene	U	0.0022	0.0050	mg/kg		8260B	08/05/11	5
1,2,4-Trichlorobenzene	U	0.0015	0.0050	mg/kg		8260B	08/05/11	5
1,1,1-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Trichloroethene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Trichlorofluoromethane	U	0.0045	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichloropropane	U	0.0056	0.013	mg/kg		8260B	08/05/11	5
1,2,4-Trimethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,2,3-Trimethylbenzene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,3,5-Trimethylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Vinyl chloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Xylenes, Total	U	0.0023	0.015	mg/kg		8260B	08/05/11	5
Surrogate Recovery								
Toluene-d8	97.5			% Rec.	J2	8260B	08/05/11	5
Dibromofluoromethane	48.3			% Rec.		8260B	08/05/11	5
4-Bromofluorobenzene	101.			% Rec.		8260B	08/05/11	5
Gasoline	6.0	1.3	4.0	mg/kg		OA2	08/08/11	1
Diesel	7.7	1.3	4.0	mg/kg		OA2	08/08/11	1
Motor Oil	36.	3.3	10.	mg/kg		OA2	08/08/11	1
Total (C7-C40)	50.	3.3	10.	mg/kg		OA2	08/08/11	1

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L529577-05 (SV8270BNA) - Previous run also had low SURR recovery. Matrix effect.



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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-3 0-3FT
Collected By : HM
Collection Date : 08/03/11 14:45

ESC Sample # : L529577-05

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Surrogate Recovery o-Terphenyl	93.6			% Rec.		0A2	08/08/11	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.017	mg/kg		8082	08/08/11	1
PCB 1221	U	0.0054	0.017	mg/kg		8082	08/08/11	1
PCB 1232	U	0.0042	0.017	mg/kg		8082	08/08/11	1
PCB 1242	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1248	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1254	U	0.0047	0.017	mg/kg		8082	08/08/11	1
PCB 1260	U	0.0049	0.017	mg/kg		8082	08/08/11	1
PCBs Surrogates								
Decachlorobiphenyl	87.7			% Rec.		8082	08/08/11	1
Tetrachloro-m-xylene	87.3			% Rec.		8082	08/08/11	1
Base/Neutral Extractables								
Acenaphthene	0.057	0.0064	0.033	mg/kg		8270C	08/10/11	1
Acenaphthylene	U	0.0067	0.033	mg/kg		8270C	08/10/11	1
Anthracene	0.15	0.0063	0.033	mg/kg		8270C	08/10/11	1
Benzidine	U	0.064	0.33	mg/kg	J4J3	8270C	08/10/11	1
Benzo(a)anthracene	0.50	0.0043	0.033	mg/kg		8270C	08/10/11	1
Benzo(b)fluoranthene	0.64	0.0070	0.033	mg/kg		8270C	08/10/11	1
Benzo(k)fluoranthene	0.23	0.0058	0.033	mg/kg		8270C	08/10/11	1
Benzo(g,h,i)perylene	0.19	0.0072	0.033	mg/kg		8270C	08/10/11	1
Benzo(a)pyrene	0.46	0.0055	0.033	mg/kg		8270C	08/10/11	1
Bis(2-chlorethoxy)methane	U	0.0077	0.33	mg/kg		8270C	08/10/11	1
Bis(2-chloroethyl)ether	U	0.0090	0.33	mg/kg	J3	8270C	08/10/11	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.33	mg/kg		8270C	08/10/11	1
4-Bromophenyl-phenylether	U	0.011	0.33	mg/kg		8270C	08/10/11	1
2-Chloronaphthalene	U	0.0064	0.033	mg/kg		8270C	08/10/11	1
4-Chlorophenyl-phenylether	U	0.0063	0.33	mg/kg		8270C	08/10/11	1
Chrysene	0.45	0.0056	0.033	mg/kg		8270C	08/10/11	1
Dibenz(a,h)anthracene	0.056	0.0082	0.033	mg/kg		8270C	08/10/11	1
3,3-Dichlorobenzidine	U	0.079	0.33	mg/kg		8270C	08/10/11	1
2,4-Dinitrotoluene	U	0.0061	0.33	mg/kg		8270C	08/10/11	1
2,6-Dinitrotoluene	U	0.0074	0.33	mg/kg		8270C	08/10/11	1
Fluoranthene	1.3	0.0050	0.033	mg/kg		8270C	08/10/11	1
Fluorene	0.048	0.0068	0.033	mg/kg		8270C	08/10/11	1
Hexachlorobenzene	U	0.0086	0.33	mg/kg		8270C	08/10/11	1
Hexachloro-1,3-butadiene	U	0.010	0.33	mg/kg		8270C	08/10/11	1
Hexachlorocyclopentadiene	U	0.059	0.33	mg/kg		8270C	08/10/11	1
Hexachloroethane	U	0.013	0.33	mg/kg		8270C	08/10/11	1
Indeno(1,2,3-cd)pyrene	0.18	0.0077	0.033	mg/kg		8270C	08/10/11	1

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L529577-05 (SV8270BNA) - Previous run also had low SURR recovery. Matrix effect.



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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-05

Sample ID : B-3 0-3FT

Site ID :

Collected By : HM
Collection Date : 08/03/11 14:45

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Isophorone	U	0.0052	0.33	mg/kg		8270C	08/10/11	1
Naphthalene	0.012	0.0089	0.033	mg/kg	J	8270C	08/10/11	1
Nitrobenzene	U	0.0070	0.33	mg/kg		8270C	08/10/11	1
n-Nitrosodimethylamine	U	0.065	0.33	mg/kg		8270C	08/10/11	1
n-Nitrosodiphenylamine	U	0.0059	0.33	mg/kg		8270C	08/10/11	1
n-Nitrosodi-n-propylamine	U	0.0091	0.33	mg/kg		8270C	08/10/11	1
Phenanthrene	0.71	0.0053	0.033	mg/kg		8270C	08/10/11	1
Benzylbutyl phthalate	U	0.010	0.33	mg/kg		8270C	08/10/11	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.33	mg/kg		8270C	08/10/11	1
Di-n-butyl phthalate	U	0.011	0.33	mg/kg		8270C	08/10/11	1
Diethyl phthalate	U	0.0069	0.33	mg/kg		8270C	08/10/11	1
Dimethyl phthalate	U	0.0054	0.33	mg/kg		8270C	08/10/11	1
Di-n-octyl phthalate	U	0.0091	0.33	mg/kg		8270C	08/10/11	1
Pyrene	0.88	0.012	0.033	mg/kg		8270C	08/10/11	1
1,2,4-Trichlorobenzene	U	0.0088	0.33	mg/kg		8270C	08/10/11	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.33	mg/kg		8270C	08/10/11	1
2-Chlorophenol	U	0.0083	0.33	mg/kg		8270C	08/10/11	1
2,4-Dichlorophenol	U	0.0075	0.33	mg/kg		8270C	08/10/11	1
2,4-Dimethylphenol	U	0.047	0.33	mg/kg		8270C	08/10/11	1
4,6-Dinitro-2-methylphenol	U	0.12	0.33	mg/kg		8270C	08/10/11	1
2,4-Dinitrophenol	U	0.098	0.33	mg/kg		8270C	08/10/11	1
2-Nitrophenol	U	0.013	0.33	mg/kg		8270C	08/10/11	1
4-Nitrophenol	U	0.052	0.33	mg/kg		8270C	08/10/11	1
Pentachlorophenol	U	0.048	0.33	mg/kg		8270C	08/10/11	1
Phenol	U	0.0070	0.33	mg/kg		8270C	08/10/11	1
2,4,6-Trichlorophenol	U	0.0078	0.33	mg/kg		8270C	08/10/11	1
Surrogate Recovery								
Nitrobenzene-d5	72.0			% Rec.		8270C	08/10/11	1
2-Fluorobiphenyl	77.9			% Rec.		8270C	08/10/11	1
p-Terphenyl-d14	76.6			% Rec.		8270C	08/10/11	1
Phenol-d5	18.5			% Rec.	J2	8270C	08/10/11	1
2-Fluorophenol	1.33			% Rec.	J2	8270C	08/10/11	1
2,4,6-Tribromophenol	0.450			% Rec.	J2	8270C	08/10/11	1

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L529577-05 (SV8270BNA) - Previous run also had low SURR recovery. Matrix effect.



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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-3 14-16FT
Collected By : HM
Collection Date : 08/03/11 15:30

ESC Sample # : L529577-06

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Mercury	0.019	0.0015	0.020	mg/kg	J	7471	08/07/11	1
Arsenic	3.0	0.32	1.0	mg/kg		6010B	08/06/11	1
Barium	110	0.050	0.25	mg/kg		6010B	08/06/11	1
Cadmium	0.39	0.040	0.25	mg/kg		6010B	08/06/11	1
Chromium	10.	0.085	0.50	mg/kg		6010B	08/06/11	1
Lead	7.4	0.090	0.25	mg/kg		6010B	08/06/11	1
Selenium	U	0.32	1.0	mg/kg		6010B	08/06/11	1
Silver	0.49	0.16	0.50	mg/kg	J	6010B	08/06/11	1
Volatile Organics								
Acetone	U	0.12	0.25	mg/kg		8260B	08/05/11	5
Acrylonitrile	U	0.016	0.050	mg/kg		8260B	08/05/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromodichloromethane	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Bromoform	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Bromomethane	U	0.0088	0.025	mg/kg		8260B	08/05/11	5
n-Butylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
sec-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
tert-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Carbon tetrachloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Chlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Chlorodibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Chloroethane	U	0.0058	0.025	mg/kg		8260B	08/05/11	5
2-Chloroethyl vinyl ether	U	0.0088	0.25	mg/kg		8260B	08/05/11	5
Chloroform	U	0.0021	0.025	mg/kg		8260B	08/05/11	5
Chloromethane	U	0.0035	0.013	mg/kg		8260B	08/05/11	5
2-Chlorotoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
4-Chlorotoluene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dibromo-3-Chloropropane	U	0.010	0.025	mg/kg		8260B	08/05/11	5
1,2-Dibromoethane	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Dibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,4-Dichlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Dichlorodifluoromethane	U	0.0038	0.025	mg/kg		8260B	08/05/11	5
1,1-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1-Dichloroethene	U	0.0031	0.0050	mg/kg		8260B	08/05/11	5
cis-1,2-Dichloroethene	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
trans-1,2-Dichloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloropropane	U	0.0032	0.0050	mg/kg		8260B	08/05/11	5

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

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Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-06

Sample ID : B-3 14-16FT

Site ID :

Collected By : HM
Collection Date : 08/03/11 15:30

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,1-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichloropropane	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
cis-1,3-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
trans-1,3-Dichloropropene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
2,2-Dichloropropane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Di-isopropyl ether	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Hexachloro-1,3-butadiene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Isopropylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
p-Isopropyltoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
2-Butanone (MEK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methylene Chloride	U	0.0065	0.025	mg/kg		8260B	08/05/11	5
4-Methyl-2-pentanone (MIBK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methyl tert-butyl ether	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Naphthalene	U	0.0028	0.025	mg/kg		8260B	08/05/11	5
n-Propylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Styrene	U	0.0019	0.0050	mg/kg	J4	8260B	08/05/11	5
1,1,1,2-Tetrachloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1,2,2-Tetrachloroethane	U	0.0021	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloro-1,2,2-trifluoro	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Tetrachloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichlorobenzene	U	0.0022	0.0050	mg/kg		8260B	08/05/11	5
1,2,4-Trichlorobenzene	U	0.0015	0.0050	mg/kg		8260B	08/05/11	5
1,1,1-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Trichloroethene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Trichlorofluoromethane	U	0.0045	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichloropropane	U	0.0056	0.013	mg/kg		8260B	08/05/11	5
1,2,4-Trimethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,2,3-Trimethylbenzene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,3,5-Trimethylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Vinyl chloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Xylenes, Total	U	0.0023	0.015	mg/kg		8260B	08/05/11	5
Surrogate Recovery								
Toluene-d8	98.3			% Rec.		8260B	08/05/11	5
Dibromofluoromethane	96.3			% Rec.		8260B	08/05/11	5
4-Bromofluorobenzene	98.0			% Rec.		8260B	08/05/11	5
Gasoline	U	1.3	4.0	mg/kg		OA2	08/08/11	1
Diesel	U	1.3	4.0	mg/kg		OA2	08/08/11	1
Motor Oil	U	3.3	10.	mg/kg		OA2	08/08/11	1
Total (C7-C40)	U	3.3	10.	mg/kg		OA2	08/08/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-3 14-16FT
Collected By : HM
Collection Date : 08/03/11 15:30

ESC Sample # : L529577-06

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Surrogate Recovery o-Terphenyl	99.5			% Rec.		0A2	08/08/11	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.017	mg/kg		8082	08/08/11	1
PCB 1221	U	0.0054	0.017	mg/kg		8082	08/08/11	1
PCB 1232	U	0.0042	0.017	mg/kg		8082	08/08/11	1
PCB 1242	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1248	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1254	U	0.0047	0.017	mg/kg		8082	08/08/11	1
PCB 1260	U	0.0049	0.017	mg/kg		8082	08/08/11	1
PCBs Surrogates								
Decachlorobiphenyl	75.9			% Rec.		8082	08/08/11	1
Tetrachloro-m-xylene	88.9			% Rec.		8082	08/08/11	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.033	mg/kg		8270C	08/08/11	1
Acenaphthylene	U	0.0067	0.033	mg/kg		8270C	08/08/11	1
Anthracene	U	0.0063	0.033	mg/kg		8270C	08/08/11	1
Benzidine	U	0.064	0.33	mg/kg		8270C	08/08/11	1
Benzo(a)anthracene	U	0.0043	0.033	mg/kg		8270C	08/08/11	1
Benzo(b)fluoranthene	U	0.0070	0.033	mg/kg		8270C	08/08/11	1
Benzo(k)fluoranthene	U	0.0058	0.033	mg/kg		8270C	08/08/11	1
Benzo(g,h,i)perylene	U	0.0072	0.033	mg/kg		8270C	08/08/11	1
Benzo(a)pyrene	U	0.0055	0.033	mg/kg		8270C	08/08/11	1
Bis(2-chlorethoxy)methane	U	0.0077	0.33	mg/kg		8270C	08/08/11	1
Bis(2-chloroethyl)ether	U	0.0090	0.33	mg/kg		8270C	08/08/11	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.33	mg/kg		8270C	08/08/11	1
4-Bromophenyl-phenylether	U	0.011	0.33	mg/kg		8270C	08/08/11	1
2-Chloronaphthalene	U	0.0064	0.033	mg/kg		8270C	08/08/11	1
4-Chlorophenyl-phenylether	U	0.0063	0.33	mg/kg		8270C	08/08/11	1
Chrysene	U	0.0056	0.033	mg/kg		8270C	08/08/11	1
Dibenz(a,h)anthracene	U	0.0082	0.033	mg/kg		8270C	08/08/11	1
3,3-Dichlorobenzidine	U	0.079	0.33	mg/kg		8270C	08/08/11	1
2,4-Dinitrotoluene	U	0.0061	0.33	mg/kg		8270C	08/08/11	1
2,6-Dinitrotoluene	U	0.0074	0.33	mg/kg		8270C	08/08/11	1
Fluoranthene	U	0.0050	0.033	mg/kg		8270C	08/08/11	1
Fluorene	U	0.0068	0.033	mg/kg		8270C	08/08/11	1
Hexachlorobenzene	U	0.0086	0.33	mg/kg		8270C	08/08/11	1
Hexachloro-1,3-butadiene	U	0.010	0.33	mg/kg		8270C	08/08/11	1
Hexachlorocyclopentadiene	U	0.059	0.33	mg/kg		8270C	08/08/11	1
Hexachloroethane	U	0.013	0.33	mg/kg		8270C	08/08/11	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.033	mg/kg		8270C	08/08/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : B-3 14-16FT

Collected By : HM
Collection Date : 08/03/11 15:30

ESC Sample # : L529577-06

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Isophorone	U	0.0052	0.33	mg/kg		8270C	08/08/11	1
Naphthalene	0.0092	0.0089	0.033	mg/kg	J	8270C	08/08/11	1
Nitrobenzene	U	0.0070	0.33	mg/kg		8270C	08/08/11	1
n-Nitrosodimethylamine	U	0.065	0.33	mg/kg		8270C	08/08/11	1
n-Nitrosodiphenylamine	U	0.0059	0.33	mg/kg		8270C	08/08/11	1
n-Nitrosodi-n-propylamine	U	0.0091	0.33	mg/kg		8270C	08/08/11	1
Phenanthrene	U	0.0053	0.033	mg/kg		8270C	08/08/11	1
Benzylbutyl phthalate	U	0.010	0.33	mg/kg		8270C	08/08/11	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.33	mg/kg		8270C	08/08/11	1
Di-n-butyl phthalate	U	0.011	0.33	mg/kg		8270C	08/08/11	1
Diethyl phthalate	U	0.0069	0.33	mg/kg		8270C	08/08/11	1
Dimethyl phthalate	U	0.0054	0.33	mg/kg		8270C	08/08/11	1
Di-n-octyl phthalate	U	0.0091	0.33	mg/kg		8270C	08/08/11	1
Pyrene	U	0.012	0.033	mg/kg		8270C	08/08/11	1
1,2,4-Trichlorobenzene	U	0.0088	0.33	mg/kg		8270C	08/08/11	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.33	mg/kg		8270C	08/08/11	1
2-Chlorophenol	U	0.0083	0.33	mg/kg		8270C	08/08/11	1
2,4-Dichlorophenol	U	0.0075	0.33	mg/kg		8270C	08/08/11	1
2,4-Dimethylphenol	U	0.047	0.33	mg/kg		8270C	08/08/11	1
4,6-Dinitro-2-methylphenol	U	0.12	0.33	mg/kg		8270C	08/08/11	1
2,4-Dinitrophenol	U	0.098	0.33	mg/kg		8270C	08/08/11	1
2-Nitrophenol	U	0.013	0.33	mg/kg		8270C	08/08/11	1
4-Nitrophenol	U	0.052	0.33	mg/kg		8270C	08/08/11	1
Pentachlorophenol	U	0.048	0.33	mg/kg		8270C	08/08/11	1
Phenol	U	0.0070	0.33	mg/kg		8270C	08/08/11	1
2,4,6-Trichlorophenol	U	0.0078	0.33	mg/kg		8270C	08/08/11	1
Surrogate Recovery								
Nitrobenzene-d5	82.2			% Rec.		8270C	08/08/11	1
2-Fluorobiphenyl	85.2			% Rec.		8270C	08/08/11	1
p-Terphenyl-d14	99.6			% Rec.		8270C	08/08/11	1
Phenol-d5	97.6			% Rec.		8270C	08/08/11	1
2-Fluorophenol	84.5			% Rec.		8270C	08/08/11	1
2,4,6-Tribromophenol	93.9			% Rec.		8270C	08/08/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-3 7-10FT
Collected By : HM
Collection Date : 08/03/11 15:35

ESC Sample # : L529577-07

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Mercury	0.0093	0.0015	0.020	mg/kg	J	7471	08/07/11	1
Arsenic	U	1.6	5.0	mg/kg	0	6010B	08/07/11	5
Barium	38.	0.050	0.25	mg/kg		6010B	08/06/11	1
Cadmium	0.14	0.040	0.25	mg/kg	J	6010B	08/06/11	1
Chromium	16.	0.085	0.50	mg/kg		6010B	08/06/11	1
Lead	1.6	0.090	0.25	mg/kg		6010B	08/06/11	1
Selenium	U	1.6	5.0	mg/kg	0	6010B	08/07/11	5
Silver	U	0.16	0.50	mg/kg		6010B	08/06/11	1
Volatile Organics								
Acetone	U	0.12	0.25	mg/kg		8260B	08/05/11	5
Acrylonitrile	U	0.016	0.050	mg/kg		8260B	08/05/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromodichloromethane	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Bromoform	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Bromomethane	U	0.0088	0.025	mg/kg		8260B	08/05/11	5
n-Butylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
sec-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
tert-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Carbon tetrachloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Chlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Chlorodibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Chloroethane	U	0.0058	0.025	mg/kg		8260B	08/05/11	5
2-Chloroethyl vinyl ether	U	0.0088	0.25	mg/kg		8260B	08/05/11	5
Chloroform	U	0.0021	0.025	mg/kg		8260B	08/05/11	5
Chloromethane	U	0.0035	0.013	mg/kg		8260B	08/05/11	5
2-Chlorotoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
4-Chlorotoluene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dibromo-3-Chloropropane	U	0.010	0.025	mg/kg		8260B	08/05/11	5
1,2-Dibromoethane	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Dibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,4-Dichlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Dichlorodifluoromethane	U	0.0038	0.025	mg/kg		8260B	08/05/11	5
1,1-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1-Dichloroethene	U	0.0031	0.0050	mg/kg		8260B	08/05/11	5
cis-1,2-Dichloroethene	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
trans-1,2-Dichloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloropropane	U	0.0032	0.0050	mg/kg		8260B	08/05/11	5

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L529577-07 (SV8270BNA) - Previous run also had low SURR recovery. Matrix effect.



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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-3 7-10FT
Collected By : HM
Collection Date : 08/03/11 15:35

ESC Sample # : L529577-07

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,1-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichloropropane	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
cis-1,3-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
trans-1,3-Dichloropropene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
2,2-Dichloropropane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Di-isopropyl ether	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Hexachloro-1,3-butadiene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Isopropylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
p-Isopropyltoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
2-Butanone (MEK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methylene Chloride	U	0.0065	0.025	mg/kg		8260B	08/05/11	5
4-Methyl-2-pentanone (MIBK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methyl tert-butyl ether	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Naphthalene	U	0.0028	0.025	mg/kg		8260B	08/05/11	5
n-Propylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Styrene	U	0.0019	0.0050	mg/kg	J4	8260B	08/05/11	5
1,1,1,2-Tetrachloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1,2,2-Tetrachloroethane	U	0.0021	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloro-1,2,2-trifluoro	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Tetrachloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichlorobenzene	U	0.0022	0.0050	mg/kg		8260B	08/05/11	5
1,2,4-Trichlorobenzene	U	0.0015	0.0050	mg/kg		8260B	08/05/11	5
1,1,1-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Trichloroethene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Trichlorofluoromethane	U	0.0045	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichloropropane	U	0.0056	0.013	mg/kg		8260B	08/05/11	5
1,2,4-Trimethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,2,3-Trimethylbenzene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,3,5-Trimethylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Vinyl chloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Xylenes, Total	U	0.0023	0.015	mg/kg		8260B	08/05/11	5
Surrogate Recovery								
Toluene-d8	97.9			% Rec.	J2	8260B	08/05/11	5
Dibromofluoromethane	49.5			% Rec.		8260B	08/05/11	5
4-Bromofluorobenzene	100.			% Rec.		8260B	08/05/11	5
Gasoline	6.8	1.3	4.0	mg/kg		OA2	08/08/11	1
Diesel	U	1.3	4.0	mg/kg		OA2	08/08/11	1
Motor Oil	U	3.3	10.	mg/kg		OA2	08/08/11	1
Total (C7-C40)	U	3.3	10.	mg/kg		OA2	08/08/11	1

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Reported: 08/11/11 14:19 Printed: 08/11/11 14:20

L529577-07 (SV8270BNA) - Previous run also had low SURR recovery. Matrix effect.



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Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-3 7-10FT
Collected By : HM
Collection Date : 08/03/11 15:35

ESC Sample # : L529577-07

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Surrogate Recovery o-Terphenyl	91.5			% Rec.		OA2	08/08/11	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.017	mg/kg		8082	08/08/11	1
PCB 1221	U	0.0054	0.017	mg/kg		8082	08/08/11	1
PCB 1232	U	0.0042	0.017	mg/kg		8082	08/08/11	1
PCB 1242	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1248	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1254	U	0.0047	0.017	mg/kg		8082	08/08/11	1
PCB 1260	U	0.0049	0.017	mg/kg		8082	08/08/11	1
PCBs Surrogates								
Decachlorobiphenyl	90.8			% Rec.		8082	08/08/11	1
Tetrachloro-m-xylene	95.9			% Rec.		8082	08/08/11	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.033	mg/kg		8270C	08/10/11	1
Acenaphthylene	U	0.0067	0.033	mg/kg		8270C	08/10/11	1
Anthracene	U	0.0063	0.033	mg/kg		8270C	08/10/11	1
Benzidine	U	0.064	0.33	mg/kg	J4J3	8270C	08/10/11	1
Benzo(a)anthracene	0.0062	0.0043	0.033	mg/kg	J	8270C	08/10/11	1
Benzo(b)fluoranthene	U	0.0070	0.033	mg/kg		8270C	08/10/11	1
Benzo(k)fluoranthene	U	0.0058	0.033	mg/kg		8270C	08/10/11	1
Benzo(g,h,i)perylene	U	0.0072	0.033	mg/kg		8270C	08/10/11	1
Benzo(a)pyrene	0.0059	0.0055	0.033	mg/kg	J	8270C	08/10/11	1
Bis(2-chlorethoxy)methane	U	0.0077	0.33	mg/kg		8270C	08/10/11	1
Bis(2-chloroethyl)ether	U	0.0090	0.33	mg/kg	J3	8270C	08/10/11	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.33	mg/kg		8270C	08/10/11	1
4-Bromophenyl-phenylether	U	0.011	0.33	mg/kg		8270C	08/10/11	1
2-Chloronaphthalene	U	0.0064	0.033	mg/kg		8270C	08/10/11	1
4-Chlorophenyl-phenylether	U	0.0063	0.33	mg/kg		8270C	08/10/11	1
Chrysene	0.0059	0.0056	0.033	mg/kg	J	8270C	08/10/11	1
Dibenz(a,h)anthracene	U	0.0082	0.033	mg/kg		8270C	08/10/11	1
3,3-Dichlorobenzidine	U	0.079	0.33	mg/kg		8270C	08/10/11	1
2,4-Dinitrotoluene	U	0.0061	0.33	mg/kg		8270C	08/10/11	1
2,6-Dinitrotoluene	U	0.0074	0.33	mg/kg		8270C	08/10/11	1
Fluoranthene	0.013	0.0050	0.033	mg/kg	J	8270C	08/10/11	1
Fluorene	U	0.0068	0.033	mg/kg		8270C	08/10/11	1
Hexachlorobenzene	U	0.0086	0.33	mg/kg		8270C	08/10/11	1
Hexachloro-1,3-butadiene	U	0.010	0.33	mg/kg		8270C	08/10/11	1
Hexachlorocyclopentadiene	U	0.059	0.33	mg/kg		8270C	08/10/11	1
Hexachloroethane	U	0.013	0.33	mg/kg		8270C	08/10/11	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.033	mg/kg		8270C	08/10/11	1

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L529577-07 (SV8270BNA) - Previous run also had low SURR recovery. Matrix effect.



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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-3 7-10FT
Collected By : HM
Collection Date : 08/03/11 15:35

ESC Sample # : L529577-07

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Isophorone	U	0.0052	0.33	mg/kg		8270C	08/10/11	1
Naphthalene	U	0.0089	0.033	mg/kg		8270C	08/10/11	1
Nitrobenzene	U	0.0070	0.33	mg/kg		8270C	08/10/11	1
n-Nitrosodimethylamine	U	0.065	0.33	mg/kg		8270C	08/10/11	1
n-Nitrosodiphenylamine	U	0.0059	0.33	mg/kg		8270C	08/10/11	1
n-Nitrosodi-n-propylamine	U	0.0091	0.33	mg/kg		8270C	08/10/11	1
Phenanthrene	0.010	0.0053	0.033	mg/kg	J	8270C	08/10/11	1
Benzylbutyl phthalate	U	0.010	0.33	mg/kg		8270C	08/10/11	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.33	mg/kg		8270C	08/10/11	1
Di-n-butyl phthalate	U	0.011	0.33	mg/kg		8270C	08/10/11	1
Diethyl phthalate	U	0.0069	0.33	mg/kg		8270C	08/10/11	1
Dimethyl phthalate	U	0.0054	0.33	mg/kg		8270C	08/10/11	1
Di-n-octyl phthalate	U	0.0091	0.33	mg/kg		8270C	08/10/11	1
Pyrene	0.013	0.012	0.033	mg/kg	J	8270C	08/10/11	1
1,2,4-Trichlorobenzene	U	0.0088	0.33	mg/kg		8270C	08/10/11	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.33	mg/kg		8270C	08/10/11	1
2-Chlorophenol	U	0.0083	0.33	mg/kg		8270C	08/10/11	1
2,4-Dichlorophenol	U	0.0075	0.33	mg/kg		8270C	08/10/11	1
2,4-Dimethylphenol	U	0.047	0.33	mg/kg		8270C	08/10/11	1
4,6-Dinitro-2-methylphenol	U	0.12	0.33	mg/kg		8270C	08/10/11	1
2,4-Dinitrophenol	U	0.098	0.33	mg/kg		8270C	08/10/11	1
2-Nitrophenol	U	0.013	0.33	mg/kg		8270C	08/10/11	1
4-Nitrophenol	U	0.052	0.33	mg/kg		8270C	08/10/11	1
Pentachlorophenol	U	0.048	0.33	mg/kg		8270C	08/10/11	1
Phenol	0.010	0.0070	0.33	mg/kg	J	8270C	08/10/11	1
2,4,6-Trichlorophenol	U	0.0078	0.33	mg/kg		8270C	08/10/11	1
Surrogate Recovery								
Nitrobenzene-d5	57.2			% Rec.		8270C	08/10/11	1
2-Fluorobiphenyl	67.3			% Rec.		8270C	08/10/11	1
p-Terphenyl-d14	86.0			% Rec.		8270C	08/10/11	1
Phenol-d5	10.1			% Rec.	J2	8270C	08/10/11	1
2-Fluorophenol	0.750			% Rec.	J2	8270C	08/10/11	1
2,4,6-Tribromophenol	0.120			% Rec.	J2	8270C	08/10/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-08

Sample ID : B-5 0-2FT

Site ID :

Collected By : HM
Collection Date : 08/03/11 15:50

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Mercury	0.0063	0.0015	0.020	mg/kg	J	7471	08/07/11	1
Arsenic	1.7	1.6	5.0	mg/kg	J	6010B	08/07/11	5
Barium	110	0.050	0.25	mg/kg		6010B	08/06/11	1
Cadmium	0.24	0.040	0.25	mg/kg	J	6010B	08/06/11	1
Chromium	11.	0.085	0.50	mg/kg		6010B	08/06/11	1
Lead	4.0	0.090	0.25	mg/kg		6010B	08/06/11	1
Selenium	U	1.6	5.0	mg/kg	0	6010B	08/07/11	5
Silver	U	0.16	0.50	mg/kg		6010B	08/06/11	1
Volatile Organics								
Acetone	U	0.12	0.25	mg/kg		8260B	08/05/11	5
Acrylonitrile	U	0.016	0.050	mg/kg		8260B	08/05/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromodichloromethane	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Bromoform	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Bromomethane	U	0.0088	0.025	mg/kg		8260B	08/05/11	5
n-Butylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
sec-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
tert-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Carbon tetrachloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Chlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Chlorodibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Chloroethane	U	0.0058	0.025	mg/kg		8260B	08/05/11	5
2-Chloroethyl vinyl ether	U	0.0088	0.25	mg/kg		8260B	08/05/11	5
Chloroform	U	0.0021	0.025	mg/kg		8260B	08/05/11	5
Chloromethane	U	0.0035	0.013	mg/kg		8260B	08/05/11	5
2-Chlorotoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
4-Chlorotoluene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dibromo-3-Chloropropane	U	0.010	0.025	mg/kg		8260B	08/05/11	5
1,2-Dibromoethane	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Dibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,4-Dichlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Dichlorodifluoromethane	U	0.0038	0.025	mg/kg		8260B	08/05/11	5
1,1-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1-Dichloroethene	U	0.0031	0.0050	mg/kg		8260B	08/05/11	5
cis-1,2-Dichloroethene	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
trans-1,2-Dichloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloropropane	U	0.0032	0.0050	mg/kg		8260B	08/05/11	5

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-5 0-2FT
Collected By : HM
Collection Date : 08/03/11 15:50

ESC Sample # : L529577-08

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,1-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichloropropane	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
cis-1,3-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
trans-1,3-Dichloropropene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
2,2-Dichloropropane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Di-isopropyl ether	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Hexachloro-1,3-butadiene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Isopropylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
p-Isopropyltoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
2-Butanone (MEK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methylene Chloride	U	0.0065	0.025	mg/kg		8260B	08/05/11	5
4-Methyl-2-pentanone (MIBK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methyl tert-butyl ether	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Naphthalene	U	0.0028	0.025	mg/kg		8260B	08/05/11	5
n-Propylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Styrene	U	0.0019	0.0050	mg/kg	J4	8260B	08/05/11	5
1,1,1,2-Tetrachloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1,2,2-Tetrachloroethane	U	0.0021	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloro-1,2,2-trifluoro	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Tetrachloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichlorobenzene	U	0.0022	0.0050	mg/kg		8260B	08/05/11	5
1,2,4-Trichlorobenzene	U	0.0015	0.0050	mg/kg		8260B	08/05/11	5
1,1,1-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Trichloroethene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Trichlorofluoromethane	U	0.0045	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichloropropane	U	0.0056	0.013	mg/kg		8260B	08/05/11	5
1,2,4-Trimethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,2,3-Trimethylbenzene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,3,5-Trimethylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Vinyl chloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Xylenes, Total	U	0.0023	0.015	mg/kg		8260B	08/05/11	5
Surrogate Recovery								
Toluene-d8	97.1			% Rec.		8260B	08/05/11	5
Dibromofluoromethane	94.6			% Rec.		8260B	08/05/11	5
4-Bromofluorobenzene	96.5			% Rec.		8260B	08/05/11	5
Gasoline	U	1.3	4.0	mg/kg		OA2	08/08/11	1
Diesel	2.0	1.3	4.0	mg/kg	J	OA2	08/08/11	1
Motor Oil	6.8	3.3	10.	mg/kg	J	OA2	08/08/11	1
Total (C7-C40)	U	3.3	10.	mg/kg		OA2	08/08/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-5 0-2FT
Collected By : HM
Collection Date : 08/03/11 15:50

ESC Sample # : L529577-08

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Surrogate Recovery o-Terphenyl	114.			% Rec.		OA2	08/08/11	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.017	mg/kg		8082	08/08/11	1
PCB 1221	U	0.0054	0.017	mg/kg		8082	08/08/11	1
PCB 1232	U	0.0042	0.017	mg/kg		8082	08/08/11	1
PCB 1242	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1248	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1254	U	0.0047	0.017	mg/kg		8082	08/08/11	1
PCB 1260	U	0.0049	0.017	mg/kg		8082	08/08/11	1
PCBs Surrogates								
Decachlorobiphenyl	82.1			% Rec.		8082	08/08/11	1
Tetrachloro-m-xylene	91.4			% Rec.		8082	08/08/11	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.033	mg/kg		8270C	08/10/11	1
Acenaphthylene	U	0.0067	0.033	mg/kg		8270C	08/10/11	1
Anthracene	U	0.0063	0.033	mg/kg		8270C	08/10/11	1
Benzidine	U	0.064	0.33	mg/kg	J4J3	8270C	08/10/11	1
Benzo(a)anthracene	0.0048	0.0043	0.033	mg/kg	J	8270C	08/10/11	1
Benzo(b)fluoranthene	U	0.0070	0.033	mg/kg		8270C	08/10/11	1
Benzo(k)fluoranthene	U	0.0058	0.033	mg/kg		8270C	08/10/11	1
Benzo(g,h,i)perylene	U	0.0072	0.033	mg/kg		8270C	08/10/11	1
Benzo(a)pyrene	U	0.0055	0.033	mg/kg		8270C	08/10/11	1
Bis(2-chlorethoxy)methane	U	0.0077	0.33	mg/kg		8270C	08/10/11	1
Bis(2-chloroethyl)ether	U	0.0090	0.33	mg/kg	J3	8270C	08/10/11	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.33	mg/kg		8270C	08/10/11	1
4-Bromophenyl-phenylether	U	0.011	0.33	mg/kg		8270C	08/10/11	1
2-Chloronaphthalene	U	0.0064	0.033	mg/kg		8270C	08/10/11	1
4-Chlorophenyl-phenylether	U	0.0063	0.33	mg/kg		8270C	08/10/11	1
Chrysene	0.0058	0.0056	0.033	mg/kg	J	8270C	08/10/11	1
Dibenz(a,h)anthracene	U	0.0082	0.033	mg/kg		8270C	08/10/11	1
3,3-Dichlorobenzidine	U	0.079	0.33	mg/kg		8270C	08/10/11	1
2,4-Dinitrotoluene	U	0.0061	0.33	mg/kg		8270C	08/10/11	1
2,6-Dinitrotoluene	U	0.0074	0.33	mg/kg		8270C	08/10/11	1
Fluoranthene	0.0078	0.0050	0.033	mg/kg	J	8270C	08/10/11	1
Fluorene	U	0.0068	0.033	mg/kg		8270C	08/10/11	1
Hexachlorobenzene	U	0.0086	0.33	mg/kg		8270C	08/10/11	1
Hexachloro-1,3-butadiene	U	0.010	0.33	mg/kg		8270C	08/10/11	1
Hexachlorocyclopentadiene	U	0.059	0.33	mg/kg		8270C	08/10/11	1
Hexachloroethane	U	0.013	0.33	mg/kg		8270C	08/10/11	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.033	mg/kg		8270C	08/10/11	1

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Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-5 0-2FT
Collected By : HM
Collection Date : 08/03/11 15:50

ESC Sample # : L529577-08

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Isophorone	U	0.0052	0.33	mg/kg		8270C	08/10/11	1
Naphthalene	U	0.0089	0.033	mg/kg		8270C	08/10/11	1
Nitrobenzene	U	0.0070	0.33	mg/kg		8270C	08/10/11	1
n-Nitrosodimethylamine	U	0.065	0.33	mg/kg		8270C	08/10/11	1
n-Nitrosodiphenylamine	U	0.0059	0.33	mg/kg		8270C	08/10/11	1
n-Nitrosodi-n-propylamine	U	0.0091	0.33	mg/kg		8270C	08/10/11	1
Phenanthrene	U	0.0053	0.033	mg/kg		8270C	08/10/11	1
Benzylbutyl phthalate	U	0.010	0.33	mg/kg		8270C	08/10/11	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.33	mg/kg		8270C	08/10/11	1
Di-n-butyl phthalate	U	0.011	0.33	mg/kg		8270C	08/10/11	1
Diethyl phthalate	U	0.0069	0.33	mg/kg		8270C	08/10/11	1
Dimethyl phthalate	U	0.0054	0.33	mg/kg		8270C	08/10/11	1
Di-n-octyl phthalate	U	0.0091	0.33	mg/kg		8270C	08/10/11	1
Pyrene	U	0.012	0.033	mg/kg		8270C	08/10/11	1
1,2,4-Trichlorobenzene	U	0.0088	0.33	mg/kg		8270C	08/10/11	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.33	mg/kg		8270C	08/10/11	1
2-Chlorophenol	U	0.0083	0.33	mg/kg		8270C	08/10/11	1
2,4-Dichlorophenol	U	0.0075	0.33	mg/kg		8270C	08/10/11	1
2,4-Dimethylphenol	U	0.047	0.33	mg/kg		8270C	08/10/11	1
4,6-Dinitro-2-methylphenol	U	0.12	0.33	mg/kg		8270C	08/10/11	1
2,4-Dinitrophenol	U	0.098	0.33	mg/kg		8270C	08/10/11	1
2-Nitrophenol	U	0.013	0.33	mg/kg		8270C	08/10/11	1
4-Nitrophenol	U	0.052	0.33	mg/kg		8270C	08/10/11	1
Pentachlorophenol	U	0.048	0.33	mg/kg		8270C	08/10/11	1
Phenol	U	0.0070	0.33	mg/kg		8270C	08/10/11	1
2,4,6-Trichlorophenol	U	0.0078	0.33	mg/kg		8270C	08/10/11	1
Surrogate Recovery								
Nitrobenzene-d5	67.2			% Rec.		8270C	08/10/11	1
2-Fluorobiphenyl	71.4			% Rec.		8270C	08/10/11	1
p-Terphenyl-d14	73.8			% Rec.		8270C	08/10/11	1
Phenol-d5	82.4			% Rec.		8270C	08/10/11	1
2-Fluorophenol	48.3			% Rec.		8270C	08/10/11	1
2,4,6-Tribromophenol	12.9			% Rec.	J2	8270C	08/10/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-5 9-12FT
Collected By : HM
Collection Date : 08/03/11 16:20

ESC Sample # : L529577-09

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Mercury	0.029	0.0015	0.020	mg/kg		7471	08/07/11	1
Arsenic	2.9	0.32	1.0	mg/kg		6010B	08/06/11	1
Barium	99.	0.050	0.25	mg/kg		6010B	08/06/11	1
Cadmium	0.48	0.040	0.25	mg/kg		6010B	08/06/11	1
Chromium	12.	0.085	0.50	mg/kg		6010B	08/06/11	1
Lead	19.	0.090	0.25	mg/kg		6010B	08/06/11	1
Selenium	U	0.32	1.0	mg/kg		6010B	08/06/11	1
Silver	0.46	0.16	0.50	mg/kg	J	6010B	08/06/11	1
Volatile Organics								
Acetone	U	0.12	0.25	mg/kg		8260B	08/05/11	5
Acrylonitrile	U	0.016	0.050	mg/kg		8260B	08/05/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromodichloromethane	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Bromoform	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Bromomethane	U	0.0088	0.025	mg/kg		8260B	08/05/11	5
n-Butylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
sec-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
tert-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Carbon tetrachloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Chlorobenzene	0.0018	0.0016	0.0050	mg/kg	J	8260B	08/05/11	5
Chlorodibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Chloroethane	U	0.0058	0.025	mg/kg		8260B	08/05/11	5
2-Chloroethyl vinyl ether	U	0.0088	0.25	mg/kg		8260B	08/05/11	5
Chloroform	U	0.0021	0.025	mg/kg		8260B	08/05/11	5
Chloromethane	U	0.0035	0.013	mg/kg		8260B	08/05/11	5
2-Chlorotoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
4-Chlorotoluene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dibromo-3-Chloropropane	U	0.010	0.025	mg/kg		8260B	08/05/11	5
1,2-Dibromoethane	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Dibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,4-Dichlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Dichlorodifluoromethane	U	0.0038	0.025	mg/kg		8260B	08/05/11	5
1,1-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1-Dichloroethene	U	0.0031	0.0050	mg/kg		8260B	08/05/11	5
cis-1,2-Dichloroethene	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
trans-1,2-Dichloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloropropane	U	0.0032	0.0050	mg/kg		8260B	08/05/11	5

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-5 9-12FT
Collected By : HM
Collection Date : 08/03/11 16:20

ESC Sample # : L529577-09

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,1-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichloropropane	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
cis-1,3-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
trans-1,3-Dichloropropene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
2,2-Dichloropropane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Di-isopropyl ether	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Hexachloro-1,3-butadiene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Isopropylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
p-Isopropyltoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
2-Butanone (MEK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methylene Chloride	U	0.0065	0.025	mg/kg		8260B	08/05/11	5
4-Methyl-2-pentanone (MIBK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methyl tert-butyl ether	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Naphthalene	U	0.0028	0.025	mg/kg		8260B	08/05/11	5
n-Propylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Styrene	U	0.0019	0.0050	mg/kg	J4	8260B	08/05/11	5
1,1,1,2-Tetrachloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1,2,2-Tetrachloroethane	U	0.0021	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloro-1,2,2-trifluoro	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Tetrachloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichlorobenzene	U	0.0022	0.0050	mg/kg		8260B	08/05/11	5
1,2,4-Trichlorobenzene	U	0.0015	0.0050	mg/kg		8260B	08/05/11	5
1,1,1-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Trichloroethene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Trichlorofluoromethane	U	0.0045	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichloropropane	U	0.0056	0.013	mg/kg		8260B	08/05/11	5
1,2,4-Trimethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,2,3-Trimethylbenzene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,3,5-Trimethylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Vinyl chloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Xylenes, Total	U	0.0023	0.015	mg/kg		8260B	08/05/11	5
Surrogate Recovery								
Toluene-d8	97.2			% Rec.		8260B	08/05/11	5
Dibromofluoromethane	94.8			% Rec.		8260B	08/05/11	5
4-Bromofluorobenzene	96.5			% Rec.		8260B	08/05/11	5
Gasoline	U	1.3	4.0	mg/kg		OA2	08/08/11	1
Diesel	U	1.3	4.0	mg/kg		OA2	08/08/11	1
Motor Oil	4.7	3.3	10.	mg/kg	J	OA2	08/08/11	1
Total (C7-C40)	U	3.3	10.	mg/kg		OA2	08/08/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-5 9-12FT
Collected By : HM
Collection Date : 08/03/11 16:20

ESC Sample # : L529577-09

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Surrogate Recovery o-Terphenyl	90.8			% Rec.		OA2	08/08/11	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.017	mg/kg		8082	08/08/11	1
PCB 1221	U	0.0054	0.017	mg/kg		8082	08/08/11	1
PCB 1232	U	0.0042	0.017	mg/kg		8082	08/08/11	1
PCB 1242	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1248	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1254	U	0.0047	0.017	mg/kg		8082	08/08/11	1
PCB 1260	U	0.0049	0.017	mg/kg		8082	08/08/11	1
PCBs Surrogates								
Decachlorobiphenyl	87.8			% Rec.		8082	08/08/11	1
Tetrachloro-m-xylene	88.8			% Rec.		8082	08/08/11	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.033	mg/kg		8270C	08/08/11	1
Acenaphthylene	U	0.0067	0.033	mg/kg		8270C	08/08/11	1
Anthracene	U	0.0063	0.033	mg/kg		8270C	08/08/11	1
Benzidine	U	0.064	0.33	mg/kg		8270C	08/08/11	1
Benzo(a)anthracene	0.0044	0.0043	0.033	mg/kg	J	8270C	08/08/11	1
Benzo(b)fluoranthene	U	0.0070	0.033	mg/kg		8270C	08/08/11	1
Benzo(k)fluoranthene	U	0.0058	0.033	mg/kg		8270C	08/08/11	1
Benzo(g,h,i)perylene	U	0.0072	0.033	mg/kg		8270C	08/08/11	1
Benzo(a)pyrene	U	0.0055	0.033	mg/kg		8270C	08/08/11	1
Bis(2-chlorethoxy)methane	U	0.0077	0.33	mg/kg		8270C	08/08/11	1
Bis(2-chloroethyl)ether	U	0.0090	0.33	mg/kg		8270C	08/08/11	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.33	mg/kg		8270C	08/08/11	1
4-Bromophenyl-phenylether	U	0.011	0.33	mg/kg		8270C	08/08/11	1
2-Chloronaphthalene	U	0.0064	0.033	mg/kg		8270C	08/08/11	1
4-Chlorophenyl-phenylether	U	0.0063	0.33	mg/kg		8270C	08/08/11	1
Chrysene	U	0.0056	0.033	mg/kg		8270C	08/08/11	1
Dibenz(a,h)anthracene	U	0.0082	0.033	mg/kg		8270C	08/08/11	1
3,3-Dichlorobenzidine	U	0.079	0.33	mg/kg		8270C	08/08/11	1
2,4-Dinitrotoluene	U	0.0061	0.33	mg/kg		8270C	08/08/11	1
2,6-Dinitrotoluene	U	0.0074	0.33	mg/kg		8270C	08/08/11	1
Fluoranthene	U	0.0050	0.033	mg/kg		8270C	08/08/11	1
Fluorene	U	0.0068	0.033	mg/kg		8270C	08/08/11	1
Hexachlorobenzene	U	0.0086	0.33	mg/kg		8270C	08/08/11	1
Hexachloro-1,3-butadiene	U	0.010	0.33	mg/kg		8270C	08/08/11	1
Hexachlorocyclopentadiene	U	0.059	0.33	mg/kg		8270C	08/08/11	1
Hexachloroethane	U	0.013	0.33	mg/kg		8270C	08/08/11	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.033	mg/kg		8270C	08/08/11	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-09

Sample ID : B-5 9-12FT

Site ID :

Collected By : HM
Collection Date : 08/03/11 16:20

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Isophorone	U	0.0052	0.33	mg/kg		8270C	08/08/11	1
Naphthalene	U	0.0089	0.033	mg/kg		8270C	08/08/11	1
Nitrobenzene	U	0.0070	0.33	mg/kg		8270C	08/08/11	1
n-Nitrosodimethylamine	U	0.065	0.33	mg/kg		8270C	08/08/11	1
n-Nitrosodiphenylamine	U	0.0059	0.33	mg/kg		8270C	08/08/11	1
n-Nitrosodi-n-propylamine	U	0.0091	0.33	mg/kg		8270C	08/08/11	1
Phenanthrene	U	0.0053	0.033	mg/kg		8270C	08/08/11	1
Benzylbutyl phthalate	U	0.010	0.33	mg/kg		8270C	08/08/11	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.33	mg/kg		8270C	08/08/11	1
Di-n-butyl phthalate	U	0.011	0.33	mg/kg		8270C	08/08/11	1
Diethyl phthalate	U	0.0069	0.33	mg/kg		8270C	08/08/11	1
Dimethyl phthalate	U	0.0054	0.33	mg/kg		8270C	08/08/11	1
Di-n-octyl phthalate	U	0.0091	0.33	mg/kg		8270C	08/08/11	1
Pyrene	U	0.012	0.033	mg/kg		8270C	08/08/11	1
1,2,4-Trichlorobenzene	U	0.0088	0.33	mg/kg		8270C	08/08/11	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.33	mg/kg		8270C	08/08/11	1
2-Chlorophenol	U	0.0083	0.33	mg/kg		8270C	08/08/11	1
2,4-Dichlorophenol	U	0.0075	0.33	mg/kg		8270C	08/08/11	1
2,4-Dimethylphenol	U	0.047	0.33	mg/kg		8270C	08/08/11	1
4,6-Dinitro-2-methylphenol	U	0.12	0.33	mg/kg		8270C	08/08/11	1
2,4-Dinitrophenol	U	0.098	0.33	mg/kg		8270C	08/08/11	1
2-Nitrophenol	U	0.013	0.33	mg/kg		8270C	08/08/11	1
4-Nitrophenol	U	0.052	0.33	mg/kg		8270C	08/08/11	1
Pentachlorophenol	U	0.048	0.33	mg/kg		8270C	08/08/11	1
Phenol	U	0.0070	0.33	mg/kg		8270C	08/08/11	1
2,4,6-Trichlorophenol	U	0.0078	0.33	mg/kg		8270C	08/08/11	1
Surrogate Recovery								
Nitrobenzene-d5	65.1			% Rec.		8270C	08/08/11	1
2-Fluorobiphenyl	68.8			% Rec.		8270C	08/08/11	1
p-Terphenyl-d14	50.6			% Rec.		8270C	08/08/11	1
Phenol-d5	91.2			% Rec.		8270C	08/08/11	1
2-Fluorophenol	75.4			% Rec.		8270C	08/08/11	1
2,4,6-Tribromophenol	86.9			% Rec.		8270C	08/08/11	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

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Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : DECON 1

Collected By : HM
Collection Date : 08/03/11 16:20

ESC Sample # : L529577-10

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic, Dissolved	U	0.25	1.0	ug/l		6020	08/07/11	1
Mercury, Dissolved	U	0.017	0.20	ug/l		7470A	08/08/11	1
Barium, Dissolved	1.1	1.0	5.0	ug/l	J	6010B	08/05/11	1
Cadmium, Dissolved	U	0.80	5.0	ug/l		6010B	08/05/11	1
Chromium, Dissolved	U	1.7	10.	ug/l		6010B	08/05/11	1
Lead, Dissolved	U	1.8	5.0	ug/l		6010B	08/05/11	1
Selenium, Dissolved	U	6.3	20.	ug/l		6010B	08/05/11	1
Silver, Dissolved	U	3.3	10.	ug/l		6010B	08/05/11	1
Volatile Organics								
Acetone	U	11.	50.	ug/l		8260B	08/05/11	1
Acrolein	U	31.	50.	ug/l		8260B	08/05/11	1
Acrylonitrile	U	1.7	10.	ug/l		8260B	08/05/11	1
Benzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
Bromobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	08/05/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	08/05/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	08/05/11	1
n-Butylbenzene	U	0.20	1.0	ug/l		8260B	08/05/11	1
sec-Butylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
tert-Butylbenzene	U	0.21	1.0	ug/l		8260B	08/05/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	08/05/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
Chlorodibromomethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	08/05/11	1
2-Chloroethyl vinyl ether	U	2.7	50.	ug/l		8260B	08/05/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	08/05/11	1
Chloromethane	U	0.46	2.5	ug/l		8260B	08/05/11	1
2-Chlorotoluene	U	0.17	1.0	ug/l		8260B	08/05/11	1
4-Chlorotoluene	U	0.20	1.0	ug/l		8260B	08/05/11	1
1,2-Dibromo-3-Chloropropane	U	1.1	5.0	ug/l		8260B	08/05/11	1
1,2-Dibromoethane	U	0.44	1.0	ug/l		8260B	08/05/11	1
Dibromomethane	U	0.51	1.0	ug/l		8260B	08/05/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	08/05/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	08/05/11	1
Dichlorodifluoromethane	U	0.57	5.0	ug/l		8260B	08/05/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	08/05/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	08/05/11	1
cis-1,2-Dichloroethene	U	0.27	1.0	ug/l		8260B	08/05/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : DECON 1

Collected By : HM
Collection Date : 08/03/11 16:20

ESC Sample # : L529577-10

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	08/05/11	1
1,1-Dichloropropene	U	0.27	1.0	ug/l	J4	8260B	08/05/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	08/05/11	1
cis-1,3-Dichloropropene	U	0.23	1.0	ug/l		8260B	08/05/11	1
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	08/05/11	1
2,2-Dichloropropane	U	0.35	1.0	ug/l		8260B	08/05/11	1
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	08/05/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	08/05/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	08/05/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
p-Isopropyltoluene	U	0.17	1.0	ug/l		8260B	08/05/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	08/05/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	08/05/11	1
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	08/05/11	1
Methyl tert-butyl ether	U	0.27	1.0	ug/l		8260B	08/05/11	1
Naphthalene	U	0.69	5.0	ug/l		8260B	08/05/11	1
n-Propylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
Styrene	U	0.30	1.0	ug/l	J4	8260B	08/05/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	08/05/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.38	1.0	ug/l		8260B	08/05/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	08/05/11	1
Toluene	U	0.16	5.0	ug/l		8260B	08/05/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	08/05/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	08/05/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	08/05/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	08/05/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	08/08/11	1
Trichlorofluoromethane	U	0.49	5.0	ug/l		8260B	08/05/11	1
1,2,3-Trichloropropane	U	0.52	2.5	ug/l		8260B	08/05/11	1
1,2,4-Trimethylbenzene	U	0.20	1.0	ug/l		8260B	08/05/11	1
1,2,3-Trimethylbenzene	U	0.17	1.0	ug/l		8260B	08/05/11	1
1,3,5-Trimethylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
Vinyl chloride	U	0.28	1.0	ug/l	J4	8260B	08/05/11	1
Xylenes, Total	U	0.86	3.0	ug/l		8260B	08/05/11	1
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	08/05/11	1
Dibromofluoromethane	86.8			% Rec.		8260B	08/05/11	1
4-Bromofluorobenzene	108.			% Rec.		8260B	08/05/11	1
Gasoline	U	35.	110	ug/l		OA2	08/09/11	1.05
Diesel	47.	35.	110	ug/l	J	OA2	08/09/11	1.05

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : DECON 1
Collected By : HM
Collection Date : 08/03/11 16:20

ESC Sample # : L529577-10

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Motor Oil	U	87.	260	ug/l		OA2	08/09/11	1.05
Total (C7-C40)	U	87.	260	ug/l		OA2	08/09/11	1.05
Surrogate Recovery o-Terphenyl	75.9			% Rec.		OA2	08/09/11	1.05
Base/Neutral Extractables								
Acenaphthene	U	0.18	1.0	ug/l		8270C	08/08/11	1
Acenaphthylene	U	0.21	1.0	ug/l		8270C	08/08/11	1
Anthracene	U	0.17	1.0	ug/l		8270C	08/08/11	1
Benzidine	U	2.1	10.	ug/l		8270C	08/08/11	1
Benzo(a)anthracene	U	0.19	1.0	ug/l		8270C	08/08/11	1
Benzo(b)fluoranthene	U	0.38	1.0	ug/l		8270C	08/08/11	1
Benzo(k)fluoranthene	U	0.26	1.0	ug/l		8270C	08/08/11	1
Benzo(g,h,i)perylene	U	0.37	1.0	ug/l		8270C	08/08/11	1
Benzo(a)pyrene	U	0.27	1.0	ug/l		8270C	08/08/11	1
Bis(2-chlorethoxy)methane	U	0.21	10.	ug/l		8270C	08/08/11	1
Bis(2-chloroethyl)ether	U	0.21	10.	ug/l		8270C	08/08/11	1
Bis(2-chloroisopropyl)ether	U	0.31	10.	ug/l		8270C	08/08/11	1
4-Bromophenyl-phenylether	U	0.18	10.	ug/l		8270C	08/08/11	1
2-Chloronaphthalene	U	0.20	1.0	ug/l		8270C	08/08/11	1
4-Chlorophenyl-phenylether	U	0.17	10.	ug/l		8270C	08/08/11	1
Chrysene	U	0.13	1.0	ug/l		8270C	08/08/11	1
Dibenz(a,h)anthracene	U	0.25	1.0	ug/l		8270C	08/08/11	1
3,3-Dichlorobenzidine	U	1.7	10.	ug/l		8270C	08/08/11	1
2,4-Dinitrotoluene	U	0.22	10.	ug/l		8270C	08/08/11	1
2,6-Dinitrotoluene	U	1.4	10.	ug/l		8270C	08/08/11	1
Fluoranthene	U	0.34	1.0	ug/l		8270C	08/08/11	1
Fluorene	U	0.18	1.0	ug/l		8270C	08/08/11	1
Hexachlorobenzene	U	0.23	1.0	ug/l		8270C	08/08/11	1
Hexachloro-1,3-butadiene	U	2.6	10.	ug/l		8270C	08/08/11	1
Hexachlorocyclopentadiene	U	1.8	10.	ug/l		8270C	08/08/11	1
Hexachloroethane	U	3.1	10.	ug/l		8270C	08/08/11	1
Indeno(1,2,3-cd)pyrene	U	0.33	1.0	ug/l		8270C	08/08/11	1
Isophorone	U	0.24	10.	ug/l		8270C	08/08/11	1
Naphthalene	U	0.41	1.0	ug/l		8270C	08/08/11	1
Nitrobenzene	U	0.20	10.	ug/l		8270C	08/08/11	1
n-Nitrosodimethylamine	U	2.6	10.	ug/l		8270C	08/08/11	1
n-Nitrosodiphenylamine	U	0.14	10.	ug/l		8270C	08/08/11	1
n-Nitrosodi-n-propylamine	U	0.31	10.	ug/l		8270C	08/08/11	1
Phenanthrene	U	0.20	1.0	ug/l		8270C	08/08/11	1
Benzylbutyl phthalate	U	0.40	1.0	ug/l		8270C	08/08/11	1
Bis(2-ethylhexyl)phthalate	1.3	0.50	1.0	ug/l		8270C	08/08/11	1
Di-n-butyl phthalate	U	0.28	1.0	ug/l	J3J4	8270C	08/08/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : DECON 1

Collected By : HM
Collection Date : 08/03/11 16:20

ESC Sample # : L529577-10

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Diethyl phthalate	U	0.36	1.0	ug/l	J3	8270C	08/08/11	1
Dimethyl phthalate	U	0.34	1.0	ug/l		8270C	08/08/11	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270C	08/08/11	1
Pyrene	U	0.30	1.0	ug/l		8270C	08/08/11	1
1,2,4-Trichlorobenzene	U	0.35	10.	ug/l		8270C	08/08/11	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.23	10.	ug/l		8270C	08/08/11	1
2-Chlorophenol	U	0.19	10.	ug/l		8270C	08/08/11	1
2,4-Dichlorophenol	U	0.97	10.	ug/l		8270C	08/08/11	1
2,4-Dimethylphenol	U	1.3	10.	ug/l		8270C	08/08/11	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270C	08/08/11	1
2,4-Dinitrophenol	U	2.3	10.	ug/l		8270C	08/08/11	1
2-Nitrophenol	U	0.28	10.	ug/l		8270C	08/08/11	1
4-Nitrophenol	U	2.7	10.	ug/l		8270C	08/08/11	1
Pentachlorophenol	U	0.41	10.	ug/l		8270C	08/08/11	1
Phenol	U	1.1	10.	ug/l		8270C	08/08/11	1
2,4,6-Trichlorophenol	U	0.28	10.	ug/l		8270C	08/08/11	1
Surrogate Recovery								
Nitrobenzene-d5	64.8			% Rec.		8270C	08/08/11	1
2-Fluorobiphenyl	80.3			% Rec.		8270C	08/08/11	1
p-Terphenyl-d14	78.7			% Rec.		8270C	08/08/11	1
Phenol-d5	18.4			% Rec.		8270C	08/08/11	1
2-Fluorophenol	27.3			% Rec.		8270C	08/08/11	1
2,4,6-Tribromophenol	81.3			% Rec.		8270C	08/08/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-4 0-2FT
Collected By : HM
Collection Date : 08/04/11 08:25

ESC Sample # : L529577-11

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Mercury	0.0027	0.0015	0.020	mg/kg	J	7471	08/07/11	1
Arsenic	U	1.6	5.0	mg/kg	0	6010B	08/07/11	5
Barium	37.	0.050	0.25	mg/kg		6010B	08/06/11	1
Cadmium	0.12	0.040	0.25	mg/kg	J	6010B	08/06/11	1
Chromium	8.6	0.085	0.50	mg/kg		6010B	08/06/11	1
Lead	1.9	0.090	0.25	mg/kg		6010B	08/06/11	1
Selenium	U	1.6	5.0	mg/kg	0	6010B	08/07/11	5
Silver	U	0.16	0.50	mg/kg		6010B	08/06/11	1
Volatile Organics								
Acetone	U	0.12	0.25	mg/kg		8260B	08/05/11	5
Acrylonitrile	U	0.016	0.050	mg/kg		8260B	08/05/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromodichloromethane	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Bromoform	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Bromomethane	U	0.0088	0.025	mg/kg		8260B	08/05/11	5
n-Butylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
sec-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
tert-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Carbon tetrachloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Chlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Chlorodibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Chloroethane	U	0.0058	0.025	mg/kg		8260B	08/05/11	5
2-Chloroethyl vinyl ether	U	0.0088	0.25	mg/kg		8260B	08/05/11	5
Chloroform	U	0.0021	0.025	mg/kg		8260B	08/05/11	5
Chloromethane	U	0.0035	0.013	mg/kg		8260B	08/05/11	5
2-Chlorotoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
4-Chlorotoluene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dibromo-3-Chloropropane	U	0.010	0.025	mg/kg		8260B	08/05/11	5
1,2-Dibromoethane	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Dibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,4-Dichlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Dichlorodifluoromethane	U	0.0038	0.025	mg/kg		8260B	08/05/11	5
1,1-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1-Dichloroethene	U	0.0031	0.0050	mg/kg		8260B	08/05/11	5
cis-1,2-Dichloroethene	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
trans-1,2-Dichloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloropropane	U	0.0032	0.0050	mg/kg		8260B	08/05/11	5

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

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Reported: 08/11/11 14:19 Printed: 08/11/11 14:20

L529577-11 (SV8270BNA) - Previous run also had low SURR recovery. Matrix effect.



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Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-11

Sample ID : B-4 0-2FT

Site ID :

Collected By : HM
Collection Date : 08/04/11 08:25

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,1-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichloropropane	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
cis-1,3-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
trans-1,3-Dichloropropene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
2,2-Dichloropropane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Di-isopropyl ether	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Hexachloro-1,3-butadiene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Isopropylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
p-Isopropyltoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
2-Butanone (MEK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methylene Chloride	U	0.0065	0.025	mg/kg		8260B	08/05/11	5
4-Methyl-2-pentanone (MIBK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methyl tert-butyl ether	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Naphthalene	U	0.0028	0.025	mg/kg		8260B	08/05/11	5
n-Propylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Styrene	U	0.0019	0.0050	mg/kg	J4	8260B	08/05/11	5
1,1,1,2-Tetrachloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1,2,2-Tetrachloroethane	U	0.0021	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloro-1,2,2-trifluoro	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Tetrachloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichlorobenzene	U	0.0022	0.0050	mg/kg		8260B	08/05/11	5
1,2,4-Trichlorobenzene	U	0.0015	0.0050	mg/kg		8260B	08/05/11	5
1,1,1-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Trichloroethene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Trichlorofluoromethane	U	0.0045	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichloropropane	U	0.0056	0.013	mg/kg		8260B	08/05/11	5
1,2,4-Trimethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,2,3-Trimethylbenzene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,3,5-Trimethylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Vinyl chloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Xylenes, Total	U	0.0023	0.015	mg/kg		8260B	08/05/11	5
Surrogate Recovery								
Toluene-d8	97.8			% Rec.		8260B	08/05/11	5
Dibromofluoromethane	64.6			% Rec.		8260B	08/05/11	5
4-Bromofluorobenzene	101.			% Rec.		8260B	08/05/11	5
Gasoline	11.	1.3	4.0	mg/kg		OA2	08/08/11	1
Diesel	U	1.3	4.0	mg/kg		OA2	08/08/11	1
Motor Oil	U	3.3	10.	mg/kg		OA2	08/08/11	1
Total (C7-C40)	11.	3.3	10.	mg/kg		OA2	08/08/11	1

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L529577-11 (SV8270BNA) - Previous run also had low SURR recovery. Matrix effect.



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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-4 0-2FT
Collected By : HM
Collection Date : 08/04/11 08:25

ESC Sample # : L529577-11

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Surrogate Recovery o-Terphenyl	98.4			% Rec.		OA2	08/08/11	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.017	mg/kg		8082	08/08/11	1
PCB 1221	U	0.0054	0.017	mg/kg		8082	08/08/11	1
PCB 1232	U	0.0042	0.017	mg/kg		8082	08/08/11	1
PCB 1242	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1248	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1254	U	0.0047	0.017	mg/kg		8082	08/08/11	1
PCB 1260	U	0.0049	0.017	mg/kg		8082	08/08/11	1
PCBs Surrogates								
Decachlorobiphenyl	85.3			% Rec.		8082	08/08/11	1
Tetrachloro-m-xylene	92.2			% Rec.		8082	08/08/11	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.033	mg/kg		8270C	08/10/11	1
Acenaphthylene	U	0.0067	0.033	mg/kg		8270C	08/10/11	1
Anthracene	U	0.0063	0.033	mg/kg		8270C	08/10/11	1
Benzidine	U	0.064	0.33	mg/kg	J4J3	8270C	08/10/11	1
Benzo(a)anthracene	U	0.0043	0.033	mg/kg		8270C	08/10/11	1
Benzo(b)fluoranthene	U	0.0070	0.033	mg/kg		8270C	08/10/11	1
Benzo(k)fluoranthene	U	0.0058	0.033	mg/kg		8270C	08/10/11	1
Benzo(g,h,i)perylene	U	0.0072	0.033	mg/kg		8270C	08/10/11	1
Benzo(a)pyrene	U	0.0055	0.033	mg/kg		8270C	08/10/11	1
Bis(2-chlorethoxy)methane	U	0.0077	0.33	mg/kg		8270C	08/10/11	1
Bis(2-chloroethyl)ether	U	0.0090	0.33	mg/kg	J3	8270C	08/10/11	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.33	mg/kg		8270C	08/10/11	1
4-Bromophenyl-phenylether	U	0.011	0.33	mg/kg		8270C	08/10/11	1
2-Chloronaphthalene	U	0.0064	0.033	mg/kg		8270C	08/10/11	1
4-Chlorophenyl-phenylether	U	0.0063	0.33	mg/kg		8270C	08/10/11	1
Chrysene	U	0.0056	0.033	mg/kg		8270C	08/10/11	1
Dibenz(a,h)anthracene	U	0.0082	0.033	mg/kg		8270C	08/10/11	1
3,3-Dichlorobenzidine	U	0.079	0.33	mg/kg		8270C	08/10/11	1
2,4-Dinitrotoluene	U	0.0061	0.33	mg/kg		8270C	08/10/11	1
2,6-Dinitrotoluene	U	0.0074	0.33	mg/kg		8270C	08/10/11	1
Fluoranthene	U	0.0050	0.033	mg/kg		8270C	08/10/11	1
Fluorene	U	0.0068	0.033	mg/kg		8270C	08/10/11	1
Hexachlorobenzene	U	0.0086	0.33	mg/kg		8270C	08/10/11	1
Hexachloro-1,3-butadiene	U	0.010	0.33	mg/kg		8270C	08/10/11	1
Hexachlorocyclopentadiene	U	0.059	0.33	mg/kg		8270C	08/10/11	1
Hexachloroethane	U	0.013	0.33	mg/kg		8270C	08/10/11	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.033	mg/kg		8270C	08/10/11	1

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L529577-11 (SV8270BNA) - Previous run also had low SURR recovery. Matrix effect.



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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : B-4 0-2FT

Collected By : HM
Collection Date : 08/04/11 08:25

ESC Sample # : L529577-11

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Isophorone	U	0.0052	0.33	mg/kg		8270C	08/10/11	1
Naphthalene	U	0.0089	0.033	mg/kg		8270C	08/10/11	1
Nitrobenzene	U	0.0070	0.33	mg/kg		8270C	08/10/11	1
n-Nitrosodimethylamine	U	0.065	0.33	mg/kg		8270C	08/10/11	1
n-Nitrosodiphenylamine	U	0.0059	0.33	mg/kg		8270C	08/10/11	1
n-Nitrosodi-n-propylamine	U	0.0091	0.33	mg/kg		8270C	08/10/11	1
Phenanthrene	U	0.0053	0.033	mg/kg		8270C	08/10/11	1
Benzylbutyl phthalate	U	0.010	0.33	mg/kg		8270C	08/10/11	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.33	mg/kg		8270C	08/10/11	1
Di-n-butyl phthalate	U	0.011	0.33	mg/kg		8270C	08/10/11	1
Diethyl phthalate	U	0.0069	0.33	mg/kg		8270C	08/10/11	1
Dimethyl phthalate	U	0.0054	0.33	mg/kg		8270C	08/10/11	1
Di-n-octyl phthalate	U	0.0091	0.33	mg/kg		8270C	08/10/11	1
Pyrene	U	0.012	0.033	mg/kg		8270C	08/10/11	1
1,2,4-Trichlorobenzene	U	0.0088	0.33	mg/kg		8270C	08/10/11	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.33	mg/kg		8270C	08/10/11	1
2-Chlorophenol	U	0.0083	0.33	mg/kg		8270C	08/10/11	1
2,4-Dichlorophenol	U	0.0075	0.33	mg/kg		8270C	08/10/11	1
2,4-Dimethylphenol	U	0.047	0.33	mg/kg		8270C	08/10/11	1
4,6-Dinitro-2-methylphenol	U	0.12	0.33	mg/kg		8270C	08/10/11	1
2,4-Dinitrophenol	U	0.098	0.33	mg/kg		8270C	08/10/11	1
2-Nitrophenol	U	0.013	0.33	mg/kg		8270C	08/10/11	1
4-Nitrophenol	U	0.052	0.33	mg/kg		8270C	08/10/11	1
Pentachlorophenol	U	0.048	0.33	mg/kg		8270C	08/10/11	1
Phenol	U	0.0070	0.33	mg/kg		8270C	08/10/11	1
2,4,6-Trichlorophenol	U	0.0078	0.33	mg/kg		8270C	08/10/11	1
Surrogate Recovery								
Nitrobenzene-d5	72.3			% Rec.		8270C	08/10/11	1
2-Fluorobiphenyl	75.4			% Rec.		8270C	08/10/11	1
p-Terphenyl-d14	86.8			% Rec.		8270C	08/10/11	1
Phenol-d5	13.5			% Rec.	J2	8270C	08/10/11	1
2-Fluorophenol	1.68			% Rec.	J2	8270C	08/10/11	1
2,4,6-Tribromophenol	0.380			% Rec.	J2	8270C	08/10/11	1

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L529577-11 (SV8270BNA) - Previous run also had low SURR recovery. Matrix effect.



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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-4 15-17FT
Collected By : HM
Collection Date : 08/04/11 09:00

ESC Sample # : L529577-12

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Mercury	0.017	0.0015	0.020	mg/kg	J	7471	08/07/11	1
Arsenic	3.4	0.32	1.0	mg/kg		6010B	08/06/11	1
Barium	77.	0.050	0.25	mg/kg		6010B	08/06/11	1
Cadmium	0.39	0.040	0.25	mg/kg		6010B	08/06/11	1
Chromium	9.4	0.085	0.50	mg/kg		6010B	08/06/11	1
Lead	6.5	0.090	0.25	mg/kg		6010B	08/06/11	1
Selenium	U	0.32	1.0	mg/kg		6010B	08/06/11	1
Silver	0.39	0.16	0.50	mg/kg	J	6010B	08/06/11	1
Volatile Organics								
Acetone	U	0.12	0.25	mg/kg		8260B	08/05/11	5
Acrylonitrile	U	0.016	0.050	mg/kg		8260B	08/05/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromodichloromethane	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Bromoform	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Bromomethane	U	0.0088	0.025	mg/kg		8260B	08/05/11	5
n-Butylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
sec-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
tert-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Carbon tetrachloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Chlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Chlorodibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Chloroethane	U	0.0058	0.025	mg/kg		8260B	08/05/11	5
2-Chloroethyl vinyl ether	U	0.0088	0.25	mg/kg		8260B	08/05/11	5
Chloroform	U	0.0021	0.025	mg/kg		8260B	08/05/11	5
Chloromethane	U	0.0035	0.013	mg/kg		8260B	08/05/11	5
2-Chlorotoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
4-Chlorotoluene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dibromo-3-Chloropropane	U	0.010	0.025	mg/kg		8260B	08/05/11	5
1,2-Dibromoethane	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Dibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,4-Dichlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Dichlorodifluoromethane	U	0.0038	0.025	mg/kg		8260B	08/05/11	5
1,1-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1-Dichloroethene	U	0.0031	0.0050	mg/kg		8260B	08/05/11	5
cis-1,2-Dichloroethene	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
trans-1,2-Dichloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloropropane	U	0.0032	0.0050	mg/kg		8260B	08/05/11	5

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-4 15-17FT
Collected By : HM
Collection Date : 08/04/11 09:00

ESC Sample # : L529577-12

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,1-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichloropropane	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
cis-1,3-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
trans-1,3-Dichloropropene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
2,2-Dichloropropane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Di-isopropyl ether	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Hexachloro-1,3-butadiene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Isopropylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
p-Isopropyltoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
2-Butanone (MEK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methylene Chloride	U	0.0065	0.025	mg/kg		8260B	08/05/11	5
4-Methyl-2-pentanone (MIBK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methyl tert-butyl ether	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Naphthalene	U	0.0028	0.025	mg/kg		8260B	08/05/11	5
n-Propylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Styrene	U	0.0019	0.0050	mg/kg	J4	8260B	08/05/11	5
1,1,1,2-Tetrachloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1,2,2-Tetrachloroethane	U	0.0021	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloro-1,2,2-trifluoro	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Tetrachloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichlorobenzene	U	0.0022	0.0050	mg/kg		8260B	08/05/11	5
1,2,4-Trichlorobenzene	U	0.0015	0.0050	mg/kg		8260B	08/05/11	5
1,1,1-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Trichloroethene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Trichlorofluoromethane	U	0.0045	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichloropropane	U	0.0056	0.013	mg/kg		8260B	08/05/11	5
1,2,4-Trimethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,2,3-Trimethylbenzene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,3,5-Trimethylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Vinyl chloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Xylenes, Total	U	0.0023	0.015	mg/kg		8260B	08/05/11	5
Surrogate Recovery								
Toluene-d8	97.7			% Rec.		8260B	08/05/11	5
Dibromofluoromethane	96.3			% Rec.		8260B	08/05/11	5
4-Bromofluorobenzene	100.			% Rec.		8260B	08/05/11	5
Gasoline	U	1.3	4.0	mg/kg		OA2	08/08/11	1
Diesel	U	1.3	4.0	mg/kg		OA2	08/08/11	1
Motor Oil	U	3.3	10.	mg/kg		OA2	08/08/11	1
Total (C7-C40)	U	3.3	10.	mg/kg		OA2	08/08/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : B-4 15-17FT

Collected By : HM
Collection Date : 08/04/11 09:00

ESC Sample # : L529577-12

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Surrogate Recovery o-Terphenyl	100.			% Rec.		OA2	08/08/11	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.017	mg/kg		8082	08/08/11	1
PCB 1221	U	0.0054	0.017	mg/kg		8082	08/08/11	1
PCB 1232	U	0.0042	0.017	mg/kg		8082	08/08/11	1
PCB 1242	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1248	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1254	U	0.0047	0.017	mg/kg		8082	08/08/11	1
PCB 1260	U	0.0049	0.017	mg/kg		8082	08/08/11	1
PCBs Surrogates								
Decachlorobiphenyl	95.7			% Rec.		8082	08/08/11	1
Tetrachloro-m-xylene	93.9			% Rec.		8082	08/08/11	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.033	mg/kg		8270C	08/08/11	1
Acenaphthylene	U	0.0067	0.033	mg/kg		8270C	08/08/11	1
Anthracene	U	0.0063	0.033	mg/kg		8270C	08/08/11	1
Benztidine	U	0.064	0.33	mg/kg		8270C	08/08/11	1
Benzo(a)anthracene	U	0.0043	0.033	mg/kg		8270C	08/08/11	1
Benzo(b)fluoranthene	U	0.0070	0.033	mg/kg		8270C	08/08/11	1
Benzo(k)fluoranthene	U	0.0058	0.033	mg/kg		8270C	08/08/11	1
Benzo(g,h,i)perylene	U	0.0072	0.033	mg/kg		8270C	08/08/11	1
Benzo(a)pyrene	U	0.0055	0.033	mg/kg		8270C	08/08/11	1
Bis(2-chlorethoxy)methane	U	0.0077	0.33	mg/kg		8270C	08/08/11	1
Bis(2-chloroethyl)ether	U	0.0090	0.33	mg/kg		8270C	08/08/11	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.33	mg/kg		8270C	08/08/11	1
4-Bromophenyl-phenylether	U	0.011	0.33	mg/kg		8270C	08/08/11	1
2-Chloronaphthalene	U	0.0064	0.033	mg/kg		8270C	08/08/11	1
4-Chlorophenyl-phenylether	U	0.0063	0.33	mg/kg		8270C	08/08/11	1
Chrysene	U	0.0056	0.033	mg/kg		8270C	08/08/11	1
Dibenz(a,h)anthracene	U	0.0082	0.033	mg/kg		8270C	08/08/11	1
3,3-Dichlorobenzidine	U	0.079	0.33	mg/kg		8270C	08/08/11	1
2,4-Dinitrotoluene	U	0.0061	0.33	mg/kg		8270C	08/08/11	1
2,6-Dinitrotoluene	U	0.0074	0.33	mg/kg		8270C	08/08/11	1
Fluoranthene	U	0.0050	0.033	mg/kg		8270C	08/08/11	1
Fluorene	U	0.0068	0.033	mg/kg		8270C	08/08/11	1
Hexachlorobenzene	U	0.0086	0.33	mg/kg		8270C	08/08/11	1
Hexachloro-1,3-butadiene	U	0.010	0.33	mg/kg		8270C	08/08/11	1
Hexachlorocyclopentadiene	U	0.059	0.33	mg/kg		8270C	08/08/11	1
Hexachloroethane	U	0.013	0.33	mg/kg		8270C	08/08/11	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.033	mg/kg		8270C	08/08/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-4 15-17FT
Collected By : HM
Collection Date : 08/04/11 09:00

ESC Sample # : L529577-12

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Isophorone	U	0.0052	0.33	mg/kg		8270C	08/08/11	1
Naphthalene	U	0.0089	0.033	mg/kg		8270C	08/08/11	1
Nitrobenzene	U	0.0070	0.33	mg/kg		8270C	08/08/11	1
n-Nitrosodimethylamine	U	0.065	0.33	mg/kg		8270C	08/08/11	1
n-Nitrosodiphenylamine	U	0.0059	0.33	mg/kg		8270C	08/08/11	1
n-Nitrosodi-n-propylamine	U	0.0091	0.33	mg/kg		8270C	08/08/11	1
Phenanthrene	U	0.0053	0.033	mg/kg		8270C	08/08/11	1
Benzylbutyl phthalate	U	0.010	0.33	mg/kg		8270C	08/08/11	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.33	mg/kg		8270C	08/08/11	1
Di-n-butyl phthalate	U	0.011	0.33	mg/kg		8270C	08/08/11	1
Diethyl phthalate	U	0.0069	0.33	mg/kg		8270C	08/08/11	1
Dimethyl phthalate	U	0.0054	0.33	mg/kg		8270C	08/08/11	1
Di-n-octyl phthalate	U	0.0091	0.33	mg/kg		8270C	08/08/11	1
Pyrene	U	0.012	0.033	mg/kg		8270C	08/08/11	1
1,2,4-Trichlorobenzene	U	0.0088	0.33	mg/kg		8270C	08/08/11	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.33	mg/kg		8270C	08/08/11	1
2-Chlorophenol	U	0.0083	0.33	mg/kg		8270C	08/08/11	1
2,4-Dichlorophenol	U	0.0075	0.33	mg/kg		8270C	08/08/11	1
2,4-Dimethylphenol	U	0.047	0.33	mg/kg		8270C	08/08/11	1
4,6-Dinitro-2-methylphenol	U	0.12	0.33	mg/kg		8270C	08/08/11	1
2,4-Dinitrophenol	U	0.098	0.33	mg/kg		8270C	08/08/11	1
2-Nitrophenol	U	0.013	0.33	mg/kg		8270C	08/08/11	1
4-Nitrophenol	U	0.052	0.33	mg/kg		8270C	08/08/11	1
Pentachlorophenol	U	0.048	0.33	mg/kg		8270C	08/08/11	1
Phenol	U	0.0070	0.33	mg/kg		8270C	08/08/11	1
2,4,6-Trichlorophenol	U	0.0078	0.33	mg/kg		8270C	08/08/11	1
Surrogate Recovery								
Nitrobenzene-d5	64.5			% Rec.		8270C	08/08/11	1
2-Fluorobiphenyl	84.2			% Rec.		8270C	08/08/11	1
p-Terphenyl-d14	88.8			% Rec.		8270C	08/08/11	1
Phenol-d5	88.3			% Rec.		8270C	08/08/11	1
2-Fluorophenol	57.3			% Rec.		8270C	08/08/11	1
2,4,6-Tribromophenol	47.5			% Rec.		8270C	08/08/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : B-1/TMW

Collected By : HM
Collection Date : 08/04/11 10:55

ESC Sample # : L529577-13

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic, Dissolved	15.	0.25	1.0	ug/l		6020	08/07/11	1
Mercury, Dissolved	0.27	0.017	0.20	ug/l		7470A	08/08/11	1
Barium, Dissolved	440	1.0	5.0	ug/l		6010B	08/05/11	1
Cadmium, Dissolved	U	0.80	5.0	ug/l		6010B	08/05/11	1
Chromium, Dissolved	2.0	1.7	10.	ug/l	J	6010B	08/05/11	1
Lead, Dissolved	37.	1.8	5.0	ug/l		6010B	08/05/11	1
Selenium, Dissolved	32.	6.3	20.	ug/l		6010B	08/05/11	1
Silver, Dissolved	U	3.3	10.	ug/l		6010B	08/05/11	1
Volatile Organics								
Acetone	14.	11.	50.	ug/l	J	8260B	08/05/11	1
Acrolein	U	31.	50.	ug/l		8260B	08/05/11	1
Acrylonitrile	U	1.7	10.	ug/l		8260B	08/05/11	1
Benzene	0.57	0.18	1.0	ug/l	J	8260B	08/05/11	1
Bromobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	08/05/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	08/05/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	08/05/11	1
n-Butylbenzene	U	0.20	1.0	ug/l		8260B	08/05/11	1
sec-Butylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
tert-Butylbenzene	U	0.21	1.0	ug/l		8260B	08/05/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	08/05/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
Chlorodibromomethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	08/05/11	1
2-Chloroethyl vinyl ether	U	2.7	50.	ug/l		8260B	08/05/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	08/05/11	1
Chloromethane	U	0.46	2.5	ug/l		8260B	08/05/11	1
2-Chlorotoluene	U	0.17	1.0	ug/l		8260B	08/05/11	1
4-Chlorotoluene	U	0.20	1.0	ug/l		8260B	08/05/11	1
1,2-Dibromo-3-Chloropropane	U	1.1	5.0	ug/l		8260B	08/05/11	1
1,2-Dibromoethane	U	0.44	1.0	ug/l		8260B	08/05/11	1
Dibromomethane	U	0.51	1.0	ug/l		8260B	08/05/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	08/05/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	08/05/11	1
Dichlorodifluoromethane	U	0.57	5.0	ug/l		8260B	08/05/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	08/05/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	08/05/11	1
cis-1,2-Dichloroethene	U	0.27	1.0	ug/l		8260B	08/05/11	1

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Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : B-1/TMW

Collected By : HM
Collection Date : 08/04/11 10:55

ESC Sample # : L529577-13

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	08/05/11	1
1,1-Dichloropropene	U	0.27	1.0	ug/l	J4	8260B	08/05/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	08/05/11	1
cis-1,3-Dichloropropene	U	0.23	1.0	ug/l		8260B	08/05/11	1
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	08/05/11	1
2,2-Dichloropropane	U	0.35	1.0	ug/l		8260B	08/05/11	1
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	08/05/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	08/05/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	08/05/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
p-Isopropyltoluene	2.0	0.17	1.0	ug/l		8260B	08/05/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	08/05/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	08/05/11	1
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	08/05/11	1
Methyl tert-butyl ether	U	0.27	1.0	ug/l		8260B	08/05/11	1
Naphthalene	10.	0.69	5.0	ug/l		8260B	08/05/11	1
n-Propylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
Styrene	U	0.30	1.0	ug/l	J4	8260B	08/05/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	08/05/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.38	1.0	ug/l		8260B	08/05/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	08/05/11	1
Toluene	0.64	0.16	5.0	ug/l	J	8260B	08/05/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	08/05/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	08/05/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	08/05/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	08/05/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	08/08/11	1
Trichlorofluoromethane	U	0.49	5.0	ug/l		8260B	08/05/11	1
1,2,3-Trichloropropane	U	0.52	2.5	ug/l		8260B	08/05/11	1
1,2,4-Trimethylbenzene	0.62	0.20	1.0	ug/l	J	8260B	08/05/11	1
1,2,3-Trimethylbenzene	0.33	0.17	1.0	ug/l	J	8260B	08/05/11	1
1,3,5-Trimethylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
Vinyl chloride	U	0.28	1.0	ug/l	J4	8260B	08/05/11	1
Xylenes, Total	U	0.86	3.0	ug/l		8260B	08/05/11	1
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	08/05/11	1
Dibromofluoromethane	88.4			% Rec.		8260B	08/05/11	1
4-Bromofluorobenzene	108.			% Rec.		8260B	08/05/11	1
Gasoline	U	35.	110	ug/l		OA2	08/09/11	1.05
Diesel	160	35.	110	ug/l		OA2	08/09/11	1.05

U = ND (Not Detected)

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-1/TMW
Collected By : HM
Collection Date : 08/04/11 10:55

ESC Sample # : L529577-13

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Motor Oil	99.	87.	260	ug/l	J	OA2	08/09/11	1.05
Total (C7-C40)	260	87.	260	ug/l	J	OA2	08/09/11	1.05
Surrogate Recovery								
o-Terphenyl	58.8			% Rec.		OA2	08/09/11	1.05
Base/Neutral Extractables								
Acenaphthene	U	1.8	10.	ug/l		8270C	08/07/11	10
Acenaphthylene	U	2.1	10.	ug/l		8270C	08/07/11	10
Anthracene	U	1.7	10.	ug/l		8270C	08/07/11	10
Benzidine	U	21.	100	ug/l		8270C	08/07/11	10
Benzo(a)anthracene	U	1.9	10.	ug/l		8270C	08/07/11	10
Benzo(b)fluoranthene	U	3.8	10.	ug/l		8270C	08/07/11	10
Benzo(k)fluoranthene	U	2.6	10.	ug/l		8270C	08/07/11	10
Benzo(g,h,i)perylene	U	3.7	10.	ug/l		8270C	08/07/11	10
Benzo(a)pyrene	U	2.7	10.	ug/l		8270C	08/07/11	10
Bis(2-chlorethoxy)methane	U	2.1	100	ug/l		8270C	08/07/11	10
Bis(2-chloroethyl)ether	U	2.1	100	ug/l		8270C	08/07/11	10
Bis(2-chloroisopropyl)ether	U	3.1	100	ug/l		8270C	08/07/11	10
4-Bromophenyl-phenylether	U	1.8	100	ug/l		8270C	08/07/11	10
2-Chloronaphthalene	U	2.0	10.	ug/l		8270C	08/07/11	10
4-Chlorophenyl-phenylether	U	1.7	100	ug/l		8270C	08/07/11	10
Chrysene	U	1.3	10.	ug/l		8270C	08/07/11	10
Dibenz(a,h)anthracene	U	2.5	10.	ug/l		8270C	08/07/11	10
3,3-Dichlorobenzidine	U	17.	100	ug/l		8270C	08/07/11	10
2,4-Dinitrotoluene	U	2.2	100	ug/l		8270C	08/07/11	10
2,6-Dinitrotoluene	U	14.	100	ug/l		8270C	08/07/11	10
Fluoranthene	U	3.4	10.	ug/l		8270C	08/07/11	10
Fluorene	U	1.8	10.	ug/l		8270C	08/07/11	10
Hexachlorobenzene	U	2.3	10.	ug/l		8270C	08/07/11	10
Hexachloro-1,3-butadiene	U	26.	100	ug/l		8270C	08/07/11	10
Hexachlorocyclopentadiene	U	18.	100	ug/l		8270C	08/07/11	10
Hexachloroethane	U	31.	100	ug/l		8270C	08/07/11	10
Indeno(1,2,3-cd)pyrene	U	3.3	10.	ug/l		8270C	08/07/11	10
Isophorone	U	2.4	100	ug/l		8270C	08/07/11	10
Naphthalene	5.9	4.1	10.	ug/l	J	8270C	08/07/11	10
Nitrobenzene	U	2.0	100	ug/l		8270C	08/07/11	10
n-Nitrosodimethylamine	U	26.	100	ug/l		8270C	08/07/11	10
n-Nitrosodiphenylamine	U	1.4	100	ug/l		8270C	08/07/11	10
n-Nitrosodi-n-propylamine	U	3.1	100	ug/l		8270C	08/07/11	10
Phenanthrene	U	2.0	10.	ug/l		8270C	08/07/11	10
Benzylbutyl phthalate	U	4.0	10.	ug/l		8270C	08/07/11	10
Bis(2-ethylhexyl)phthalate	U	5.0	10.	ug/l		8270C	08/07/11	10
Di-n-butyl phthalate	U	2.8	10.	ug/l		8270C	08/07/11	10

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : B-1/TMW

Collected By : HM
Collection Date : 08/04/11 10:55

ESC Sample # : L529577-13

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Diethyl phthalate	U	3.6	10.	ug/l		8270C	08/07/11	10
Dimethyl phthalate	U	3.4	10.	ug/l		8270C	08/07/11	10
Di-n-octyl phthalate	U	2.8	10.	ug/l		8270C	08/07/11	10
Pyrene	U	3.0	10.	ug/l		8270C	08/07/11	10
1,2,4-Trichlorobenzene	U	3.5	100	ug/l		8270C	08/07/11	10
Acid Extractables								
4-Chloro-3-methylphenol	U	2.3	100	ug/l		8270C	08/07/11	10
2-Chlorophenol	U	1.9	100	ug/l		8270C	08/07/11	10
2,4-Dichlorophenol	U	9.7	100	ug/l		8270C	08/07/11	10
2,4-Dimethylphenol	U	13.	100	ug/l		8270C	08/07/11	10
4,6-Dinitro-2-methylphenol	U	26.	100	ug/l		8270C	08/07/11	10
2,4-Dinitrophenol	U	23.	100	ug/l		8270C	08/07/11	10
2-Nitrophenol	U	2.8	100	ug/l		8270C	08/07/11	10
4-Nitrophenol	U	27.	100	ug/l		8270C	08/07/11	10
Pentachlorophenol	U	4.1	100	ug/l		8270C	08/07/11	10
Phenol	26.	11.	100	ug/l	J	8270C	08/07/11	10
2,4,6-Trichlorophenol	U	2.8	100	ug/l		8270C	08/07/11	10
Surrogate Recovery								
Nitrobenzene-d5	67.1			% Rec.		8270C	08/07/11	10
2-Fluorobiphenyl	78.8			% Rec.		8270C	08/07/11	10
p-Terphenyl-d14	75.5			% Rec.		8270C	08/07/11	10
Phenol-d5	28.4			% Rec.		8270C	08/07/11	10
2-Fluorophenol	40.2			% Rec.		8270C	08/07/11	10
2,4,6-Tribromophenol	89.5			% Rec.		8270C	08/07/11	10

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : B-2/TMW

Collected By : HM
Collection Date : 08/04/11 11:15

ESC Sample # : L529577-14

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic, Dissolved	6.1	0.25	1.0	ug/l		6020	08/07/11	1
Mercury, Dissolved	0.040	0.017	0.20	ug/l	J	7470A	08/08/11	1
Barium, Dissolved	400	1.0	5.0	ug/l		6010B	08/05/11	1
Cadmium, Dissolved	U	0.80	5.0	ug/l		6010B	08/05/11	1
Chromium, Dissolved	U	1.7	10.	ug/l		6010B	08/05/11	1
Lead, Dissolved	8.2	1.8	5.0	ug/l	P1	6010B	08/05/11	1
Selenium, Dissolved	47.	6.3	20.	ug/l		6010B	08/05/11	1
Silver, Dissolved	U	3.3	10.	ug/l	J6	6010B	08/05/11	1
Volatile Organics								
Acetone	100	11.	50.	ug/l		8260B	08/05/11	1
Acrolein	U	31.	50.	ug/l		8260B	08/05/11	1
Acrylonitrile	U	1.7	10.	ug/l		8260B	08/05/11	1
Benzene	0.77	0.18	1.0	ug/l	J	8260B	08/05/11	1
Bromobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	08/05/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	08/05/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	08/05/11	1
n-Butylbenzene	U	0.20	1.0	ug/l		8260B	08/05/11	1
sec-Butylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
tert-Butylbenzene	U	0.21	1.0	ug/l		8260B	08/05/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	08/05/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
Chlorodibromomethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	08/05/11	1
2-Chloroethyl vinyl ether	U	2.7	50.	ug/l		8260B	08/05/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	08/05/11	1
Chloromethane	U	0.46	2.5	ug/l		8260B	08/05/11	1
2-Chlorotoluene	U	0.17	1.0	ug/l		8260B	08/05/11	1
4-Chlorotoluene	U	0.20	1.0	ug/l		8260B	08/05/11	1
1,2-Dibromo-3-Chloropropane	U	1.1	5.0	ug/l		8260B	08/05/11	1
1,2-Dibromoethane	U	0.44	1.0	ug/l		8260B	08/05/11	1
Dibromomethane	U	0.51	1.0	ug/l		8260B	08/05/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	08/05/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	08/05/11	1
Dichlorodifluoromethane	U	0.57	5.0	ug/l		8260B	08/05/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	08/05/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	08/05/11	1
cis-1,2-Dichloroethene	U	0.27	1.0	ug/l		8260B	08/05/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-14

Sample ID : B-2/TMW

Site ID :

Collected By : HM
Collection Date : 08/04/11 11:15

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	08/05/11	1
1,1-Dichloropropene	U	0.27	1.0	ug/l	J4	8260B	08/05/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	08/05/11	1
cis-1,3-Dichloropropene	U	0.23	1.0	ug/l		8260B	08/05/11	1
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	08/05/11	1
2,2-Dichloropropane	U	0.35	1.0	ug/l		8260B	08/05/11	1
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	08/05/11	1
Ethylbenzene	0.48	0.27	1.0	ug/l	J	8260B	08/05/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	08/05/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
p-Isopropyltoluene	U	0.17	1.0	ug/l		8260B	08/05/11	1
2-Butanone (MEK)	5.8	3.0	10.	ug/l	J	8260B	08/05/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	08/05/11	1
4-Methyl-2-pentanone (MIBK)	2.1	0.80	10.	ug/l	J	8260B	08/05/11	1
Methyl tert-butyl ether	U	0.27	1.0	ug/l		8260B	08/05/11	1
Naphthalene	2.0	0.69	5.0	ug/l	J	8260B	08/05/11	1
n-Propylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
Styrene	U	0.30	1.0	ug/l	J4	8260B	08/05/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	08/05/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.38	1.0	ug/l		8260B	08/05/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	08/05/11	1
Toluene	0.56	0.16	5.0	ug/l	J	8260B	08/05/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	08/05/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	08/05/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	08/05/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	08/05/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	08/08/11	1
Trichlorofluoromethane	U	0.49	5.0	ug/l		8260B	08/05/11	1
1,2,3-Trichloropropane	U	0.52	2.5	ug/l		8260B	08/05/11	1
1,2,4-Trimethylbenzene	0.40	0.20	1.0	ug/l	J	8260B	08/05/11	1
1,2,3-Trimethylbenzene	U	0.17	1.0	ug/l		8260B	08/05/11	1
1,3,5-Trimethylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
Vinyl chloride	U	0.28	1.0	ug/l	J4	8260B	08/05/11	1
Xylenes, Total	2.1	0.86	3.0	ug/l	J	8260B	08/05/11	1
Surrogate Recovery								
Toluene-d8	99.9			% Rec.		8260B	08/05/11	1
Dibromofluoromethane	88.3			% Rec.		8260B	08/05/11	1
4-Bromofluorobenzene	106.			% Rec.		8260B	08/05/11	1
Gasoline	U	35.	110	ug/l		OA2	08/09/11	1.05
Diesel	130	35.	110	ug/l		OA2	08/09/11	1.05

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-2/TMW
Collected By : HM
Collection Date : 08/04/11 11:15

ESC Sample # : L529577-14

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Motor Oil	U	87.	260	ug/l		OA2	08/09/11	1.05
Total (C7-C40)	130	87.	260	ug/l	J	OA2	08/09/11	1.05
Surrogate Recovery								
o-Terphenyl	67.3			% Rec.		OA2	08/09/11	1.05
Base/Neutral Extractables								
Acenaphthene	0.42	0.18	1.0	ug/l	J	8270C	08/07/11	1
Acenaphthylene	U	0.21	1.0	ug/l		8270C	08/07/11	1
Anthracene	U	0.17	1.0	ug/l		8270C	08/07/11	1
Benzidine	U	2.1	10.	ug/l		8270C	08/07/11	1
Benzo(a)anthracene	U	0.19	1.0	ug/l		8270C	08/07/11	1
Benzo(b)fluoranthene	U	0.38	1.0	ug/l		8270C	08/07/11	1
Benzo(k)fluoranthene	U	0.26	1.0	ug/l		8270C	08/07/11	1
Benzo(g,h,i)perylene	U	0.37	1.0	ug/l		8270C	08/07/11	1
Benzo(a)pyrene	U	0.27	1.0	ug/l		8270C	08/07/11	1
Bis(2-chlorethoxy)methane	U	0.21	10.	ug/l		8270C	08/07/11	1
Bis(2-chloroethyl)ether	0.47	0.21	10.	ug/l	J	8270C	08/07/11	1
Bis(2-chloroisopropyl)ether	U	0.31	10.	ug/l		8270C	08/07/11	1
4-Bromophenyl-phenylether	U	0.18	10.	ug/l		8270C	08/07/11	1
2-Chloronaphthalene	U	0.20	1.0	ug/l		8270C	08/07/11	1
4-Chlorophenyl-phenylether	U	0.17	10.	ug/l		8270C	08/07/11	1
Chrysene	U	0.13	1.0	ug/l		8270C	08/07/11	1
Dibenz(a,h)anthracene	U	0.25	1.0	ug/l		8270C	08/07/11	1
3,3-Dichlorobenzidine	U	1.7	10.	ug/l		8270C	08/07/11	1
2,4-Dinitrotoluene	U	0.22	10.	ug/l		8270C	08/07/11	1
2,6-Dinitrotoluene	U	1.4	10.	ug/l		8270C	08/07/11	1
Fluoranthene	U	0.34	1.0	ug/l		8270C	08/07/11	1
Fluorene	U	0.18	1.0	ug/l		8270C	08/07/11	1
Hexachlorobenzene	U	0.23	1.0	ug/l		8270C	08/07/11	1
Hexachloro-1,3-butadiene	U	2.6	10.	ug/l		8270C	08/07/11	1
Hexachlorocyclopentadiene	U	1.8	10.	ug/l		8270C	08/07/11	1
Hexachloroethane	U	3.1	10.	ug/l		8270C	08/07/11	1
Indeno(1,2,3-cd)pyrene	U	0.33	1.0	ug/l		8270C	08/07/11	1
Isophorone	U	0.24	10.	ug/l		8270C	08/07/11	1
Naphthalene	1.2	0.41	1.0	ug/l		8270C	08/07/11	1
Nitrobenzene	U	0.20	10.	ug/l		8270C	08/07/11	1
n-Nitrosodimethylamine	U	2.6	10.	ug/l		8270C	08/07/11	1
n-Nitrosodiphenylamine	U	0.14	10.	ug/l		8270C	08/07/11	1
n-Nitrosodi-n-propylamine	U	0.31	10.	ug/l		8270C	08/07/11	1
Phenanthrene	0.64	0.20	1.0	ug/l	J	8270C	08/07/11	1
Benzylbutyl phthalate	U	0.40	1.0	ug/l		8270C	08/07/11	1
Bis(2-ethylhexyl)phthalate	U	0.50	1.0	ug/l		8270C	08/07/11	1
Di-n-butyl phthalate	U	0.28	1.0	ug/l		8270C	08/07/11	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : B-2/TMW

Collected By : HM
Collection Date : 08/04/11 11:15

ESC Sample # : L529577-14

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Diethyl phthalate	U	0.36	1.0	ug/l		8270C	08/07/11	1
Dimethyl phthalate	U	0.34	1.0	ug/l		8270C	08/07/11	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270C	08/07/11	1
Pyrene	U	0.30	1.0	ug/l		8270C	08/07/11	1
1,2,4-Trichlorobenzene	U	0.35	10.	ug/l		8270C	08/07/11	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.23	10.	ug/l		8270C	08/07/11	1
2-Chlorophenol	U	0.19	10.	ug/l		8270C	08/07/11	1
2,4-Dichlorophenol	U	0.97	10.	ug/l		8270C	08/07/11	1
2,4-Dimethylphenol	U	1.3	10.	ug/l		8270C	08/07/11	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270C	08/07/11	1
2,4-Dinitrophenol	U	2.3	10.	ug/l		8270C	08/07/11	1
2-Nitrophenol	U	0.28	10.	ug/l		8270C	08/07/11	1
4-Nitrophenol	U	2.7	10.	ug/l		8270C	08/07/11	1
Pentachlorophenol	0.66	0.41	10.	ug/l	J	8270C	08/07/11	1
Phenol	19.	1.1	10.	ug/l		8270C	08/07/11	1
2,4,6-Trichlorophenol	U	0.28	10.	ug/l		8270C	08/07/11	1
Surrogate Recovery								
Nitrobenzene-d5	78.1			% Rec.		8270C	08/07/11	1
2-Fluorobiphenyl	84.4			% Rec.		8270C	08/07/11	1
p-Terphenyl-d14	84.0			% Rec.		8270C	08/07/11	1
Phenol-d5	33.7			% Rec.		8270C	08/07/11	1
2-Fluorophenol	43.0			% Rec.		8270C	08/07/11	1
2,4,6-Tribromophenol	102.			% Rec.		8270C	08/07/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-3/TMW
Collected By : HM
Collection Date : 08/04/11 11:40

ESC Sample # : L529577-15

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic, Dissolved	18.	0.25	1.0	ug/l		6020	08/07/11	1
Mercury, Dissolved	0.020	0.017	0.20	ug/l	J	7470A	08/08/11	1
Barium, Dissolved	89.	1.0	5.0	ug/l		6010B	08/05/11	1
Cadmium, Dissolved	U	0.80	5.0	ug/l		6010B	08/05/11	1
Chromium, Dissolved	U	1.7	10.	ug/l		6010B	08/05/11	1
Lead, Dissolved	3.8	1.8	5.0	ug/l	J	6010B	08/05/11	1
Selenium, Dissolved	20.	6.3	20.	ug/l	J	6010B	08/05/11	1
Silver, Dissolved	U	3.3	10.	ug/l		6010B	08/05/11	1
Volatile Organics								
Acetone	270	11.	50.	ug/l		8260B	08/05/11	1
Acrolein	U	31.	50.	ug/l		8260B	08/05/11	1
Acrylonitrile	U	1.7	10.	ug/l		8260B	08/05/11	1
Benzene	1.6	0.18	1.0	ug/l		8260B	08/05/11	1
Bromobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	08/05/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	08/05/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	08/05/11	1
n-Butylbenzene	U	0.20	1.0	ug/l		8260B	08/05/11	1
sec-Butylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
tert-Butylbenzene	U	0.21	1.0	ug/l		8260B	08/05/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	08/05/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
Chlorodibromomethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	08/05/11	1
2-Chloroethyl vinyl ether	U	2.7	50.	ug/l		8260B	08/05/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	08/05/11	1
Chloromethane	U	0.46	2.5	ug/l		8260B	08/05/11	1
2-Chlorotoluene	U	0.17	1.0	ug/l		8260B	08/05/11	1
4-Chlorotoluene	U	0.20	1.0	ug/l		8260B	08/05/11	1
1,2-Dibromo-3-Chloropropane	U	1.1	5.0	ug/l		8260B	08/05/11	1
1,2-Dibromoethane	U	0.44	1.0	ug/l		8260B	08/05/11	1
Dibromomethane	U	0.51	1.0	ug/l		8260B	08/05/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	08/05/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	08/05/11	1
Dichlorodifluoromethane	U	0.57	5.0	ug/l		8260B	08/05/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	08/05/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	08/05/11	1
cis-1,2-Dichloroethene	U	0.27	1.0	ug/l		8260B	08/05/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : B-3/TMW

Collected By : HM
Collection Date : 08/04/11 11:40

ESC Sample # : L529577-15

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	08/05/11	1
1,1-Dichloropropene	U	0.27	1.0	ug/l	J4	8260B	08/05/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	08/05/11	1
cis-1,3-Dichloropropene	U	0.23	1.0	ug/l		8260B	08/05/11	1
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	08/05/11	1
2,2-Dichloropropane	U	0.35	1.0	ug/l		8260B	08/05/11	1
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	08/05/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	08/05/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	08/05/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
p-Isopropyltoluene	U	0.17	1.0	ug/l		8260B	08/05/11	1
2-Butanone (MEK)	8.0	3.0	10.	ug/l	J	8260B	08/05/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	08/05/11	1
4-Methyl-2-pentanone (MIBK)	3.1	0.80	10.	ug/l	J	8260B	08/05/11	1
Methyl tert-butyl ether	U	0.27	1.0	ug/l		8260B	08/05/11	1
Naphthalene	2.0	0.69	5.0	ug/l	J	8260B	08/05/11	1
n-Propylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
Styrene	U	0.30	1.0	ug/l	J4	8260B	08/05/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	08/05/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.38	1.0	ug/l		8260B	08/05/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	08/05/11	1
Toluene	0.67	0.16	5.0	ug/l	J	8260B	08/05/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	08/05/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	08/05/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	08/05/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	08/05/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	08/08/11	1
Trichlorofluoromethane	U	0.49	5.0	ug/l		8260B	08/05/11	1
1,2,3-Trichloropropane	U	0.52	2.5	ug/l		8260B	08/05/11	1
1,2,4-Trimethylbenzene	1.0	0.20	1.0	ug/l	J	8260B	08/05/11	1
1,2,3-Trimethylbenzene	0.42	0.17	1.0	ug/l	J	8260B	08/05/11	1
1,3,5-Trimethylbenzene	0.40	0.18	1.0	ug/l	J	8260B	08/05/11	1
Vinyl chloride	U	0.28	1.0	ug/l	J4	8260B	08/05/11	1
Xylenes, Total	U	0.86	3.0	ug/l		8260B	08/05/11	1
Surrogate Recovery								
Toluene-d8	100.			% Rec.		8260B	08/05/11	1
Dibromofluoromethane	89.2			% Rec.		8260B	08/05/11	1
4-Bromofluorobenzene	104.			% Rec.		8260B	08/05/11	1
Gasoline	U	35.	110	ug/l		OA2	08/09/11	1.05
Diesel	130	35.	110	ug/l		OA2	08/09/11	1.05

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-15

Sample ID : B-3/TMW

Site ID :

Collected By : HM
Collection Date : 08/04/11 11:40

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Motor Oil	U	87.	260	ug/l		OA2	08/09/11	1.05
Total (C7-C40)	130	87.	260	ug/l	J	OA2	08/09/11	1.05
Surrogate Recovery								
o-Terphenyl	66.1			% Rec.		OA2	08/09/11	1.05
Base/Neutral Extractables								
Acenaphthene	U	0.90	5.0	ug/l		8270C	08/07/11	5
Acenaphthylene	U	1.0	5.0	ug/l		8270C	08/07/11	5
Anthracene	U	0.83	5.0	ug/l		8270C	08/07/11	5
Benzidine	U	10.	50.	ug/l		8270C	08/07/11	5
Benzo(a)anthracene	U	0.93	5.0	ug/l		8270C	08/07/11	5
Benzo(b)fluoranthene	U	1.9	5.0	ug/l		8270C	08/07/11	5
Benzo(k)fluoranthene	U	1.3	5.0	ug/l		8270C	08/07/11	5
Benzo(g,h,i)perylene	U	1.8	5.0	ug/l		8270C	08/07/11	5
Benzo(a)pyrene	U	1.3	5.0	ug/l		8270C	08/07/11	5
Bis(2-chlorethoxy)methane	U	1.1	50.	ug/l		8270C	08/07/11	5
Bis(2-chloroethyl)ether	U	1.1	50.	ug/l		8270C	08/07/11	5
Bis(2-chloroisopropyl)ether	U	1.5	50.	ug/l		8270C	08/07/11	5
4-Bromophenyl-phenylether	U	0.90	50.	ug/l		8270C	08/07/11	5
2-Chloronaphthalene	U	1.0	5.0	ug/l		8270C	08/07/11	5
4-Chlorophenyl-phenylether	U	0.85	50.	ug/l		8270C	08/07/11	5
Chrysene	U	0.66	5.0	ug/l		8270C	08/07/11	5
Dibenz(a,h)anthracene	U	1.2	5.0	ug/l		8270C	08/07/11	5
3,3-Dichlorobenzidine	U	8.4	50.	ug/l		8270C	08/07/11	5
2,4-Dinitrotoluene	U	1.1	50.	ug/l		8270C	08/07/11	5
2,6-Dinitrotoluene	U	7.2	50.	ug/l		8270C	08/07/11	5
Fluoranthene	U	1.7	5.0	ug/l		8270C	08/07/11	5
Fluorene	U	0.88	5.0	ug/l		8270C	08/07/11	5
Hexachlorobenzene	U	1.1	5.0	ug/l		8270C	08/07/11	5
Hexachloro-1,3-butadiene	U	13.	50.	ug/l		8270C	08/07/11	5
Hexachlorocyclopentadiene	U	9.0	50.	ug/l		8270C	08/07/11	5
Hexachloroethane	U	16.	50.	ug/l		8270C	08/07/11	5
Indeno(1,2,3-cd)pyrene	U	1.7	5.0	ug/l		8270C	08/07/11	5
Isophorone	U	1.2	50.	ug/l		8270C	08/07/11	5
Naphthalene	U	2.1	5.0	ug/l		8270C	08/07/11	5
Nitrobenzene	U	1.0	50.	ug/l		8270C	08/07/11	5
n-Nitrosodimethylamine	U	13.	50.	ug/l		8270C	08/07/11	5
n-Nitrosodiphenylamine	U	0.68	50.	ug/l		8270C	08/07/11	5
n-Nitrosodi-n-propylamine	U	1.6	50.	ug/l		8270C	08/07/11	5
Phenanthrene	U	1.0	5.0	ug/l		8270C	08/07/11	5
Benzylbutyl phthalate	U	2.0	5.0	ug/l		8270C	08/07/11	5
Bis(2-ethylhexyl)phthalate	U	2.5	5.0	ug/l		8270C	08/07/11	5
Di-n-butyl phthalate	U	1.4	5.0	ug/l		8270C	08/07/11	5

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-3/TMW
Collected By : HM
Collection Date : 08/04/11 11:40

ESC Sample # : L529577-15

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Diethyl phthalate	U	1.8	5.0	ug/l		8270C	08/07/11	5
Dimethyl phthalate	U	1.7	5.0	ug/l		8270C	08/07/11	5
Di-n-octyl phthalate	U	1.4	5.0	ug/l		8270C	08/07/11	5
Pyrene	U	1.5	5.0	ug/l		8270C	08/07/11	5
1,2,4-Trichlorobenzene	U	1.8	50.	ug/l		8270C	08/07/11	5
Acid Extractables								
4-Chloro-3-methylphenol	U	1.1	50.	ug/l		8270C	08/07/11	5
2-Chlorophenol	U	0.95	50.	ug/l		8270C	08/07/11	5
2,4-Dichlorophenol	U	4.9	50.	ug/l		8270C	08/07/11	5
2,4-Dimethylphenol	U	6.7	50.	ug/l		8270C	08/07/11	5
4,6-Dinitro-2-methylphenol	U	13.	50.	ug/l		8270C	08/07/11	5
2,4-Dinitrophenol	U	12.	50.	ug/l		8270C	08/07/11	5
2-Nitrophenol	U	1.4	50.	ug/l		8270C	08/07/11	5
4-Nitrophenol	U	14.	50.	ug/l		8270C	08/07/11	5
Pentachlorophenol	18.	2.0	50.	ug/l	J	8270C	08/07/11	5
Phenol	11.	5.6	50.	ug/l	J	8270C	08/07/11	5
2,4,6-Trichlorophenol	U	1.4	50.	ug/l		8270C	08/07/11	5
Surrogate Recovery								
Nitrobenzene-d5	71.9			% Rec.		8270C	08/07/11	5
2-Fluorobiphenyl	87.3			% Rec.		8270C	08/07/11	5
p-Terphenyl-d14	88.0			% Rec.		8270C	08/07/11	5
Phenol-d5	27.9			% Rec.		8270C	08/07/11	5
2-Fluorophenol	39.2			% Rec.		8270C	08/07/11	5
2,4,6-Tribromophenol	85.6			% Rec.		8270C	08/07/11	5

U = ND (Not Detected)
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : B-5/TMW

Collected By : HM
Collection Date : 08/04/11 12:15

ESC Sample # : L529577-16

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic, Dissolved	6.5	0.25	1.0	ug/l		6020	08/07/11	1
Mercury, Dissolved	U	0.017	0.20	ug/l		7470A	08/08/11	1
Barium, Dissolved	92.	1.0	5.0	ug/l		6010B	08/05/11	1
Cadmium, Dissolved	U	0.80	5.0	ug/l		6010B	08/05/11	1
Chromium, Dissolved	U	1.7	10.	ug/l		6010B	08/05/11	1
Lead, Dissolved	4.0	1.8	5.0	ug/l	J	6010B	08/05/11	1
Selenium, Dissolved	7.4	6.3	20.	ug/l	J	6010B	08/05/11	1
Silver, Dissolved	U	3.3	10.	ug/l		6010B	08/05/11	1
Volatile Organics								
Acetone	U	11.	50.	ug/l		8260B	08/05/11	1
Acrolein	U	31.	50.	ug/l		8260B	08/05/11	1
Acrylonitrile	U	1.7	10.	ug/l		8260B	08/05/11	1
Benzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
Bromobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	08/05/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	08/05/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	08/05/11	1
n-Butylbenzene	U	0.20	1.0	ug/l		8260B	08/05/11	1
sec-Butylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
tert-Butylbenzene	U	0.21	1.0	ug/l		8260B	08/05/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	08/05/11	1
Chlorobenzene	0.73	0.25	1.0	ug/l	J	8260B	08/05/11	1
Chlorodibromomethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	08/05/11	1
2-Chloroethyl vinyl ether	U	2.7	50.	ug/l		8260B	08/05/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	08/05/11	1
Chloromethane	U	0.46	2.5	ug/l		8260B	08/05/11	1
2-Chlorotoluene	U	0.17	1.0	ug/l		8260B	08/05/11	1
4-Chlorotoluene	U	0.20	1.0	ug/l		8260B	08/05/11	1
1,2-Dibromo-3-Chloropropane	U	1.1	5.0	ug/l		8260B	08/05/11	1
1,2-Dibromoethane	U	0.44	1.0	ug/l		8260B	08/05/11	1
Dibromomethane	U	0.51	1.0	ug/l		8260B	08/05/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	08/05/11	1
1,3-Dichlorobenzene	0.51	0.25	1.0	ug/l	J	8260B	08/05/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	08/05/11	1
Dichlorodifluoromethane	U	0.57	5.0	ug/l		8260B	08/05/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	08/05/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	08/05/11	1
cis-1,2-Dichloroethene	U	0.27	1.0	ug/l		8260B	08/05/11	1

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Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-5/TMW
Collected By : HM
Collection Date : 08/04/11 12:15

ESC Sample # : L529577-16

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l	J4	8260B	08/05/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	08/05/11	1
1,1-Dichloropropene	U	0.27	1.0	ug/l		8260B	08/05/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	08/05/11	1
cis-1,3-Dichloropropene	U	0.23	1.0	ug/l		8260B	08/05/11	1
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	08/05/11	1
2,2-Dichloropropane	U	0.35	1.0	ug/l		8260B	08/05/11	1
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	08/05/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	08/05/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	08/05/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
p-Isopropyltoluene	U	0.17	1.0	ug/l		8260B	08/05/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	08/05/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	08/05/11	1
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	08/05/11	1
Methyl tert-butyl ether	U	0.27	1.0	ug/l	J4	8260B	08/05/11	1
Naphthalene	U	0.69	5.0	ug/l		8260B	08/05/11	1
n-Propylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
Styrene	U	0.30	1.0	ug/l		8260B	08/05/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	08/05/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.38	1.0	ug/l		8260B	08/05/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	08/05/11	1
Toluene	U	0.16	5.0	ug/l		8260B	08/05/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	08/05/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	08/05/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	08/05/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	08/05/11	1
Trichloroethene	U	0.29	1.0	ug/l	J4	8260B	08/08/11	1
Trichlorofluoromethane	U	0.49	5.0	ug/l		8260B	08/05/11	1
1,2,3-Trichloropropane	U	0.52	2.5	ug/l		8260B	08/05/11	1
1,2,4-Trimethylbenzene	U	0.20	1.0	ug/l		8260B	08/05/11	1
1,2,3-Trimethylbenzene	U	0.17	1.0	ug/l		8260B	08/05/11	1
1,3,5-Trimethylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
Vinyl chloride	U	0.28	1.0	ug/l		8260B	08/05/11	1
Xylenes, Total	U	0.86	3.0	ug/l		8260B	08/05/11	1
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	08/05/11	1
Dibromofluoromethane	89.0			% Rec.		8260B	08/05/11	1
4-Bromofluorobenzene	107.			% Rec.		8260B	08/05/11	1
Gasoline	U	36.	110	ug/l		OA2	08/09/11	1.1
Diesel	U	36.	110	ug/l		OA2	08/09/11	1.1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-5/TMW
Collected By : HM
Collection Date : 08/04/11 12:15

ESC Sample # : L529577-16

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Motor Oil	U	91.	280	ug/l		OA2	08/09/11	1.1
Total (C7-C40)	U	91.	280	ug/l		OA2	08/09/11	1.1
Surrogate Recovery								
o-Terphenyl	71.9			% Rec.		OA2	08/09/11	1.1
Base/Neutral Extractables								
Acenaphthene	U	0.18	1.0	ug/l		8270C	08/07/11	1
Acenaphthylene	U	0.21	1.0	ug/l		8270C	08/07/11	1
Anthracene	U	0.17	1.0	ug/l		8270C	08/07/11	1
Benzidine	U	2.1	10.	ug/l		8270C	08/07/11	1
Benzo(a)anthracene	U	0.19	1.0	ug/l		8270C	08/07/11	1
Benzo(b)fluoranthene	U	0.38	1.0	ug/l		8270C	08/07/11	1
Benzo(k)fluoranthene	U	0.26	1.0	ug/l		8270C	08/07/11	1
Benzo(g,h,i)perylene	U	0.37	1.0	ug/l		8270C	08/07/11	1
Benzo(a)pyrene	U	0.27	1.0	ug/l		8270C	08/07/11	1
Bis(2-chlorethoxy)methane	U	0.21	10.	ug/l		8270C	08/07/11	1
Bis(2-chloroethyl)ether	U	0.21	10.	ug/l		8270C	08/07/11	1
Bis(2-chloroisopropyl)ether	U	0.31	10.	ug/l		8270C	08/07/11	1
4-Bromophenyl-phenylether	U	0.18	10.	ug/l		8270C	08/07/11	1
2-Chloronaphthalene	U	0.20	1.0	ug/l		8270C	08/07/11	1
4-Chlorophenyl-phenylether	U	0.17	10.	ug/l		8270C	08/07/11	1
Chrysene	U	0.13	1.0	ug/l		8270C	08/07/11	1
Dibenz(a,h)anthracene	U	0.25	1.0	ug/l		8270C	08/07/11	1
3,3-Dichlorobenzidine	U	1.7	10.	ug/l		8270C	08/07/11	1
2,4-Dinitrotoluene	U	0.22	10.	ug/l		8270C	08/07/11	1
2,6-Dinitrotoluene	U	1.4	10.	ug/l		8270C	08/07/11	1
Fluoranthene	U	0.34	1.0	ug/l		8270C	08/07/11	1
Fluorene	U	0.18	1.0	ug/l		8270C	08/07/11	1
Hexachlorobenzene	U	0.23	1.0	ug/l		8270C	08/07/11	1
Hexachloro-1,3-butadiene	U	2.6	10.	ug/l		8270C	08/07/11	1
Hexachlorocyclopentadiene	U	1.8	10.	ug/l		8270C	08/07/11	1
Hexachloroethane	U	3.1	10.	ug/l		8270C	08/07/11	1
Indeno(1,2,3-cd)pyrene	U	0.33	1.0	ug/l		8270C	08/07/11	1
Isophorone	U	0.24	10.	ug/l		8270C	08/07/11	1
Naphthalene	U	0.41	1.0	ug/l		8270C	08/07/11	1
Nitrobenzene	U	0.20	10.	ug/l		8270C	08/07/11	1
n-Nitrosodimethylamine	U	2.6	10.	ug/l		8270C	08/07/11	1
n-Nitrosodiphenylamine	U	0.14	10.	ug/l		8270C	08/07/11	1
n-Nitrosodi-n-propylamine	U	0.31	10.	ug/l		8270C	08/07/11	1
Phenanthrene	U	0.20	1.0	ug/l		8270C	08/07/11	1
Benzylbutyl phthalate	U	0.40	1.0	ug/l		8270C	08/07/11	1
Bis(2-ethylhexyl)phthalate	U	0.50	1.0	ug/l		8270C	08/07/11	1
Di-n-butyl phthalate	U	0.28	1.0	ug/l		8270C	08/07/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-5/TMW
Collected By : HM
Collection Date : 08/04/11 12:15

ESC Sample # : L529577-16

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Diethyl phthalate	U	0.36	1.0	ug/l		8270C	08/07/11	1
Dimethyl phthalate	U	0.34	1.0	ug/l		8270C	08/07/11	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270C	08/07/11	1
Pyrene	U	0.30	1.0	ug/l		8270C	08/07/11	1
1,2,4-Trichlorobenzene	U	0.35	10.	ug/l		8270C	08/07/11	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.23	10.	ug/l		8270C	08/07/11	1
2-Chlorophenol	U	0.19	10.	ug/l		8270C	08/07/11	1
2,4-Dichlorophenol	U	0.97	10.	ug/l		8270C	08/07/11	1
2,4-Dimethylphenol	U	1.3	10.	ug/l		8270C	08/07/11	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270C	08/07/11	1
2,4-Dinitrophenol	U	2.3	10.	ug/l		8270C	08/07/11	1
2-Nitrophenol	U	0.28	10.	ug/l		8270C	08/07/11	1
4-Nitrophenol	U	2.7	10.	ug/l		8270C	08/07/11	1
Pentachlorophenol	U	0.41	10.	ug/l		8270C	08/07/11	1
Phenol	U	1.1	10.	ug/l		8270C	08/07/11	1
2,4,6-Trichlorophenol	U	0.28	10.	ug/l		8270C	08/07/11	1
Surrogate Recovery								
Nitrobenzene-d5	66.4			% Rec.		8270C	08/07/11	1
2-Fluorobiphenyl	84.4			% Rec.		8270C	08/07/11	1
p-Terphenyl-d14	99.9			% Rec.		8270C	08/07/11	1
Phenol-d5	28.3			% Rec.		8270C	08/07/11	1
2-Fluorophenol	36.8			% Rec.		8270C	08/07/11	1
2,4,6-Tribromophenol	100.			% Rec.		8270C	08/07/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-17

Sample ID : B-4/TMW

Site ID :

Collected By : HM
Collection Date : 08/04/11 12:30

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic, Dissolved	35.	0.25	1.0	ug/l		6020	08/07/11	1
Mercury, Dissolved	U	0.017	0.20	ug/l		7470A	08/08/11	1
Barium, Dissolved	43.	1.0	5.0	ug/l		6010B	08/05/11	1
Cadmium, Dissolved	U	0.80	5.0	ug/l		6010B	08/05/11	1
Chromium, Dissolved	U	1.7	10.	ug/l		6010B	08/05/11	1
Lead, Dissolved	4.0	1.8	5.0	ug/l	J	6010B	08/05/11	1
Selenium, Dissolved	16.	6.3	20.	ug/l	J	6010B	08/05/11	1
Silver, Dissolved	U	3.3	10.	ug/l		6010B	08/05/11	1
Volatile Organics								
Acetone	U	11.	50.	ug/l		8260B	08/05/11	1
Acrolein	U	31.	50.	ug/l		8260B	08/05/11	1
Acrylonitrile	U	1.7	10.	ug/l		8260B	08/05/11	1
Benzene	1.6	0.18	1.0	ug/l		8260B	08/05/11	1
Bromobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	08/05/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	08/05/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	08/05/11	1
n-Butylbenzene	U	0.20	1.0	ug/l		8260B	08/05/11	1
sec-Butylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
tert-Butylbenzene	U	0.21	1.0	ug/l		8260B	08/05/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	08/05/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
Chlorodibromomethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	08/05/11	1
2-Chloroethyl vinyl ether	U	2.7	50.	ug/l		8260B	08/05/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	08/05/11	1
Chloromethane	U	0.46	2.5	ug/l		8260B	08/05/11	1
2-Chlorotoluene	U	0.17	1.0	ug/l		8260B	08/05/11	1
4-Chlorotoluene	U	0.20	1.0	ug/l		8260B	08/05/11	1
1,2-Dibromo-3-Chloropropane	U	1.1	5.0	ug/l		8260B	08/05/11	1
1,2-Dibromoethane	U	0.44	1.0	ug/l		8260B	08/05/11	1
Dibromomethane	U	0.51	1.0	ug/l		8260B	08/05/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	08/05/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	08/05/11	1
Dichlorodifluoromethane	U	0.57	5.0	ug/l		8260B	08/05/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	08/05/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	08/05/11	1
cis-1,2-Dichloroethene	U	0.27	1.0	ug/l		8260B	08/05/11	1

U = ND (Not Detected)

RDL = Reported Detection Limit = LOQ = PQL = EQL

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-4/TMW
Collected By : HM
Collection Date : 08/04/11 12:30

ESC Sample # : L529577-17

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	08/05/11	1
1,1-Dichloropropene	U	0.27	1.0	ug/l	J4	8260B	08/05/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	08/05/11	1
cis-1,3-Dichloropropene	U	0.23	1.0	ug/l		8260B	08/05/11	1
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	08/05/11	1
2,2-Dichloropropane	U	0.35	1.0	ug/l		8260B	08/05/11	1
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	08/05/11	1
Ethylbenzene	0.30	0.27	1.0	ug/l	J	8260B	08/05/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	08/05/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
p-Isopropyltoluene	U	0.17	1.0	ug/l		8260B	08/05/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	08/05/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	08/05/11	1
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	08/05/11	1
Methyl tert-butyl ether	U	0.27	1.0	ug/l		8260B	08/05/11	1
Naphthalene	7.7	0.69	5.0	ug/l		8260B	08/05/11	1
n-Propylbenzene	0.33	0.18	1.0	ug/l	J	8260B	08/05/11	1
Styrene	U	0.30	1.0	ug/l	J4	8260B	08/05/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	08/05/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.38	1.0	ug/l		8260B	08/05/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	08/05/11	1
Toluene	0.61	0.16	5.0	ug/l	J	8260B	08/05/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	08/05/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	08/05/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	08/05/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	08/05/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	08/08/11	1
Trichlorofluoromethane	U	0.49	5.0	ug/l		8260B	08/05/11	1
1,2,3-Trichloropropane	U	0.52	2.5	ug/l		8260B	08/05/11	1
1,2,4-Trimethylbenzene	2.5	0.20	1.0	ug/l		8260B	08/05/11	1
1,2,3-Trimethylbenzene	1.8	0.17	1.0	ug/l		8260B	08/05/11	1
1,3,5-Trimethylbenzene	0.58	0.18	1.0	ug/l	J	8260B	08/05/11	1
Vinyl chloride	U	0.28	1.0	ug/l	J4	8260B	08/05/11	1
Xylenes, Total	1.1	0.86	3.0	ug/l	J	8260B	08/05/11	1
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	08/05/11	1
Dibromofluoromethane	90.1			% Rec.		8260B	08/05/11	1
4-Bromofluorobenzene	105.			% Rec.		8260B	08/05/11	1
Gasoline	U	36.	110	ug/l		OA2	08/09/11	1.1
Diesel	220	36.	110	ug/l		OA2	08/09/11	1.1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-4/TMW
Collected By : HM
Collection Date : 08/04/11 12:30

ESC Sample # : L529577-17

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Motor Oil	U	91.	280	ug/l		OA2	08/09/11	1.1
Total (C7-C40)	220	91.	280	ug/l	J	OA2	08/09/11	1.1
Surrogate Recovery								
o-Terphenyl	61.9			% Rec.		OA2	08/09/11	1.1
Base/Neutral Extractables								
Acenaphthene	1.1	0.90	5.0	ug/l	J	8270C	08/07/11	5
Acenaphthylene	U	1.0	5.0	ug/l		8270C	08/07/11	5
Anthracene	U	0.83	5.0	ug/l		8270C	08/07/11	5
Benzidine	U	10.	50.	ug/l		8270C	08/07/11	5
Benzo(a)anthracene	U	0.93	5.0	ug/l		8270C	08/07/11	5
Benzo(b)fluoranthene	U	1.9	5.0	ug/l		8270C	08/07/11	5
Benzo(k)fluoranthene	U	1.3	5.0	ug/l		8270C	08/07/11	5
Benzo(g,h,i)perylene	U	1.8	5.0	ug/l		8270C	08/07/11	5
Benzo(a)pyrene	U	1.3	5.0	ug/l		8270C	08/07/11	5
Bis(2-chlorethoxy)methane	U	1.1	50.	ug/l		8270C	08/07/11	5
Bis(2-chloroethyl)ether	U	1.1	50.	ug/l		8270C	08/07/11	5
Bis(2-chloroisopropyl)ether	U	1.5	50.	ug/l		8270C	08/07/11	5
4-Bromophenyl-phenylether	U	0.90	50.	ug/l		8270C	08/07/11	5
2-Chloronaphthalene	U	1.0	5.0	ug/l		8270C	08/07/11	5
4-Chlorophenyl-phenylether	U	0.85	50.	ug/l		8270C	08/07/11	5
Chrysene	U	0.66	5.0	ug/l		8270C	08/07/11	5
Dibenz(a,h)anthracene	U	1.2	5.0	ug/l		8270C	08/07/11	5
3,3-Dichlorobenzidine	U	8.4	50.	ug/l		8270C	08/07/11	5
2,4-Dinitrotoluene	U	1.1	50.	ug/l		8270C	08/07/11	5
2,6-Dinitrotoluene	U	7.2	50.	ug/l		8270C	08/07/11	5
Fluoranthene	U	1.7	5.0	ug/l		8270C	08/07/11	5
Fluorene	U	0.88	5.0	ug/l		8270C	08/07/11	5
Hexachlorobenzene	U	1.1	5.0	ug/l		8270C	08/07/11	5
Hexachloro-1,3-butadiene	U	13.	50.	ug/l		8270C	08/07/11	5
Hexachlorocyclopentadiene	U	9.0	50.	ug/l		8270C	08/07/11	5
Hexachloroethane	U	16.	50.	ug/l		8270C	08/07/11	5
Indeno(1,2,3-cd)pyrene	U	1.7	5.0	ug/l		8270C	08/07/11	5
Isophorone	U	1.2	50.	ug/l		8270C	08/07/11	5
Naphthalene	5.7	2.1	5.0	ug/l		8270C	08/07/11	5
Nitrobenzene	U	1.0	50.	ug/l		8270C	08/07/11	5
n-Nitrosodimethylamine	U	13.	50.	ug/l		8270C	08/07/11	5
n-Nitrosodiphenylamine	U	0.68	50.	ug/l		8270C	08/07/11	5
n-Nitrosodi-n-propylamine	U	1.6	50.	ug/l		8270C	08/07/11	5
Phenanthrene	U	1.0	5.0	ug/l		8270C	08/07/11	5
Benzylbutyl phthalate	U	2.0	5.0	ug/l		8270C	08/07/11	5
Bis(2-ethylhexyl)phthalate	U	2.5	5.0	ug/l		8270C	08/07/11	5
Di-n-butyl phthalate	U	1.4	5.0	ug/l		8270C	08/07/11	5

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : B-4/TMW

Collected By : HM
Collection Date : 08/04/11 12:30

ESC Sample # : L529577-17

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Diethyl phthalate	U	1.8	5.0	ug/l		8270C	08/07/11	5
Dimethyl phthalate	U	1.7	5.0	ug/l		8270C	08/07/11	5
Di-n-octyl phthalate	U	1.4	5.0	ug/l		8270C	08/07/11	5
Pyrene	U	1.5	5.0	ug/l		8270C	08/07/11	5
1,2,4-Trichlorobenzene	U	1.8	50.	ug/l		8270C	08/07/11	5
Acid Extractables								
4-Chloro-3-methylphenol	U	1.1	50.	ug/l		8270C	08/07/11	5
2-Chlorophenol	U	0.95	50.	ug/l		8270C	08/07/11	5
2,4-Dichlorophenol	U	4.9	50.	ug/l		8270C	08/07/11	5
2,4-Dimethylphenol	U	6.7	50.	ug/l		8270C	08/07/11	5
4,6-Dinitro-2-methylphenol	U	13.	50.	ug/l		8270C	08/07/11	5
2,4-Dinitrophenol	U	12.	50.	ug/l		8270C	08/07/11	5
2-Nitrophenol	U	1.4	50.	ug/l		8270C	08/07/11	5
4-Nitrophenol	U	14.	50.	ug/l		8270C	08/07/11	5
Pentachlorophenol	U	2.0	50.	ug/l		8270C	08/07/11	5
Phenol	16.	5.6	50.	ug/l	J	8270C	08/07/11	5
2,4,6-Trichlorophenol	U	1.4	50.	ug/l		8270C	08/07/11	5
Surrogate Recovery								
Nitrobenzene-d5	76.3			% Rec.		8270C	08/07/11	5
2-Fluorobiphenyl	83.7			% Rec.		8270C	08/07/11	5
p-Terphenyl-d14	84.2			% Rec.		8270C	08/07/11	5
Phenol-d5	29.2			% Rec.		8270C	08/07/11	5
2-Fluorophenol	38.1			% Rec.		8270C	08/07/11	5
2,4,6-Tribromophenol	89.8			% Rec.		8270C	08/07/11	5

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-18

Sample ID : DUP-1

Site ID :

Collected By : HM
Collection Date : 08/04/11 00:00

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic, Dissolved	35.	0.25	1.0	ug/l		6020	08/07/11	1
Mercury, Dissolved	U	0.017	0.20	ug/l		7470A	08/08/11	1
Barium, Dissolved	43.	1.0	5.0	ug/l		6010B	08/05/11	1
Cadmium, Dissolved	U	0.80	5.0	ug/l		6010B	08/05/11	1
Chromium, Dissolved	U	1.7	10.	ug/l		6010B	08/05/11	1
Lead, Dissolved	4.2	1.8	5.0	ug/l	J	6010B	08/05/11	1
Selenium, Dissolved	14.	6.3	20.	ug/l	J	6010B	08/05/11	1
Silver, Dissolved	U	3.3	10.	ug/l		6010B	08/05/11	1
Volatile Organics								
Acetone	U	11.	50.	ug/l		8260B	08/05/11	1
Acrolein	U	31.	50.	ug/l		8260B	08/05/11	1
Acrylonitrile	U	1.7	10.	ug/l		8260B	08/05/11	1
Benzene	1.6	0.18	1.0	ug/l		8260B	08/05/11	1
Bromobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	08/05/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	08/05/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	08/05/11	1
n-Butylbenzene	U	0.20	1.0	ug/l		8260B	08/05/11	1
sec-Butylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
tert-Butylbenzene	U	0.21	1.0	ug/l		8260B	08/05/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	08/05/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
Chlorodibromomethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	08/05/11	1
2-Chloroethyl vinyl ether	U	2.7	50.	ug/l		8260B	08/05/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	08/05/11	1
Chloromethane	U	0.46	2.5	ug/l		8260B	08/05/11	1
2-Chlorotoluene	U	0.17	1.0	ug/l		8260B	08/05/11	1
4-Chlorotoluene	U	0.20	1.0	ug/l		8260B	08/05/11	1
1,2-Dibromo-3-Chloropropane	U	1.1	5.0	ug/l		8260B	08/05/11	1
1,2-Dibromoethane	U	0.44	1.0	ug/l		8260B	08/05/11	1
Dibromomethane	U	0.51	1.0	ug/l		8260B	08/05/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	08/05/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	08/05/11	1
Dichlorodifluoromethane	U	0.57	5.0	ug/l		8260B	08/05/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	08/05/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	08/05/11	1
cis-1,2-Dichloroethene	U	0.27	1.0	ug/l		8260B	08/05/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-18

Sample ID : DUP-1

Site ID :

Collected By : HM
Collection Date : 08/04/11 00:00

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	08/05/11	1
1,1-Dichloropropene	U	0.27	1.0	ug/l	J4	8260B	08/05/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	08/05/11	1
cis-1,3-Dichloropropene	U	0.23	1.0	ug/l		8260B	08/05/11	1
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	08/05/11	1
2,2-Dichloropropane	U	0.35	1.0	ug/l		8260B	08/05/11	1
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	08/05/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	08/05/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	08/05/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
p-Isopropyltoluene	U	0.17	1.0	ug/l		8260B	08/05/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	08/05/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	08/05/11	1
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	08/05/11	1
Methyl tert-butyl ether	U	0.27	1.0	ug/l		8260B	08/05/11	1
Naphthalene	7.6	0.69	5.0	ug/l		8260B	08/05/11	1
n-Propylbenzene	0.34	0.18	1.0	ug/l	J	8260B	08/05/11	1
Styrene	U	0.30	1.0	ug/l	J4	8260B	08/05/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	08/05/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.38	1.0	ug/l		8260B	08/05/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	08/05/11	1
Toluene	0.61	0.16	5.0	ug/l	J	8260B	08/05/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	08/05/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	08/05/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	08/05/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	08/05/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	08/08/11	1
Trichlorofluoromethane	U	0.49	5.0	ug/l		8260B	08/05/11	1
1,2,3-Trichloropropane	U	0.52	2.5	ug/l		8260B	08/05/11	1
1,2,4-Trimethylbenzene	2.5	0.20	1.0	ug/l		8260B	08/05/11	1
1,2,3-Trimethylbenzene	1.8	0.17	1.0	ug/l		8260B	08/05/11	1
1,3,5-Trimethylbenzene	0.57	0.18	1.0	ug/l	J	8260B	08/05/11	1
Vinyl chloride	U	0.28	1.0	ug/l	J4	8260B	08/05/11	1
Xylenes, Total	1.2	0.86	3.0	ug/l	J	8260B	08/05/11	1
Surrogate Recovery								
Toluene-d8	100.			% Rec.		8260B	08/05/11	1
Dibromofluoromethane	89.8			% Rec.		8260B	08/05/11	1
4-Bromofluorobenzene	105.			% Rec.		8260B	08/05/11	1
Gasoline	U	36.	110	ug/l		OA2	08/09/11	1.1
Diesel	180	36.	110	ug/l		OA2	08/09/11	1.1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-18

Sample ID : DUP-1

Site ID :

Collected By : HM
Collection Date : 08/04/11 00:00

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Motor Oil	U	91.	280	ug/l		OA2	08/09/11	1.1
Total (C7-C40)	180	91.	280	ug/l	J	OA2	08/09/11	1.1
Surrogate Recovery								
o-Terphenyl	57.7			% Rec.		OA2	08/09/11	1.1
Base/Neutral Extractables								
Acenaphthene	0.97	0.90	5.0	ug/l	J	8270C	08/07/11	5
Acenaphthylene	U	1.0	5.0	ug/l		8270C	08/07/11	5
Anthracene	U	0.83	5.0	ug/l		8270C	08/07/11	5
Benzidine	U	10.	50.	ug/l		8270C	08/07/11	5
Benzo(a)anthracene	U	0.93	5.0	ug/l		8270C	08/07/11	5
Benzo(b)fluoranthene	U	1.9	5.0	ug/l		8270C	08/07/11	5
Benzo(k)fluoranthene	U	1.3	5.0	ug/l		8270C	08/07/11	5
Benzo(g,h,i)perylene	U	1.8	5.0	ug/l		8270C	08/07/11	5
Benzo(a)pyrene	U	1.3	5.0	ug/l		8270C	08/07/11	5
Bis(2-chlorethoxy)methane	U	1.1	50.	ug/l		8270C	08/07/11	5
Bis(2-chloroethyl)ether	U	1.1	50.	ug/l		8270C	08/07/11	5
Bis(2-chloroisopropyl)ether	U	1.5	50.	ug/l		8270C	08/07/11	5
4-Bromophenyl-phenylether	U	0.90	50.	ug/l		8270C	08/07/11	5
2-Chloronaphthalene	U	1.0	5.0	ug/l		8270C	08/07/11	5
4-Chlorophenyl-phenylether	U	0.85	50.	ug/l		8270C	08/07/11	5
Chrysene	U	0.66	5.0	ug/l		8270C	08/07/11	5
Dibenz(a,h)anthracene	U	1.2	5.0	ug/l		8270C	08/07/11	5
3,3-Dichlorobenzidine	U	8.4	50.	ug/l		8270C	08/07/11	5
2,4-Dinitrotoluene	U	1.1	50.	ug/l		8270C	08/07/11	5
2,6-Dinitrotoluene	U	7.2	50.	ug/l		8270C	08/07/11	5
Fluoranthene	U	1.7	5.0	ug/l		8270C	08/07/11	5
Fluorene	U	0.88	5.0	ug/l		8270C	08/07/11	5
Hexachlorobenzene	U	1.1	5.0	ug/l		8270C	08/07/11	5
Hexachloro-1,3-butadiene	U	13.	50.	ug/l		8270C	08/07/11	5
Hexachlorocyclopentadiene	U	9.0	50.	ug/l		8270C	08/07/11	5
Hexachloroethane	U	16.	50.	ug/l		8270C	08/07/11	5
Indeno(1,2,3-cd)pyrene	U	1.7	5.0	ug/l		8270C	08/07/11	5
Isophorone	U	1.2	50.	ug/l		8270C	08/07/11	5
Naphthalene	4.8	2.1	5.0	ug/l	J	8270C	08/07/11	5
Nitrobenzene	U	1.0	50.	ug/l		8270C	08/07/11	5
n-Nitrosodimethylamine	U	13.	50.	ug/l		8270C	08/07/11	5
n-Nitrosodiphenylamine	U	0.68	50.	ug/l		8270C	08/07/11	5
n-Nitrosodi-n-propylamine	U	1.6	50.	ug/l		8270C	08/07/11	5
Phenanthrene	U	1.0	5.0	ug/l		8270C	08/07/11	5
Benzylbutyl phthalate	U	2.0	5.0	ug/l		8270C	08/07/11	5
Bis(2-ethylhexyl)phthalate	U	2.5	5.0	ug/l		8270C	08/07/11	5
Di-n-butyl phthalate	U	1.4	5.0	ug/l		8270C	08/07/11	5

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Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : DUP-1
Collected By : HM
Collection Date : 08/04/11 00:00

ESC Sample # : L529577-18

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Diethyl phthalate	U	1.8	5.0	ug/l		8270C	08/07/11	5
Dimethyl phthalate	U	1.7	5.0	ug/l		8270C	08/07/11	5
Di-n-octyl phthalate	U	1.4	5.0	ug/l		8270C	08/07/11	5
Pyrene	U	1.5	5.0	ug/l		8270C	08/07/11	5
1,2,4-Trichlorobenzene	U	1.8	50.	ug/l		8270C	08/07/11	5
Acid Extractables								
4-Chloro-3-methylphenol	U	1.1	50.	ug/l		8270C	08/07/11	5
2-Chlorophenol	U	0.95	50.	ug/l		8270C	08/07/11	5
2,4-Dichlorophenol	U	4.9	50.	ug/l		8270C	08/07/11	5
2,4-Dimethylphenol	U	6.7	50.	ug/l		8270C	08/07/11	5
4,6-Dinitro-2-methylphenol	U	13.	50.	ug/l		8270C	08/07/11	5
2,4-Dinitrophenol	U	12.	50.	ug/l		8270C	08/07/11	5
2-Nitrophenol	U	1.4	50.	ug/l		8270C	08/07/11	5
4-Nitrophenol	U	14.	50.	ug/l		8270C	08/07/11	5
Pentachlorophenol	U	2.0	50.	ug/l		8270C	08/07/11	5
Phenol	15.	5.6	50.	ug/l	J	8270C	08/07/11	5
2,4,6-Trichlorophenol	U	1.4	50.	ug/l		8270C	08/07/11	5
Surrogate Recovery								
Nitrobenzene-d5	69.1			% Rec.		8270C	08/07/11	5
2-Fluorobiphenyl	77.9			% Rec.		8270C	08/07/11	5
p-Terphenyl-d14	81.4			% Rec.		8270C	08/07/11	5
Phenol-d5	27.4			% Rec.		8270C	08/07/11	5
2-Fluorophenol	36.4			% Rec.		8270C	08/07/11	5
2,4,6-Tribromophenol	81.0			% Rec.		8270C	08/07/11	5

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : TRIP BLANK

Collected By : HM
Collection Date : 08/04/11 08:00

ESC Sample # : L529577-19

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	11.	50.	ug/l		8260B	08/08/11	1
Acrolein	U	31.	50.	ug/l		8260B	08/08/11	1
Acrylonitrile	U	1.7	10.	ug/l		8260B	08/08/11	1
Benzene	U	0.18	1.0	ug/l		8260B	08/08/11	1
Bromobenzene	U	0.25	1.0	ug/l		8260B	08/08/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	08/08/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	08/08/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	08/08/11	1
n-Butylbenzene	U	0.20	1.0	ug/l		8260B	08/08/11	1
sec-Butylbenzene	U	0.18	1.0	ug/l		8260B	08/08/11	1
tert-Butylbenzene	U	0.21	1.0	ug/l		8260B	08/08/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	08/08/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	08/08/11	1
Chlorodibromomethane	U	0.29	1.0	ug/l		8260B	08/08/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	08/08/11	1
2-Chloroethyl vinyl ether	U	2.7	50.	ug/l		8260B	08/08/11	1
Chloroform	U	0.22	5.0	ug/l		8260B	08/08/11	1
Chloromethane	U	0.46	2.5	ug/l		8260B	08/08/11	1
2-Chlorotoluene	U	0.17	1.0	ug/l		8260B	08/08/11	1
4-Chlorotoluene	U	0.20	1.0	ug/l		8260B	08/08/11	1
1,2-Dibromo-3-Chloropropane	U	1.1	5.0	ug/l		8260B	08/08/11	1
1,2-Dibromoethane	U	0.44	1.0	ug/l		8260B	08/08/11	1
Dibromomethane	U	0.51	1.0	ug/l		8260B	08/08/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	08/08/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	08/08/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	08/08/11	1
Dichlorodifluoromethane	U	0.57	5.0	ug/l		8260B	08/08/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	08/08/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	08/08/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	08/08/11	1
cis-1,2-Dichloroethene	U	0.27	1.0	ug/l		8260B	08/08/11	1
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l		8260B	08/08/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	08/08/11	1
1,1-Dichloropropene	U	0.27	1.0	ug/l		8260B	08/08/11	1
1,3-Dichloropropene	U	0.37	1.0	ug/l		8260B	08/08/11	1
cis-1,3-Dichloropropene	U	0.23	1.0	ug/l		8260B	08/08/11	1
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	08/08/11	1
2,2-Dichloropropane	U	0.35	1.0	ug/l		8260B	08/08/11	1
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	08/08/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	08/08/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	08/08/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	08/08/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-19

Sample ID : TRIP BLANK

Site ID :

Collected By : HM
Collection Date : 08/04/11 08:00

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
p-Isopropyltoluene	U	0.17	1.0	ug/l		8260B	08/08/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	08/08/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	08/08/11	1
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	08/08/11	1
Methyl tert-butyl ether	U	0.27	1.0	ug/l		8260B	08/08/11	1
Naphthalene	U	0.69	5.0	ug/l		8260B	08/08/11	1
n-Propylbenzene	U	0.18	1.0	ug/l		8260B	08/08/11	1
Styrene	U	0.30	1.0	ug/l	J4	8260B	08/08/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	08/08/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	08/08/11	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.38	1.0	ug/l		8260B	08/08/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	08/08/11	1
Toluene	U	0.16	5.0	ug/l		8260B	08/08/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	08/08/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	08/08/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	08/08/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	08/08/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	08/08/11	1
Trichlorofluoromethane	U	0.49	5.0	ug/l		8260B	08/08/11	1
1,2,3-Trichloropropane	U	0.52	2.5	ug/l		8260B	08/08/11	1
1,2,4-Trimethylbenzene	U	0.20	1.0	ug/l		8260B	08/08/11	1
1,2,3-Trimethylbenzene	U	0.17	1.0	ug/l		8260B	08/08/11	1
1,3,5-Trimethylbenzene	U	0.18	1.0	ug/l		8260B	08/08/11	1
Vinyl chloride	U	0.28	1.0	ug/l		8260B	08/08/11	1
Xylenes, Total	U	0.86	3.0	ug/l		8260B	08/08/11	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	08/08/11	1
Dibromofluoromethane	104.			% Rec.		8260B	08/08/11	1
4-Bromofluorobenzene	107.			% Rec.		8260B	08/08/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : DECON 2

Collected By : HM
Collection Date : 08/04/11 15:00

ESC Sample # : L529577-20

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Arsenic, Dissolved	U	0.25	1.0	ug/l		6020	08/07/11	1
Mercury, Dissolved	U	0.017	0.20	ug/l		7470A	08/08/11	1
Barium, Dissolved	18.	1.0	5.0	ug/l		6010B	08/10/11	1
Cadmium, Dissolved	U	0.80	5.0	ug/l		6010B	08/05/11	1
Chromium, Dissolved	2.3	1.7	10.	ug/l	J	6010B	08/05/11	1
Lead, Dissolved	4.5	1.8	5.0	ug/l	J	6010B	08/05/11	1
Selenium, Dissolved	U	6.3	20.	ug/l		6010B	08/05/11	1
Silver, Dissolved	U	3.3	10.	ug/l		6010B	08/05/11	1
Volatile Organics								
Acetone	U	11.	50.	ug/l		8260B	08/05/11	1
Acrolein	U	31.	50.	ug/l		8260B	08/05/11	1
Acrylonitrile	U	1.7	10.	ug/l		8260B	08/05/11	1
Benzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
Bromobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
Bromodichloromethane	U	0.21	1.0	ug/l		8260B	08/05/11	1
Bromoform	U	0.46	1.0	ug/l		8260B	08/05/11	1
Bromomethane	U	0.57	5.0	ug/l		8260B	08/05/11	1
n-Butylbenzene	U	0.20	1.0	ug/l		8260B	08/05/11	1
sec-Butylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
tert-Butylbenzene	U	0.21	1.0	ug/l		8260B	08/05/11	1
Carbon tetrachloride	U	0.38	1.0	ug/l		8260B	08/05/11	1
Chlorobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
Chlorodibromomethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
Chloroethane	U	1.4	5.0	ug/l		8260B	08/05/11	1
2-Chloroethyl vinyl ether	U	2.7	50.	ug/l		8260B	08/05/11	1
Chloroform	0.95	0.22	5.0	ug/l	J	8260B	08/05/11	1
Chloromethane	U	0.46	2.5	ug/l		8260B	08/05/11	1
2-Chlorotoluene	U	0.17	1.0	ug/l		8260B	08/05/11	1
4-Chlorotoluene	U	0.20	1.0	ug/l		8260B	08/05/11	1
1,2-Dibromo-3-Chloropropane	U	1.1	5.0	ug/l		8260B	08/05/11	1
1,2-Dibromoethane	U	0.44	1.0	ug/l		8260B	08/05/11	1
Dibromomethane	U	0.51	1.0	ug/l		8260B	08/05/11	1
1,2-Dichlorobenzene	U	0.26	1.0	ug/l		8260B	08/05/11	1
1,3-Dichlorobenzene	U	0.25	1.0	ug/l		8260B	08/05/11	1
1,4-Dichlorobenzene	U	0.19	1.0	ug/l		8260B	08/05/11	1
Dichlorodifluoromethane	U	0.57	5.0	ug/l		8260B	08/05/11	1
1,1-Dichloroethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,2-Dichloroethane	U	0.26	1.0	ug/l		8260B	08/05/11	1
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	08/05/11	1
cis-1,2-Dichloroethene	U	0.27	1.0	ug/l		8260B	08/05/11	1

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Mt. Juliet, TN 37122
(615) 758-5858
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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : DECON 2

Collected By : HM
Collection Date : 08/04/11 15:00

ESC Sample # : L529577-20

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
trans-1,2-Dichloroethene	U	0.29	1.0	ug/l	J4	8260B	08/05/11	1
1,2-Dichloropropane	U	0.47	1.0	ug/l		8260B	08/05/11	1
1,1-Dichloropropene	U	0.27	1.0	ug/l		8260B	08/05/11	1
1,3-Dichloropropane	U	0.37	1.0	ug/l		8260B	08/05/11	1
cis-1,3-Dichloropropene	U	0.23	1.0	ug/l		8260B	08/05/11	1
trans-1,3-Dichloropropene	U	0.39	1.0	ug/l		8260B	08/05/11	1
2,2-Dichloropropane	U	0.35	1.0	ug/l		8260B	08/05/11	1
Di-isopropyl ether	U	0.24	1.0	ug/l		8260B	08/05/11	1
Ethylbenzene	U	0.27	1.0	ug/l		8260B	08/05/11	1
Hexachloro-1,3-butadiene	U	0.38	1.0	ug/l		8260B	08/05/11	1
Isopropylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
p-Isopropyltoluene	U	0.17	1.0	ug/l		8260B	08/05/11	1
2-Butanone (MEK)	U	3.0	10.	ug/l		8260B	08/05/11	1
Methylene Chloride	U	0.79	5.0	ug/l		8260B	08/05/11	1
4-Methyl-2-pentanone (MIBK)	U	0.80	10.	ug/l		8260B	08/05/11	1
Methyl tert-butyl ether	U	0.27	1.0	ug/l	J4	8260B	08/05/11	1
Naphthalene	U	0.69	5.0	ug/l		8260B	08/05/11	1
n-Propylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
Styrene	U	0.30	1.0	ug/l		8260B	08/05/11	1
1,1,1,2-Tetrachloroethane	U	0.31	1.0	ug/l		8260B	08/05/11	1
1,1,2,2-Tetrachloroethane	U	0.29	1.0	ug/l		8260B	08/05/11	1
1,1,2-Trichloro-1,2,2-trifluoro	U	0.38	1.0	ug/l		8260B	08/05/11	1
Tetrachloroethene	U	0.24	1.0	ug/l		8260B	08/05/11	1
Toluene	U	0.16	5.0	ug/l		8260B	08/05/11	1
1,2,3-Trichlorobenzene	U	0.30	1.0	ug/l		8260B	08/05/11	1
1,2,4-Trichlorobenzene	U	0.21	1.0	ug/l		8260B	08/05/11	1
1,1,1-Trichloroethane	U	0.24	1.0	ug/l		8260B	08/05/11	1
1,1,2-Trichloroethane	U	0.38	1.0	ug/l		8260B	08/05/11	1
Trichloroethene	U	0.29	1.0	ug/l		8260B	08/08/11	1
Trichlorofluoromethane	U	0.49	5.0	ug/l		8260B	08/05/11	1
1,2,3-Trichloropropane	U	0.52	2.5	ug/l	J4	8260B	08/05/11	1
1,2,4-Trimethylbenzene	U	0.20	1.0	ug/l		8260B	08/05/11	1
1,2,3-Trimethylbenzene	U	0.17	1.0	ug/l		8260B	08/05/11	1
1,3,5-Trimethylbenzene	U	0.18	1.0	ug/l		8260B	08/05/11	1
Vinyl chloride	U	0.28	1.0	ug/l	J4	8260B	08/05/11	1
Xylenes, Total	U	0.86	3.0	ug/l		8260B	08/05/11	1
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	08/05/11	1
Dibromofluoromethane	88.7			% Rec.		8260B	08/05/11	1
4-Bromofluorobenzene	105.			% Rec.		8260B	08/05/11	1
Gasoline	U	36.	110	ug/l		OA2	08/09/11	1.1
Diesel	U	36.	110	ug/l		OA2	08/09/11	1.1

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2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : DECON 2

Collected By : HM
Collection Date : 08/04/11 15:00

ESC Sample # : L529577-20

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Motor Oil	U	91.	280	ug/l		OA2	08/09/11	1.1
Total (C7-C40)	U	91.	280	ug/l		OA2	08/09/11	1.1
Surrogate Recovery								
o-Terphenyl	70.5			% Rec.		OA2	08/09/11	1.1
Base/Neutral Extractables								
Acenaphthene	U	0.18	1.0	ug/l		8270C	08/07/11	1
Acenaphthylene	U	0.21	1.0	ug/l		8270C	08/07/11	1
Anthracene	U	0.17	1.0	ug/l		8270C	08/07/11	1
Benzidine	U	2.1	10.	ug/l		8270C	08/07/11	1
Benzo(a)anthracene	U	0.19	1.0	ug/l		8270C	08/07/11	1
Benzo(b)fluoranthene	U	0.38	1.0	ug/l		8270C	08/07/11	1
Benzo(k)fluoranthene	U	0.26	1.0	ug/l		8270C	08/07/11	1
Benzo(g,h,i)perylene	U	0.37	1.0	ug/l		8270C	08/07/11	1
Benzo(a)pyrene	U	0.27	1.0	ug/l		8270C	08/07/11	1
Bis(2-chloroethoxy)methane	U	0.21	10.	ug/l		8270C	08/07/11	1
Bis(2-chloroethyl)ether	U	0.21	10.	ug/l		8270C	08/07/11	1
Bis(2-chloroisopropyl)ether	U	0.31	10.	ug/l		8270C	08/07/11	1
4-Bromophenyl-phenylether	U	0.18	10.	ug/l		8270C	08/07/11	1
2-Chloronaphthalene	U	0.20	1.0	ug/l		8270C	08/07/11	1
4-Chlorophenyl-phenylether	U	0.17	10.	ug/l		8270C	08/07/11	1
Chrysene	U	0.13	1.0	ug/l		8270C	08/07/11	1
Dibenz(a,h)anthracene	U	0.25	1.0	ug/l		8270C	08/07/11	1
3,3-Dichlorobenzidine	U	1.7	10.	ug/l		8270C	08/07/11	1
2,4-Dinitrotoluene	U	0.22	10.	ug/l		8270C	08/07/11	1
2,6-Dinitrotoluene	U	1.4	10.	ug/l		8270C	08/07/11	1
Fluoranthene	U	0.34	1.0	ug/l		8270C	08/07/11	1
Fluorene	U	0.18	1.0	ug/l		8270C	08/07/11	1
Hexachlorobenzene	U	0.23	1.0	ug/l		8270C	08/07/11	1
Hexachloro-1,3-butadiene	U	2.6	10.	ug/l		8270C	08/07/11	1
Hexachlorocyclopentadiene	U	1.8	10.	ug/l		8270C	08/07/11	1
Hexachloroethane	U	3.1	10.	ug/l		8270C	08/07/11	1
Indeno(1,2,3-cd)pyrene	U	0.33	1.0	ug/l		8270C	08/07/11	1
Isophorone	U	0.24	10.	ug/l		8270C	08/07/11	1
Naphthalene	U	0.41	1.0	ug/l		8270C	08/07/11	1
Nitrobenzene	U	0.20	10.	ug/l		8270C	08/07/11	1
n-Nitrosodimethylamine	U	2.6	10.	ug/l		8270C	08/07/11	1
n-Nitrosodiphenylamine	U	0.14	10.	ug/l		8270C	08/07/11	1
n-Nitrosodi-n-propylamine	U	0.31	10.	ug/l		8270C	08/07/11	1
Phenanthrene	U	0.20	1.0	ug/l		8270C	08/07/11	1
Benzylbutyl phthalate	U	0.40	1.0	ug/l		8270C	08/07/11	1
Bis(2-ethylhexyl)phthalate	U	0.50	1.0	ug/l		8270C	08/07/11	1
Di-n-butyl phthalate	U	0.28	1.0	ug/l		8270C	08/07/11	1

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REPORT OF ANALYSIS

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2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

Sample ID : DECON 2

Collected By : HM
Collection Date : 08/04/11 15:00

ESC Sample # : L529577-20

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Diethyl phthalate	U	0.36	1.0	ug/l		8270C	08/07/11	1
Dimethyl phthalate	U	0.34	1.0	ug/l		8270C	08/07/11	1
Di-n-octyl phthalate	U	0.28	1.0	ug/l		8270C	08/07/11	1
Pyrene	U	0.30	1.0	ug/l		8270C	08/07/11	1
1,2,4-Trichlorobenzene	U	0.35	10.	ug/l		8270C	08/07/11	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.23	10.	ug/l		8270C	08/07/11	1
2-Chlorophenol	U	0.19	10.	ug/l		8270C	08/07/11	1
2,4-Dichlorophenol	U	0.97	10.	ug/l		8270C	08/07/11	1
2,4-Dimethylphenol	U	1.3	10.	ug/l		8270C	08/07/11	1
4,6-Dinitro-2-methylphenol	U	2.6	10.	ug/l		8270C	08/07/11	1
2,4-Dinitrophenol	U	2.3	10.	ug/l		8270C	08/07/11	1
2-Nitrophenol	U	0.28	10.	ug/l		8270C	08/07/11	1
4-Nitrophenol	U	2.7	10.	ug/l		8270C	08/07/11	1
Pentachlorophenol	U	0.41	10.	ug/l		8270C	08/07/11	1
Phenol	U	1.1	10.	ug/l		8270C	08/07/11	1
2,4,6-Trichlorophenol	U	0.28	10.	ug/l		8270C	08/07/11	1
Surrogate Recovery								
Nitrobenzene-d5	76.5			% Rec.		8270C	08/07/11	1
2-Fluorobiphenyl	89.2			% Rec.		8270C	08/07/11	1
p-Terphenyl-d14	101.			% Rec.		8270C	08/07/11	1
Phenol-d5	24.0			% Rec.		8270C	08/07/11	1
2-Fluorophenol	35.8			% Rec.		8270C	08/07/11	1
2,4,6-Tribromophenol	83.6			% Rec.		8270C	08/07/11	1

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REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-5 9-12FT DUP
Collected By : HM
Collection Date : 08/04/11 00:00

ESC Sample # : L529577-21

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Mercury	0.031	0.0015	0.020	mg/kg		7471	08/07/11	1
Arsenic	5.8	0.32	1.0	mg/kg		6010B	08/06/11	1
Barium	150	0.050	0.25	mg/kg		6010B	08/06/11	1
Cadmium	0.74	0.040	0.25	mg/kg		6010B	08/06/11	1
Chromium	16.	0.085	0.50	mg/kg		6010B	08/06/11	1
Lead	12.	0.090	0.25	mg/kg		6010B	08/06/11	1
Selenium	U	0.32	1.0	mg/kg		6010B	08/06/11	1
Silver	0.84	0.16	0.50	mg/kg		6010B	08/06/11	1
Volatile Organics								
Acetone	U	0.12	0.25	mg/kg		8260B	08/05/11	5
Acrylonitrile	U	0.016	0.050	mg/kg		8260B	08/05/11	5
Benzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Bromodichloromethane	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Bromoform	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Bromomethane	U	0.0088	0.025	mg/kg		8260B	08/05/11	5
n-Butylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
sec-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
tert-Butylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Carbon tetrachloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Chlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Chlorodibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Chloroethane	U	0.0058	0.025	mg/kg		8260B	08/05/11	5
2-Chloroethyl vinyl ether	U	0.0088	0.25	mg/kg		8260B	08/05/11	5
Chloroform	U	0.0021	0.025	mg/kg		8260B	08/05/11	5
Chloromethane	U	0.0035	0.013	mg/kg		8260B	08/05/11	5
2-Chlorotoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
4-Chlorotoluene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dibromo-3-Chloropropane	U	0.010	0.025	mg/kg		8260B	08/05/11	5
1,2-Dibromoethane	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Dibromomethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichlorobenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
1,4-Dichlorobenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Dichlorodifluoromethane	U	0.0038	0.025	mg/kg		8260B	08/05/11	5
1,1-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1-Dichloroethene	U	0.0031	0.0050	mg/kg		8260B	08/05/11	5
cis-1,2-Dichloroethene	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
trans-1,2-Dichloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,2-Dichloropropane	U	0.0032	0.0050	mg/kg		8260B	08/05/11	5

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August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-21

Sample ID : B-5 9-12FT DUP

Site ID :

Collected By : HM
Collection Date : 08/04/11 00:00

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,1-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,3-Dichloropropane	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
cis-1,3-Dichloropropene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
trans-1,3-Dichloropropene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
2,2-Dichloropropane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Di-isopropyl ether	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Ethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Hexachloro-1,3-butadiene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Isopropylbenzene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
p-Isopropyltoluene	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
2-Butanone (MEK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methylene Chloride	U	0.0065	0.025	mg/kg		8260B	08/05/11	5
4-Methyl-2-pentanone (MIBK)	U	0.014	0.050	mg/kg		8260B	08/05/11	5
Methyl tert-butyl ether	U	0.0016	0.0050	mg/kg		8260B	08/05/11	5
Naphthalene	U	0.0028	0.025	mg/kg		8260B	08/05/11	5
n-Propylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Styrene	U	0.0019	0.0050	mg/kg	J4	8260B	08/05/11	5
1,1,1,2-Tetrachloroethane	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
1,1,2,2-Tetrachloroethane	U	0.0021	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloro-1,2,2-trifluoro	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Tetrachloroethene	U	0.0020	0.0050	mg/kg		8260B	08/05/11	5
Toluene	U	0.0016	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichlorobenzene	U	0.0022	0.0050	mg/kg		8260B	08/05/11	5
1,2,4-Trichlorobenzene	U	0.0015	0.0050	mg/kg		8260B	08/05/11	5
1,1,1-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
1,1,2-Trichloroethane	U	0.0018	0.0050	mg/kg		8260B	08/05/11	5
Trichloroethene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Trichlorofluoromethane	U	0.0045	0.025	mg/kg		8260B	08/05/11	5
1,2,3-Trichloropropane	U	0.0056	0.013	mg/kg		8260B	08/05/11	5
1,2,4-Trimethylbenzene	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
1,2,3-Trimethylbenzene	U	0.0014	0.0050	mg/kg		8260B	08/05/11	5
1,3,5-Trimethylbenzene	U	0.0017	0.0050	mg/kg		8260B	08/05/11	5
Vinyl chloride	U	0.0019	0.0050	mg/kg		8260B	08/05/11	5
Xylenes, Total	U	0.0023	0.015	mg/kg		8260B	08/05/11	5
Surrogate Recovery								
Toluene-d8	98.6			% Rec.		8260B	08/05/11	5
Dibromofluoromethane	96.5			% Rec.		8260B	08/05/11	5
4-Bromofluorobenzene	99.1			% Rec.		8260B	08/05/11	5
Gasoline	U	1.3	4.0	mg/kg		OA2	08/07/11	1
Diesel	U	1.3	4.0	mg/kg		OA2	08/07/11	1
Motor Oil	U	3.3	10.	mg/kg		OA2	08/07/11	1
Total (C7-C40)	U	3.3	10.	mg/kg		OA2	08/07/11	1

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Kirk Johnson
Terracon - Cedar Rapids
2640 12th Street SW
Cedar Rapids, IA 52404

August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA
Sample ID : B-5 9-12FT DUP
Collected By : HM
Collection Date : 08/04/11 00:00

ESC Sample # : L529577-21

Site ID :

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Surrogate Recovery o-Terphenyl	70.7			% Rec.		0A2	08/07/11	1
Polychlorinated Biphenyls								
PCB 1016	U	0.0065	0.017	mg/kg		8082	08/08/11	1
PCB 1221	U	0.0054	0.017	mg/kg		8082	08/08/11	1
PCB 1232	U	0.0042	0.017	mg/kg		8082	08/08/11	1
PCB 1242	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1248	U	0.0032	0.017	mg/kg		8082	08/08/11	1
PCB 1254	U	0.0047	0.017	mg/kg		8082	08/08/11	1
PCB 1260	U	0.0049	0.017	mg/kg		8082	08/08/11	1
PCBs Surrogates								
Decachlorobiphenyl	81.5			% Rec.		8082	08/08/11	1
Tetrachloro-m-xylene	77.8			% Rec.		8082	08/08/11	1
Base/Neutral Extractables								
Acenaphthene	U	0.0064	0.033	mg/kg		8270C	08/08/11	1
Acenaphthylene	U	0.0067	0.033	mg/kg		8270C	08/08/11	1
Anthracene	U	0.0063	0.033	mg/kg		8270C	08/08/11	1
Benztidine	U	0.064	0.33	mg/kg		8270C	08/08/11	1
Benzo(a)anthracene	U	0.0043	0.033	mg/kg		8270C	08/08/11	1
Benzo(b)fluoranthene	U	0.0070	0.033	mg/kg		8270C	08/08/11	1
Benzo(k)fluoranthene	U	0.0058	0.033	mg/kg		8270C	08/08/11	1
Benzo(g,h,i)perylene	U	0.0072	0.033	mg/kg		8270C	08/08/11	1
Benzo(a)pyrene	U	0.0055	0.033	mg/kg		8270C	08/08/11	1
Bis(2-chlorethoxy)methane	U	0.0077	0.33	mg/kg		8270C	08/08/11	1
Bis(2-chloroethyl)ether	U	0.0090	0.33	mg/kg		8270C	08/08/11	1
Bis(2-chloroisopropyl)ether	U	0.0076	0.33	mg/kg		8270C	08/08/11	1
4-Bromophenyl-phenylether	U	0.011	0.33	mg/kg		8270C	08/08/11	1
2-Chloronaphthalene	U	0.0064	0.033	mg/kg		8270C	08/08/11	1
4-Chlorophenyl-phenylether	U	0.0063	0.33	mg/kg		8270C	08/08/11	1
Chrysene	U	0.0056	0.033	mg/kg		8270C	08/08/11	1
Dibenz(a,h)anthracene	U	0.0082	0.033	mg/kg		8270C	08/08/11	1
3,3-Dichlorobenzidine	U	0.079	0.33	mg/kg		8270C	08/08/11	1
2,4-Dinitrotoluene	U	0.0061	0.33	mg/kg		8270C	08/08/11	1
2,6-Dinitrotoluene	U	0.0074	0.33	mg/kg		8270C	08/08/11	1
Fluoranthene	U	0.0050	0.033	mg/kg		8270C	08/08/11	1
Fluorene	U	0.0068	0.033	mg/kg		8270C	08/08/11	1
Hexachlorobenzene	U	0.0086	0.33	mg/kg		8270C	08/08/11	1
Hexachloro-1,3-butadiene	U	0.010	0.33	mg/kg		8270C	08/08/11	1
Hexachlorocyclopentadiene	U	0.059	0.33	mg/kg		8270C	08/08/11	1
Hexachloroethane	U	0.013	0.33	mg/kg		8270C	08/08/11	1
Indeno(1,2,3-cd)pyrene	U	0.0077	0.033	mg/kg		8270C	08/08/11	1

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2640 12th Street SW
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August 11, 2011

Date Received : August 05, 2011
Description : South Crandic - Coralville, IA

ESC Sample # : L529577-21

Sample ID : B-5 9-12FT DUP

Site ID :

Collected By : HM
Collection Date : 08/04/11 00:00

Project # : 06097004L

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Isophorone	U	0.0052	0.33	mg/kg		8270C	08/08/11	1
Naphthalene	U	0.0089	0.033	mg/kg		8270C	08/08/11	1
Nitrobenzene	U	0.0070	0.33	mg/kg		8270C	08/08/11	1
n-Nitrosodimethylamine	U	0.065	0.33	mg/kg		8270C	08/08/11	1
n-Nitrosodiphenylamine	U	0.0059	0.33	mg/kg		8270C	08/08/11	1
n-Nitrosodi-n-propylamine	U	0.0091	0.33	mg/kg		8270C	08/08/11	1
Phenanthrene	U	0.0053	0.033	mg/kg		8270C	08/08/11	1
Benzylbutyl phthalate	U	0.010	0.33	mg/kg		8270C	08/08/11	1
Bis(2-ethylhexyl)phthalate	U	0.012	0.33	mg/kg		8270C	08/08/11	1
Di-n-butyl phthalate	U	0.011	0.33	mg/kg		8270C	08/08/11	1
Diethyl phthalate	U	0.0069	0.33	mg/kg		8270C	08/08/11	1
Dimethyl phthalate	U	0.0054	0.33	mg/kg		8270C	08/08/11	1
Di-n-octyl phthalate	U	0.0091	0.33	mg/kg		8270C	08/08/11	1
Pyrene	U	0.012	0.033	mg/kg		8270C	08/08/11	1
1,2,4-Trichlorobenzene	U	0.0088	0.33	mg/kg		8270C	08/08/11	1
Acid Extractables								
4-Chloro-3-methylphenol	U	0.0048	0.33	mg/kg		8270C	08/08/11	1
2-Chlorophenol	U	0.0083	0.33	mg/kg		8270C	08/08/11	1
2,4-Dichlorophenol	U	0.0075	0.33	mg/kg		8270C	08/08/11	1
2,4-Dimethylphenol	U	0.047	0.33	mg/kg		8270C	08/08/11	1
4,6-Dinitro-2-methylphenol	U	0.12	0.33	mg/kg		8270C	08/08/11	1
2,4-Dinitrophenol	U	0.098	0.33	mg/kg		8270C	08/08/11	1
2-Nitrophenol	U	0.013	0.33	mg/kg		8270C	08/08/11	1
4-Nitrophenol	U	0.052	0.33	mg/kg		8270C	08/08/11	1
Pentachlorophenol	U	0.048	0.33	mg/kg		8270C	08/08/11	1
Phenol	U	0.0070	0.33	mg/kg		8270C	08/08/11	1
2,4,6-Trichlorophenol	U	0.0078	0.33	mg/kg		8270C	08/08/11	1
Surrogate Recovery								
Nitrobenzene-d5	80.1			% Rec.		8270C	08/08/11	1
2-Fluorobiphenyl	87.2			% Rec.		8270C	08/08/11	1
p-Terphenyl-d14	85.8			% Rec.		8270C	08/08/11	1
Phenol-d5	104.			% Rec.		8270C	08/08/11	1
2-Fluorophenol	92.9			% Rec.		8270C	08/08/11	1
2,4,6-Tribromophenol	94.6			% Rec.		8270C	08/08/11	1

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L529577-01	WG549236	SAMP	Arsenic	R1806430	0
	WG549236	SAMP	Cadmium	R1806430	J
	WG549236	SAMP	Selenium	R1806430	0
	WG549217	SAMP	Mercury	R1806512	J
	WG549226	SAMP	Styrene	R1806452	J4
	WG549226	SAMP	1,1,2,2-Tetrachloroethane	R1806452	J6J3
	WG549226	SAMP	Trichloroethene	R1806452	J5
	WG549310	SAMP	PCB 1254	R1807014	J
	WG549703	SAMP	Benzidine	R1810111	J4J3
	WG549703	SAMP	Bis(2-chloroethyl)ether	R1810111	J3
	WG549703	SAMP	Fluoranthene	R1810111	J
	WG549703	SAMP	Phenanthrene	R1810111	J
	WG549703	SAMP	Pyrene	R1810111	J
	WG549703	SAMP	2-Fluorophenol	R1810111	J2
	WG549703	SAMP	2,4,6-Tribromophenol	R1810111	J2
L529577-02	WG549226	SAMP	Styrene	R1806452	J4
	WG549404	SAMP	Anthracene	R1806712	J
	WG549404	SAMP	Benzo(a)anthracene	R1806712	J
	WG549404	SAMP	Chrysene	R1806712	J
	WG549404	SAMP	Fluoranthene	R1806712	J
	WG549404	SAMP	Naphthalene	R1806712	J
	WG549404	SAMP	Phenanthrene	R1806712	J
	WG549404	SAMP	Bis(2-ethylhexyl)phthalate	R1806712	J
	WG549404	SAMP	Pyrene	R1806712	J
	WG549236	SAMP	Arsenic	R1806430	0
L529577-03	WG549236	SAMP	Cadmium	R1806430	J
	WG549236	SAMP	Selenium	R1806430	0
	WG549217	SAMP	Mercury	R1806512	J
	WG549226	SAMP	Styrene	R1806452	J4
	WG549376	SAMP	Gasoline	R1807531	J
	WG549703	SAMP	Benzidine	R1810111	J4J3
	WG549703	SAMP	Bis(2-chloroethyl)ether	R1810111	J3
	WG549703	SAMP	2-Fluorophenol	R1810111	J2
	WG549703	SAMP	2,4,6-Tribromophenol	R1810111	J2
	WG549236	SAMP	Cadmium	R1806430	J
L529577-04	WG549236	SAMP	Arsenic	R1806430	0
	WG549236	SAMP	Selenium	R1806430	0
	WG549226	SAMP	Acetone	R1806452	J
	WG549226	SAMP	p-Isopropyltoluene	R1806452	J
	WG549226	SAMP	Styrene	R1806452	J4
	WG549226	SAMP	1,3,5-Trimethylbenzene	R1806452	J
	WG549226	SAMP	Xylenes, Total	R1806452	J
	WG549226	SAMP	Dibromofluoromethane	R1806452	J2
	WG549376	SAMP	Diesel	R1807531	J
	WG549404	SAMP	Acenaphthene	R1806712	0
	WG549404	SAMP	Acenaphthylene	R1806712	0
	WG549404	SAMP	Anthracene	R1806712	0
	WG549404	SAMP	Benzidine	R1806712	0
	WG549404	SAMP	Benzo(a)anthracene	R1806712	0
	WG549404	SAMP	Benzo(b)fluoranthene	R1806712	0
	WG549404	SAMP	Benzo(k)fluoranthene	R1806712	0
	WG549404	SAMP	Benzo(g,h,i)perylene	R1806712	0
	WG549404	SAMP	Benzo(a)pyrene	R1806712	0
	WG549404	SAMP	Bis(2-chloroethoxy)methane	R1806712	0
	WG549404	SAMP	Bis(2-chloroethyl)ether	R1806712	0
	WG549404	SAMP	Bis(2-chloroisopropyl)ether	R1806712	0
	WG549404	SAMP	4-Bromophenyl-phenylether	R1806712	0
	WG549404	SAMP	2-Chloronaphthalene	R1806712	0
	WG549404	SAMP	4-Chlorophenyl-phenylether	R1806712	0
	WG549404	SAMP	Chrysene	R1806712	0
	WG549404	SAMP	Dibenz(a,h)anthracene	R1806712	0
	WG549404	SAMP	3,3-Dichlorobenzidine	R1806712	0
	WG549404	SAMP	2,4-Dinitrotoluene	R1806712	0
	WG549404	SAMP	2,6-Dinitrotoluene	R1806712	0
	WG549404	SAMP	Fluoranthene	R1806712	0
	WG549404	SAMP	Fluorene	R1806712	0
	WG549404	SAMP	Hexachlorobenzene	R1806712	0
	WG549404	SAMP	Hexachloro-1,3-butadiene	R1806712	0
	WG549404	SAMP	Hexachlorocyclopentadiene	R1806712	0

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
	WG549404	SAMP	Hexachloroethane	R1806712	0
	WG549404	SAMP	Indeno(1,2,3-cd)pyrene	R1806712	0
	WG549404	SAMP	Isophorone	R1806712	0
	WG549404	SAMP	Naphthalene	R1806712	0
	WG549404	SAMP	Nitrobenzene	R1806712	0
	WG549404	SAMP	n-Nitrosodimethylamine	R1806712	0
	WG549404	SAMP	n-Nitrosodiphenylamine	R1806712	0
	WG549404	SAMP	n-Nitrosodi-n-propylamine	R1806712	0
	WG549404	SAMP	Phenanthrene	R1806712	0
	WG549404	SAMP	Benzylbutyl phthalate	R1806712	0
	WG549404	SAMP	Bis(2-ethylhexyl)phthalate	R1806712	0
	WG549404	SAMP	Di-n-butyl phthalate	R1806712	0
	WG549404	SAMP	Diethyl phthalate	R1806712	0
	WG549404	SAMP	Dimethyl phthalate	R1806712	0
	WG549404	SAMP	Di-n-octyl phthalate	R1806712	0
	WG549404	SAMP	Pyrene	R1806712	0
	WG549404	SAMP	1,2,4-Trichlorobenzene	R1806712	0
	WG549404	SAMP	4-Chloro-3-methylphenol	R1806712	0
	WG549404	SAMP	2-Chlorophenol	R1806712	0
	WG549404	SAMP	2,4-Dichlorophenol	R1806712	0
	WG549404	SAMP	2,4-Dimethylphenol	R1806712	0
	WG549404	SAMP	4,6-Dinitro-2-methylphenol	R1806712	0
	WG549404	SAMP	2,4-Dinitrophenol	R1806712	0
	WG549404	SAMP	2-Nitrophenol	R1806712	0
	WG549404	SAMP	4-Nitrophenol	R1806712	0
	WG549404	SAMP	Pentachlorophenol	R1806712	0
	WG549404	SAMP	Phenol	R1806712	0
	WG549404	SAMP	2,4,6-Trichlorophenol	R1806712	0
	WG549404	SAMP	Nitrobenzene-d5	R1806712	J7
	WG549404	SAMP	2-Fluorobiphenyl	R1806712	J7
	WG549404	SAMP	p-Terphenyl-d14	R1806712	J7
	WG549404	SAMP	Phenol-d5	R1806712	J7
	WG549404	SAMP	2-Fluorophenol	R1806712	J7
	WG549404	SAMP	2,4,6-Tribromophenol	R1806712	J7
L529577-05	WG549236	SAMP	Arsenic	R1806430	0
	WG549236	SAMP	Cadmium	R1806430	J
	WG549236	SAMP	Selenium	R1806430	0
	WG549217	SAMP	Mercury	R1806512	J
	WG549226	SAMP	Styrene	R1806452	J4
	WG549226	SAMP	Dibromofluoromethane	R1806452	J2
	WG549703	SAMP	Benzidine	R1810111	J4J3
	WG549703	SAMP	Bis(2-chloroethyl)ether	R1810111	J3
	WG549703	SAMP	Naphthalene	R1810111	J
	WG549703	SAMP	Phenol-d5	R1810111	J2
	WG549703	SAMP	2-Fluorophenol	R1810111	J2
	WG549703	SAMP	2,4,6-Tribromophenol	R1810111	J2
L529577-06	WG549236	SAMP	Silver	R1806430	J
	WG549217	SAMP	Mercury	R1806512	J
	WG549226	SAMP	Styrene	R1806452	J4
	WG549404	SAMP	Naphthalene	R1806712	J
L529577-07	WG549236	SAMP	Arsenic	R1806430	0
	WG549236	SAMP	Cadmium	R1806430	J
	WG549236	SAMP	Selenium	R1806430	0
	WG549217	SAMP	Mercury	R1806512	J
	WG549226	SAMP	Styrene	R1806452	J4
	WG549226	SAMP	Dibromofluoromethane	R1806452	J2
	WG549703	SAMP	Benzidine	R1810111	J4J3
	WG549703	SAMP	Benzo(a)anthracene	R1810111	J
	WG549703	SAMP	Benzo(a)pyrene	R1810111	J
	WG549703	SAMP	Bis(2-chloroethyl)ether	R1810111	J3
	WG549703	SAMP	Chrysene	R1810111	J
	WG549703	SAMP	Fluoranthene	R1810111	J
	WG549703	SAMP	Phenanthrene	R1810111	J
	WG549703	SAMP	Pyrene	R1810111	J
	WG549703	SAMP	Phenol	R1810111	J
	WG549703	SAMP	Phenol-d5	R1810111	J2
	WG549703	SAMP	2-Fluorophenol	R1810111	J2
	WG549703	SAMP	2,4,6-Tribromophenol	R1810111	J2
L529577-08	WG549236	SAMP	Arsenic	R1806430	J
	WG549236	SAMP	Cadmium	R1806430	J

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List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L529577-09	WG549236	SAMP	Selenium	R1806430	0
	WG549217	SAMP	Mercury	R1806512	J
	WG549226	SAMP	Styrene	R1806452	J4
	WG549376	SAMP	Diesel	R1807531	J
	WG549376	SAMP	Motor Oil	R1807531	J
	WG549703	SAMP	Benzidine	R1810111	J4J3
	WG549703	SAMP	Benzo(a)anthracene	R1810111	J
	WG549703	SAMP	Bis(2-chloroethyl)ether	R1810111	J3
	WG549703	SAMP	Chrysene	R1810111	J
	WG549703	SAMP	Fluoranthene	R1810111	J
	WG549703	SAMP	2,4,6-Tribromophenol	R1810111	J2
	WG549236	SAMP	Silver	R1806430	J
	WG549226	SAMP	Chlorobenzene	R1806452	J
	WG549226	SAMP	Styrene	R1806452	J4
	WG549376	SAMP	Motor Oil	R1807531	J
	WG549404	SAMP	Benzo(a)anthracene	R1806712	J
	WG549212	SAMP	1,1-Dichloropropene	R1806253	J4
	WG549212	SAMP	Styrene	R1806253	J4
	WG549212	SAMP	Vinyl chloride	R1806253	J4
	WG549127	SAMP	Di-n-butyl phthalate	R1806411	J3J4
L529577-10	WG549127	SAMP	Diethyl phthalate	R1806411	J3
	WG549210	SAMP	Barium, Dissolved	R1806311	J
	WG549303	SAMP	Diesel	R1808257	J
	WG549236	SAMP	Arsenic	R1806430	0
	WG549236	SAMP	Cadmium	R1806430	J
	WG549236	SAMP	Selenium	R1806430	0
	WG549217	SAMP	Mercury	R1806512	J
	WG549226	SAMP	Styrene	R1806452	J4
	WG549703	SAMP	Benzidine	R1810111	J4J3
	WG549703	SAMP	Bis(2-chloroethyl)ether	R1810111	J3
L529577-11	WG549703	SAMP	Phenol-d5	R1810111	J2
	WG549703	SAMP	2-Fluorophenol	R1810111	J2
	WG549703	SAMP	2,4,6-Tribromophenol	R1810111	J2
	WG549236	SAMP	Silver	R1806430	J
	WG549217	SAMP	Mercury	R1806512	J
	WG549226	SAMP	Styrene	R1806452	J4
	WG549212	SAMP	Mercury	R1806452	J4
	WG549212	SAMP	Styrene	R1806253	J
	WG549212	SAMP	Benzene	R1806253	J
	WG549212	SAMP	1,1-Dichloropropene	R1806253	J4
L529577-12	WG549212	SAMP	Styrene	R1806253	J4
	WG549212	SAMP	Toluene	R1806253	J
	WG549212	SAMP	1,2,4-Trimethylbenzene	R1806253	J
	WG549212	SAMP	1,2,3-Trimethylbenzene	R1806253	J
	WG549212	SAMP	Vinyl chloride	R1806253	J4
	WG549308	SAMP	Naphthalene	R1806412	J
	WG549308	SAMP	Phenol	R1806412	J
	WG549210	SAMP	Chromium, Dissolved	R1806311	J
	WG549303	SAMP	Motor Oil	R1808257	J
	WG549303	SAMP	Total (C7-C40)	R1808257	J
L529577-13	WG549212	SAMP	Benzene	R1806253	J
	WG549212	SAMP	1,1-Dichloropropene	R1806253	J4
	WG549212	SAMP	Ethylbenzene	R1806253	J
	WG549212	SAMP	2-Butanone (MEK)	R1806253	J
	WG549212	SAMP	4-Methyl-2-pentanone (MIBK)	R1806253	J
	WG549212	SAMP	Naphthalene	R1806253	J
	WG549212	SAMP	Styrene	R1806253	J4
	WG549212	SAMP	Toluene	R1806253	J
	WG549212	SAMP	1,2,4-Trimethylbenzene	R1806253	J
	WG549212	SAMP	Vinyl chloride	R1806253	J4
L529577-14	WG549212	SAMP	Xylenes, Total	R1806253	J
	WG549308	SAMP	Acenaphthene	R1806412	J
	WG549308	SAMP	Bis(2-chloroethyl)ether	R1806412	J
	WG549308	SAMP	Phenanthrene	R1806412	J
	WG549308	SAMP	Pentachlorophenol	R1806412	J
	WG548951	SAMP	Mercury, Dissolved	R1807510	J
	WG549210	SAMP	Lead, Dissolved	R1806311	P1
	WG549210	SAMP	Silver, Dissolved	R1806311	J6
	WG549303	SAMP	Total (C7-C40)	R1808257	J
	WG549212	SAMP	1,1-Dichloropropene	R1806253	J4
L529577-15	WG549212	SAMP	2-Butanone (MEK)	R1806253	J

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L529577-16	WG549212	SAMP	4-Methyl-2-pentanone (MIBK)	R1806253	J
	WG549212	SAMP	Naphthalene	R1806253	J
	WG549212	SAMP	Styrene	R1806253	J4
	WG549212	SAMP	Toluene	R1806253	J
	WG549212	SAMP	1,2,4-Trimethylbenzene	R1806253	J
	WG549212	SAMP	1,2,3-Trimethylbenzene	R1806253	J
	WG549212	SAMP	1,3,5-Trimethylbenzene	R1806253	J
	WG549212	SAMP	Vinyl chloride	R1806253	J4
	WG549308	SAMP	Pentachlorophenol	R1806412	J
	WG549308	SAMP	Phenol	R1806412	J
	WG548951	SAMP	Mercury, Dissolved	R1807510	J
	WG549210	SAMP	Lead, Dissolved	R1806311	J
	WG549210	SAMP	Selenium, Dissolved	R1806311	J
	WG549303	SAMP	Total (C7-C40)	R1808257	J
	WG549212	SAMP	Chlorobenzene	R1806253	J
	WG549212	SAMP	1,3-Dichlorobenzene	R1806253	J
	WG549212	SAMP	1,1-Dichloropropene	R1806253	J4
	WG549212	SAMP	Styrene	R1806253	J4
	WG549212	SAMP	Vinyl chloride	R1806253	J4
	WG549210	SAMP	Lead, Dissolved	R1806311	J
	WG549210	SAMP	Selenium, Dissolved	R1806311	J
	WG549212	SAMP	1,1-Dichloropropene	R1806253	J4
	WG549212	SAMP	Ethylbenzene	R1806253	J
	WG549212	SAMP	n-Propylbenzene	R1806253	J
L529577-17	WG549212	SAMP	Styrene	R1806253	J4
	WG549212	SAMP	Toluene	R1806253	J
	WG549212	SAMP	1,3,5-Trimethylbenzene	R1806253	J
	WG549212	SAMP	Vinyl chloride	R1806253	J4
	WG549212	SAMP	Xylenes, Total	R1806253	J
	WG549308	SAMP	Acenaphthene	R1806412	J
	WG549308	SAMP	Phenol	R1806412	J
	WG549210	SAMP	Lead, Dissolved	R1806311	J
	WG549210	SAMP	Selenium, Dissolved	R1806311	J
	WG549303	SAMP	Total (C7-C40)	R1808257	J
	WG549212	SAMP	1,1-Dichloropropene	R1806253	J4
	WG549212	SAMP	n-Propylbenzene	R1806253	J
	WG549212	SAMP	Styrene	R1806253	J4
	WG549212	SAMP	Toluene	R1806253	J
	WG549212	SAMP	1,3,5-Trimethylbenzene	R1806253	J
	WG549212	SAMP	Vinyl chloride	R1806253	J4
	WG549212	SAMP	Xylenes, Total	R1806253	J
	WG549308	SAMP	Acenaphthene	R1806412	J
	WG549308	SAMP	Naphthalene	R1806412	J
	WG549308	SAMP	Phenol	R1806412	J
	WG549210	SAMP	Lead, Dissolved	R1806311	J
	WG549210	SAMP	Selenium, Dissolved	R1806311	J
	WG549303	SAMP	Total (C7-C40)	R1808257	J
	WG549500	SAMP	Styrene	R1807351	J4
L529577-19 L529577-20	WG549212	SAMP	Chloroform	R1806253	J
	WG549212	SAMP	1,1-Dichloropropene	R1806253	J4
L529577-21	WG549212	SAMP	Styrene	R1806253	J4
	WG549212	SAMP	Vinyl chloride	R1806253	J4
L529577-19 L529577-20	WG549210	SAMP	Chromium, Dissolved	R1806311	J
	WG549210	SAMP	Lead, Dissolved	R1806311	J
	WG549210	SAMP	Lead, Dissolved	R1806311	J
	WG549226	SAMP	Styrene	R1806452	J4

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
J7	Surrogate recovery limits cannot be evaluated; surrogates were diluted out
0	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

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 Difference.
- Surrogate** - Organic compounds that are similar in chemical composition, extraction, and chromatography 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
08/11/11 at 14:21:32

TSR Signing Reports: 206
R5 - Desired TAT

Sample: L529577-01 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Sample: L529577-02 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Sample: L529577-03 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Sample: L529577-04 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Sample: L529577-05 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Sample: L529577-06 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Sample: L529577-07 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Sample: L529577-08 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Sample: L529577-09 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Sample: L529577-10 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Diss. Metals field-filtered and preserved
Sample: L529577-11 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Sample: L529577-12 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Sample: L529577-13 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Diss. Metals field-filtered and preserved
Sample: L529577-14 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Diss. Metals field-filtered and preserved
Sample: L529577-15 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Diss. Metals field-filtered and preserved
Sample: L529577-16 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Diss. Metals field-filtered and preserved
Sample: L529577-17 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Diss. Metals field-filtered and preserved
Sample: L529577-18 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Diss. Metals field-filtered and preserved
Sample: L529577-19 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Diss. Metals field-filtered and preserved
Sample: L529577-20 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19
Diss. Metals field-filtered and preserved
Sample: L529577-21 Account: TERRACRI Received: 08/05/11 09:00 Due Date: 08/10/11 00:00 RPT Date: 08/11/11 14:19



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1-800-767-5859
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Tax I.D. 62-0814289

Est. 1970

August 11, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Diesel	< 4	mg/kg			WG549312	08/07/11 09:21
Gasoline	< 4	mg/kg			WG549312	08/07/11 09:21
Motor Oil	< 10	mg/kg			WG549312	08/07/11 09:21
o-Terphenyl		% Rec.	85.54	50-150	WG549312	08/07/11 09:21
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG549212	08/05/11 12:54
1,1,1-Trichloroethane	< .001	mg/l			WG549212	08/05/11 12:54
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG549212	08/05/11 12:54
1,1,2-Trichloroethane	< .001	mg/l			WG549212	08/05/11 12:54
1,1,2-Trichloro-1,2,2-trifluoroethane	< .001	mg/l			WG549212	08/05/11 12:54
1,1-Dichloroethane	< .001	mg/l			WG549212	08/05/11 12:54
1,1-Dichloroethene	< .001	mg/l			WG549212	08/05/11 12:54
1,1-Dichloropropene	< .001	mg/l			WG549212	08/05/11 12:54
1,2,3-Trichlorobenzene	< .001	mg/l			WG549212	08/05/11 12:54
1,2,3-Trichloropropane	< .001	mg/l			WG549212	08/05/11 12:54
1,2,3-Trimethylbenzene	< .001	mg/l			WG549212	08/05/11 12:54
1,2,4-Trichlorobenzene	< .001	mg/l			WG549212	08/05/11 12:54
1,2,4-Trimethylbenzene	< .001	mg/l			WG549212	08/05/11 12:54
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG549212	08/05/11 12:54
1,2-Dibromoethane	< .001	mg/l			WG549212	08/05/11 12:54
1,2-Dichlorobenzene	< .001	mg/l			WG549212	08/05/11 12:54
1,2-Dichloroethane	< .001	mg/l			WG549212	08/05/11 12:54
1,2-Dichloropropane	< .001	mg/l			WG549212	08/05/11 12:54
1,3,5-Trimethylbenzene	< .001	mg/l			WG549212	08/05/11 12:54
1,3-Dichlorobenzene	< .001	mg/l			WG549212	08/05/11 12:54
1,3-Dichloropropane	< .001	mg/l			WG549212	08/05/11 12:54
1,4-Dichlorobenzene	< .001	mg/l			WG549212	08/05/11 12:54
2,2-Dichloropropane	< .001	mg/l			WG549212	08/05/11 12:54
2-Butanone (MEK)	< .01	mg/l			WG549212	08/05/11 12:54
2-Chloroethyl vinyl ether	< .05	mg/l			WG549212	08/05/11 12:54
2-Chlorotoluene	< .001	mg/l			WG549212	08/05/11 12:54
4-Chlorotoluene	< .001	mg/l			WG549212	08/05/11 12:54
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG549212	08/05/11 12:54
Acetone	< .05	mg/l			WG549212	08/05/11 12:54
Acrolein	< .025	mg/l			WG549212	08/05/11 12:54
Acrylonitrile	< .01	mg/l			WG549212	08/05/11 12:54
Benzene	< .001	mg/l			WG549212	08/05/11 12:54
Bromobenzene	< .001	mg/l			WG549212	08/05/11 12:54
Bromodichloromethane	< .001	mg/l			WG549212	08/05/11 12:54
Bromoform	< .001	mg/l			WG549212	08/05/11 12:54
Bromomethane	< .005	mg/l			WG549212	08/05/11 12:54
Carbon tetrachloride	< .001	mg/l			WG549212	08/05/11 12:54
Chlorobenzene	< .001	mg/l			WG549212	08/05/11 12:54
Chlorodibromomethane	< .001	mg/l			WG549212	08/05/11 12:54
Chloroethane	< .005	mg/l			WG549212	08/05/11 12:54
Chloroform	< .005	mg/l			WG549212	08/05/11 12:54
Chloromethane	< .0025	mg/l			WG549212	08/05/11 12:54
cis-1,2-Dichloroethene	< .001	mg/l			WG549212	08/05/11 12:54
cis-1,3-Dichloropropene	< .001	mg/l			WG549212	08/05/11 12:54
Di-isopropyl ether	< .001	mg/l			WG549212	08/05/11 12:54
Dibromomethane	< .001	mg/l			WG549212	08/05/11 12:54
Dichlorodifluoromethane	< .005	mg/l			WG549212	08/05/11 12:54
Ethylbenzene	< .001	mg/l			WG549212	08/05/11 12:54
Hexachloro-1,3-butadiene	< .001	mg/l			WG549212	08/05/11 12:54
Isopropylbenzene	< .001	mg/l			WG549212	08/05/11 12:54
Methyl tert-butyl ether	< .001	mg/l			WG549212	08/05/11 12:54
Methylene Chloride	< .005	mg/l			WG549212	08/05/11 12:54
n-Butylbenzene	< .001	mg/l			WG549212	08/05/11 12:54

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Tax I.D. 62-0814289

Est. 1970

August 11, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
n-Propylbenzene	< .001	mg/l			WG549212	08/05/11 12:54
Naphthalene	< .005	mg/l			WG549212	08/05/11 12:54
p-Isopropyltoluene	< .001	mg/l			WG549212	08/05/11 12:54
sec-Butylbenzene	< .001	mg/l			WG549212	08/05/11 12:54
Styrene	< .001	mg/l			WG549212	08/05/11 12:54
tert-Butylbenzene	< .001	mg/l			WG549212	08/05/11 12:54
Tetrachloroethene	< .001	mg/l			WG549212	08/05/11 12:54
Toluene	< .005	mg/l			WG549212	08/05/11 12:54
trans-1,2-Dichloroethene	< .001	mg/l			WG549212	08/05/11 12:54
trans-1,3-Dichloropropene	< .001	mg/l			WG549212	08/05/11 12:54
Trichlorofluoromethane	< .005	mg/l			WG549212	08/05/11 12:54
Vinyl chloride	< .001	mg/l			WG549212	08/05/11 12:54
Xylenes, Total	< .003	mg/l			WG549212	08/05/11 12:54
4-Bromofluorobenzene		% Rec.	106.4	75-128	WG549212	08/05/11 12:54
Dibromofluoromethane		% Rec.	90.35	79-125	WG549212	08/05/11 12:54
Toluene-d8		% Rec.	100.6	87-114	WG549212	08/05/11 12:54
Barium, Dissolved	< .005	mg/l			WG549210	08/06/11 09:36
Cadmium, Dissolved	< .005	mg/l			WG549210	08/06/11 09:36
Chromium, Dissolved	< .01	mg/l			WG549210	08/06/11 09:36
Lead, Dissolved	< .005	mg/l			WG549210	08/06/11 09:36
Selenium, Dissolved	< .02	mg/l			WG549210	08/06/11 09:36
Silver, Dissolved	< .01	mg/l			WG549210	08/06/11 09:36
Arsenic, Dissolved	< .001	mg/l			WG549323	08/07/11 15:39
1,2,4-Trichlorobenzene	< .01	mg/l			WG549127	08/07/11 09:25
2,4,6-Trichlorophenol	< .01	mg/l			WG549127	08/07/11 09:25
2,4-Dichlorophenol	< .01	mg/l			WG549127	08/07/11 09:25
2,4-Dimethylphenol	< .01	mg/l			WG549127	08/07/11 09:25
2,4-Dinitrophenol	< .01	mg/l			WG549127	08/07/11 09:25
2,4-Dinitrotoluene	< .01	mg/l			WG549127	08/07/11 09:25
2,6-Dinitrotoluene	< .01	mg/l			WG549127	08/07/11 09:25
2-Chloronaphthalene	< .001	mg/l			WG549127	08/07/11 09:25
2-Chlorophenol	< .01	mg/l			WG549127	08/07/11 09:25
2-Nitrophenol	< .01	mg/l			WG549127	08/07/11 09:25
3,3-Dichlorobenzidine	< .01	mg/l			WG549127	08/07/11 09:25
4,6-Dinitro-2-methylphenol	< .01	mg/l			WG549127	08/07/11 09:25
4-Bromophenyl-phenylether	< .01	mg/l			WG549127	08/07/11 09:25
4-Chloro-3-methylphenol	< .01	mg/l			WG549127	08/07/11 09:25
4-Chlorophenyl-phenylether	< .01	mg/l			WG549127	08/07/11 09:25
4-Nitrophenol	< .01	mg/l			WG549127	08/07/11 09:25
Acenaphthene	< .001	mg/l			WG549127	08/07/11 09:25
Acenaphthylene	< .001	mg/l			WG549127	08/07/11 09:25
Anthracene	< .001	mg/l			WG549127	08/07/11 09:25
Benzidine	< .01	mg/l			WG549127	08/07/11 09:25
Benzo(a)anthracene	< .001	mg/l			WG549127	08/07/11 09:25
Benzo(a)pyrene	< .001	mg/l			WG549127	08/07/11 09:25
Benzo(b)fluoranthene	< .001	mg/l			WG549127	08/07/11 09:25
Benzo(g,h,i)perylene	< .001	mg/l			WG549127	08/07/11 09:25
Benzo(k)fluoranthene	< .001	mg/l			WG549127	08/07/11 09:25
Benzylbutyl phthalate	< .001	mg/l			WG549127	08/07/11 09:25
Bis(2-chlorethoxy)methane	< .01	mg/l			WG549127	08/07/11 09:25
Bis(2-chloroethyl)ether	< .01	mg/l			WG549127	08/07/11 09:25
Bis(2-chloroisopropyl)ether	< .01	mg/l			WG549127	08/07/11 09:25
Bis(2-ethylhexyl)phthalate	< .001	mg/l			WG549127	08/07/11 09:25

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Est. 1970

August 11, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Chrysene	< .001	mg/l			WG549127	08/07/11 09:25
Di-n-butyl phthalate	< .001	mg/l			WG549127	08/07/11 09:25
Di-n-octyl phthalate	< .001	mg/l			WG549127	08/07/11 09:25
Dibenz(a,h)anthracene	< .001	mg/l			WG549127	08/07/11 09:25
Diethyl phthalate	< .001	mg/l			WG549127	08/07/11 09:25
Dimethyl phthalate	< .001	mg/l			WG549127	08/07/11 09:25
Fluoranthene	< .001	mg/l			WG549127	08/07/11 09:25
Fluorene	< .001	mg/l			WG549127	08/07/11 09:25
Hexachloro-1,3-butadiene	< .01	mg/l			WG549127	08/07/11 09:25
Hexachlorobenzene	< .001	mg/l			WG549127	08/07/11 09:25
Hexachlorocyclopentadiene	< .01	mg/l			WG549127	08/07/11 09:25
Hexachloroethane	< .01	mg/l			WG549127	08/07/11 09:25
Indeno(1,2,3-cd)pyrene	< .001	mg/l			WG549127	08/07/11 09:25
Isophorone	< .01	mg/l			WG549127	08/07/11 09:25
n-Nitrosodi-n-propylamine	< .01	mg/l			WG549127	08/07/11 09:25
n-Nitrosodimethylamine	< .01	mg/l			WG549127	08/07/11 09:25
n-Nitrosodiphenylamine	< .01	mg/l			WG549127	08/07/11 09:25
Naphthalene	< .001	mg/l			WG549127	08/07/11 09:25
Nitrobenzene	< .01	mg/l			WG549127	08/07/11 09:25
Pentachlorophenol	< .001	mg/l			WG549127	08/07/11 09:25
Phenanthrene	< .001	mg/l			WG549127	08/07/11 09:25
Phenol	< .01	mg/l			WG549127	08/07/11 09:25
Pyrene	< .001	mg/l			WG549127	08/07/11 09:25
2,4,6-Tribromophenol		mg/l	84.99	16-147	WG549127	08/07/11 09:25
2-Fluorobiphenyl		mg/l	72.84	29-127	WG549127	08/07/11 09:25
2-Fluorophenol		mg/l	32.82	10-75	WG549127	08/07/11 09:25
Nitrobenzene-d5		mg/l	65.40	17-119	WG549127	08/07/11 09:25
Phenol-d5		mg/l	21.89	10-63	WG549127	08/07/11 09:25
p-Terphenyl-d14		mg/l	87.15	40-174	WG549127	08/07/11 09:25
1,2,4-Trichlorobenzene	< .01	mg/l			WG549308	08/07/11 10:44
2,4,6-Trichlorophenol	< .01	mg/l			WG549308	08/07/11 10:44
2,4-Dichlorophenol	< .01	mg/l			WG549308	08/07/11 10:44
2,4-Dimethylphenol	< .01	mg/l			WG549308	08/07/11 10:44
2,4-Dinitrophenol	< .01	mg/l			WG549308	08/07/11 10:44
2,4-Dinitrotoluene	< .01	mg/l			WG549308	08/07/11 10:44
2,6-Dinitrotoluene	< .01	mg/l			WG549308	08/07/11 10:44
2-Chloronaphthalene	< .001	mg/l			WG549308	08/07/11 10:44
2-Chlorophenol	< .01	mg/l			WG549308	08/07/11 10:44
2-Nitrophenol	< .01	mg/l			WG549308	08/07/11 10:44
3,3-Dichlorobenzidine	< .01	mg/l			WG549308	08/07/11 10:44
4,6-Dinitro-2-methylphenol	< .01	mg/l			WG549308	08/07/11 10:44
4-Bromophenyl-phenylether	< .01	mg/l			WG549308	08/07/11 10:44
4-Chloro-3-methylphenol	< .01	mg/l			WG549308	08/07/11 10:44
4-Chlorophenyl-phenylether	< .01	mg/l			WG549308	08/07/11 10:44
4-Nitrophenol	< .01	mg/l			WG549308	08/07/11 10:44
Acenaphthene	< .001	mg/l			WG549308	08/07/11 10:44
Acenaphthylene	< .001	mg/l			WG549308	08/07/11 10:44
Anthracene	< .001	mg/l			WG549308	08/07/11 10:44
Benzidine	< .01	mg/l			WG549308	08/07/11 10:44
Benzo(a)anthracene	< .001	mg/l			WG549308	08/07/11 10:44
Benzo(a)pyrene	< .001	mg/l			WG549308	08/07/11 10:44
Benzo(b)fluoranthene	< .001	mg/l			WG549308	08/07/11 10:44
Benzo(g,h,i)perylene	< .001	mg/l			WG549308	08/07/11 10:44
Benzo(k)fluoranthene	< .001	mg/l			WG549308	08/07/11 10:44
Benzylbutyl phthalate	< .001	mg/l			WG549308	08/07/11 10:44
Bis(2-chlorethoxy)methane	< .01	mg/l			WG549308	08/07/11 10:44
Bis(2-chloroethyl)ether	< .01	mg/l			WG549308	08/07/11 10:44

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Kirk Johnson
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Cedar Rapids, IA 52404

Quality Assurance Report
Level II

L529577

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

August 11, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Bis(2-chloroisopropyl)ether	< .01	mg/l			WG549308	08/07/11 10:44
Bis(2-ethylhexyl)phthalate	< .001	mg/l			WG549308	08/07/11 10:44
Chrysene	< .001	mg/l			WG549308	08/07/11 10:44
Di-n-butyl phthalate	< .001	mg/l			WG549308	08/07/11 10:44
Di-n-octyl phthalate	< .001	mg/l			WG549308	08/07/11 10:44
Dibenz(a,h)anthracene	< .001	mg/l			WG549308	08/07/11 10:44
Diethyl phthalate	< .001	mg/l			WG549308	08/07/11 10:44
Dimethyl phthalate	< .001	mg/l			WG549308	08/07/11 10:44
Fluoranthene	< .001	mg/l			WG549308	08/07/11 10:44
Fluorene	< .001	mg/l			WG549308	08/07/11 10:44
Hexachloro-1,3-butadiene	< .01	mg/l			WG549308	08/07/11 10:44
Hexachlorobenzene	< .001	mg/l			WG549308	08/07/11 10:44
Hexachlorocyclopentadiene	< .01	mg/l			WG549308	08/07/11 10:44
Hexachloroethane	< .01	mg/l			WG549308	08/07/11 10:44
Indeno(1,2,3-cd)pyrene	< .001	mg/l			WG549308	08/07/11 10:44
Isophorone	< .01	mg/l			WG549308	08/07/11 10:44
n-Nitrosodi-n-propylamine	< .01	mg/l			WG549308	08/07/11 10:44
n-Nitrosodimethylamine	< .01	mg/l			WG549308	08/07/11 10:44
n-Nitrosodiphenylamine	< .01	mg/l			WG549308	08/07/11 10:44
Naphthalene	< .001	mg/l			WG549308	08/07/11 10:44
Nitrobenzene	< .01	mg/l			WG549308	08/07/11 10:44
Pentachlorophenol	< .001	mg/l			WG549308	08/07/11 10:44
Phenanthrene	< .001	mg/l			WG549308	08/07/11 10:44
Phenol	< .01	mg/l			WG549308	08/07/11 10:44
Pyrene	< .001	mg/l			WG549308	08/07/11 10:44
2,4,6-Tribromophenol		mg/l	71.57	16-147	WG549308	08/07/11 10:44
2-Fluorobiphenyl		mg/l	73.81	29-127	WG549308	08/07/11 10:44
2-Fluorophenol		mg/l	45.25	10-75	WG549308	08/07/11 10:44
Nitrobenzene-d5		mg/l	70.32	17-119	WG549308	08/07/11 10:44
Phenol-d5		mg/l	33.53	10-63	WG549308	08/07/11 10:44
p-Terphenyl-d14		mg/l	80.40	40-174	WG549308	08/07/11 10:44
Arsenic	< 1	mg/kg			WG549236	08/06/11 21:31
Barium	< .25	mg/kg			WG549236	08/06/11 21:31
Cadmium	< .25	mg/kg			WG549236	08/06/11 21:31
Chromium	< .5	mg/kg			WG549236	08/06/11 21:31
Lead	< .25	mg/kg			WG549236	08/06/11 21:31
Selenium	< 1	mg/kg			WG549236	08/06/11 21:31
Silver	< .5	mg/kg			WG549236	08/06/11 21:31
1,1,1,2-Tetrachloroethane	< .001	mg/kg			WG549226	08/05/11 15:18
1,1,1-Trichloroethane	< .001	mg/kg			WG549226	08/05/11 15:18
1,1,2,2-Tetrachloroethane	< .001	mg/kg			WG549226	08/05/11 15:18
1,1,2-Trichloroethane	< .001	mg/kg			WG549226	08/05/11 15:18
1,1,2-Trichloro-1,2,2-trifluoroethane	< .001	mg/kg			WG549226	08/05/11 15:18
1,1-Dichloroethane	< .001	mg/kg			WG549226	08/05/11 15:18
1,1-Dichloroethene	< .001	mg/kg			WG549226	08/05/11 15:18
1,1-Dichloropropene	< .001	mg/kg			WG549226	08/05/11 15:18
1,2,3-Trichlorobenzene	< .001	mg/kg			WG549226	08/05/11 15:18
1,2,3-Trichloropropane	< .0025	mg/kg			WG549226	08/05/11 15:18
1,2,3-Trimethylbenzene	< .001	mg/kg			WG549226	08/05/11 15:18
1,2,4-Trichlorobenzene	< .001	mg/kg			WG549226	08/05/11 15:18
1,2,4-Trimethylbenzene	< .001	mg/kg			WG549226	08/05/11 15:18
1,2-Dibromo-3-Chloropropane	< .005	mg/kg			WG549226	08/05/11 15:18
1,2-Dibromoethane	< .001	mg/kg			WG549226	08/05/11 15:18
1,2-Dichlorobenzene	< .001	mg/kg			WG549226	08/05/11 15:18
1,2-Dichloroethane	< .001	mg/kg			WG549226	08/05/11 15:18

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Level II

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Tax I.D. 62-0814289

Est. 1970

August 11, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
1,2-Dichloropropane	< .001	mg/kg			WG549226	08/05/11 15:18
1,3,5-Trimethylbenzene	< .001	mg/kg			WG549226	08/05/11 15:18
1,3-Dichlorobenzene	< .001	mg/kg			WG549226	08/05/11 15:18
1,3-Dichloropropane	< .001	mg/kg			WG549226	08/05/11 15:18
1,4-Dichlorobenzene	< .001	mg/kg			WG549226	08/05/11 15:18
2,2-Dichloropropane	< .001	mg/kg			WG549226	08/05/11 15:18
2-Butanone (MEK)	< .01	mg/kg			WG549226	08/05/11 15:18
2-Chloroethyl vinyl ether	< .05	mg/kg			WG549226	08/05/11 15:18
2-Chlorotoluene	< .001	mg/kg			WG549226	08/05/11 15:18
4-Chlorotoluene	< .001	mg/kg			WG549226	08/05/11 15:18
4-Methyl-2-pentanone (MIBK)	< .01	mg/kg			WG549226	08/05/11 15:18
Acetone	< .05	mg/kg			WG549226	08/05/11 15:18
Acrylonitrile	< .01	mg/kg			WG549226	08/05/11 15:18
Benzene	< .001	mg/kg			WG549226	08/05/11 15:18
Bromobenzene	< .001	mg/kg			WG549226	08/05/11 15:18
Bromodichloromethane	< .001	mg/kg			WG549226	08/05/11 15:18
Bromoform	< .001	mg/kg			WG549226	08/05/11 15:18
Bromomethane	< .005	mg/kg			WG549226	08/05/11 15:18
Carbon tetrachloride	< .001	mg/kg			WG549226	08/05/11 15:18
Chlorobenzene	< .001	mg/kg			WG549226	08/05/11 15:18
Chlorodibromomethane	< .001	mg/kg			WG549226	08/05/11 15:18
Chloroethane	< .005	mg/kg			WG549226	08/05/11 15:18
Chloroform	< .005	mg/kg			WG549226	08/05/11 15:18
Chloromethane	< .0025	mg/kg			WG549226	08/05/11 15:18
cis-1,2-Dichloroethene	< .001	mg/kg			WG549226	08/05/11 15:18
cis-1,3-Dichloropropene	< .001	mg/kg			WG549226	08/05/11 15:18
Di-isopropyl ether	< .001	mg/kg			WG549226	08/05/11 15:18
Dibromomethane	< .001	mg/kg			WG549226	08/05/11 15:18
Dichlorodifluoromethane	< .005	mg/kg			WG549226	08/05/11 15:18
Ethylbenzene	< .001	mg/kg			WG549226	08/05/11 15:18
Hexachloro-1,3-butadiene	< .001	mg/kg			WG549226	08/05/11 15:18
Isopropylbenzene	< .001	mg/kg			WG549226	08/05/11 15:18
Methyl tert-butyl ether	< .001	mg/kg			WG549226	08/05/11 15:18
Methylene Chloride	< .005	mg/kg			WG549226	08/05/11 15:18
n-Butylbenzene	< .001	mg/kg			WG549226	08/05/11 15:18
n-Propylbenzene	< .001	mg/kg			WG549226	08/05/11 15:18
Naphthalene	< .005	mg/kg			WG549226	08/05/11 15:18
p-Isopropyltoluene	< .001	mg/kg			WG549226	08/05/11 15:18
sec-Butylbenzene	< .001	mg/kg			WG549226	08/05/11 15:18
Styrene	< .001	mg/kg			WG549226	08/05/11 15:18
tert-Butylbenzene	< .001	mg/kg			WG549226	08/05/11 15:18
Tetrachloroethene	< .001	mg/kg			WG549226	08/05/11 15:18
Toluene	< .005	mg/kg			WG549226	08/05/11 15:18
trans-1,2-Dichloroethene	< .001	mg/kg			WG549226	08/05/11 15:18
trans-1,3-Dichloropropene	< .001	mg/kg			WG549226	08/05/11 15:18
Trichloroethene	< .001	mg/kg			WG549226	08/05/11 15:18
Trichlorofluoromethane	< .005	mg/kg			WG549226	08/05/11 15:18
Vinyl chloride	< .001	mg/kg			WG549226	08/05/11 15:18
Xylenes, Total	< .003	mg/kg			WG549226	08/05/11 15:18
4-Bromofluorobenzene		% Rec.	104.9	59-140	WG549226	08/05/11 15:18
Dibromofluoromethane		% Rec.	90.84	63-139	WG549226	08/05/11 15:18
Toluene-d8		% Rec.	100.2	84-116	WG549226	08/05/11 15:18
Mercury	< .02	mg/kg			WG549217	08/07/11 22:11
1,2,4-Trichlorobenzene	< .333	mg/kg			WG549404	08/08/11 09:54
2,4,6-Trichlorophenol	< .333	mg/kg			WG549404	08/08/11 09:54

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Est. 1970

August 11, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
2,4-Dichlorophenol	< .333	mg/kg			WG549404	08/08/11 09:54
2,4-Dimethylphenol	< .333	mg/kg			WG549404	08/08/11 09:54
2,4-Dinitrophenol	< .333	mg/kg			WG549404	08/08/11 09:54
2,4-Dinitrotoluene	< .333	mg/kg			WG549404	08/08/11 09:54
2,6-Dinitrotoluene	< .333	mg/kg			WG549404	08/08/11 09:54
2-Chloronaphthalene	< .033	mg/kg			WG549404	08/08/11 09:54
2-Chlorophenol	< .333	mg/kg			WG549404	08/08/11 09:54
2-Nitrophenol	< .333	mg/kg			WG549404	08/08/11 09:54
3,3-Dichlorobenzidine	< .333	mg/kg			WG549404	08/08/11 09:54
4,6-Dinitro-2-methylphenol	< .333	mg/kg			WG549404	08/08/11 09:54
4-Bromophenyl-phenylether	< .333	mg/kg			WG549404	08/08/11 09:54
4-Chloro-3-methylphenol	< .333	mg/kg			WG549404	08/08/11 09:54
4-Chlorophenyl-phenylether	< .333	mg/kg			WG549404	08/08/11 09:54
4-Nitrophenol	< .333	mg/kg			WG549404	08/08/11 09:54
Acenaphthene	< .033	mg/kg			WG549404	08/08/11 09:54
Acenaphthylene	< .033	mg/kg			WG549404	08/08/11 09:54
Anthracene	< .033	mg/kg			WG549404	08/08/11 09:54
Benzidine	< .333	mg/kg			WG549404	08/08/11 09:54
Benzo(a)anthracene	< .033	mg/kg			WG549404	08/08/11 09:54
Benzo(a)pyrene	< .033	mg/kg			WG549404	08/08/11 09:54
Benzo(b)fluoranthene	< .033	mg/kg			WG549404	08/08/11 09:54
Benzo(g,h,i)perylene	< .033	mg/kg			WG549404	08/08/11 09:54
Benzo(k)fluoranthene	< .033	mg/kg			WG549404	08/08/11 09:54
Benzylbutyl phthalate	< .333	mg/kg			WG549404	08/08/11 09:54
Bis(2-chlorethoxy)methane	< .333	mg/kg			WG549404	08/08/11 09:54
Bis(2-chloroethyl)ether	< .333	mg/kg			WG549404	08/08/11 09:54
Bis(2-chloroisopropyl)ether	< .333	mg/kg			WG549404	08/08/11 09:54
Bis(2-ethylhexyl)phthalate	< .333	mg/kg			WG549404	08/08/11 09:54
Chrysene	< .033	mg/kg			WG549404	08/08/11 09:54
Di-n-butyl phthalate	< .333	mg/kg			WG549404	08/08/11 09:54
Di-n-octyl phthalate	< .333	mg/kg			WG549404	08/08/11 09:54
Dibenz(a,h)anthracene	< .033	mg/kg			WG549404	08/08/11 09:54
Diethyl phthalate	< .333	mg/kg			WG549404	08/08/11 09:54
Dimethyl phthalate	< .333	mg/kg			WG549404	08/08/11 09:54
Fluoranthene	< .033	mg/kg			WG549404	08/08/11 09:54
Fluorene	< .033	mg/kg			WG549404	08/08/11 09:54
Hexachloro-1,3-butadiene	< .333	mg/kg			WG549404	08/08/11 09:54
Hexachlorobenzene	< .333	mg/kg			WG549404	08/08/11 09:54
Hexachlorocyclopentadiene	< .333	mg/kg			WG549404	08/08/11 09:54
Hexachloroethane	< .333	mg/kg			WG549404	08/08/11 09:54
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG549404	08/08/11 09:54
Isophorone	< .333	mg/kg			WG549404	08/08/11 09:54
n-Nitrosodi-n-propylamine	< .333	mg/kg			WG549404	08/08/11 09:54
n-Nitrosodimethylamine	< .333	mg/kg			WG549404	08/08/11 09:54
n-Nitrosodiphenylamine	< .333	mg/kg			WG549404	08/08/11 09:54
Naphthalene	< .033	mg/kg			WG549404	08/08/11 09:54
Nitrobenzene	< .333	mg/kg			WG549404	08/08/11 09:54
Pentachlorophenol	< .333	mg/kg			WG549404	08/08/11 09:54
Phenanthrene	< .033	mg/kg			WG549404	08/08/11 09:54
Phenol	< .333	mg/kg			WG549404	08/08/11 09:54
Pyrene	< .033	mg/kg			WG549404	08/08/11 09:54
2,4,6-Tribromophenol		mg/kg	74.63	16-136	WG549404	08/08/11 09:54
2-Fluorobiphenyl		mg/kg	74.27	37-119	WG549404	08/08/11 09:54
2-Fluorophenol		mg/kg	72.80	22-114	WG549404	08/08/11 09:54
Nitrobenzene-d5		mg/kg	67.87	20-114	WG549404	08/08/11 09:54
Phenol-d5		mg/kg	81.04	26-127	WG549404	08/08/11 09:54
p-Terphenyl-d14		mg/kg	70.77	15-174	WG549404	08/08/11 09:54

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Est. 1970

August 11, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
PCB 1016	< .017	mg/kg			WG549310	08/08/11 11:03
PCB 1221	< .017	mg/kg			WG549310	08/08/11 11:03
PCB 1232	< .017	mg/kg			WG549310	08/08/11 11:03
PCB 1242	< .017	mg/kg			WG549310	08/08/11 11:03
PCB 1248	< .017	mg/kg			WG549310	08/08/11 11:03
PCB 1254	< .017	mg/kg			WG549310	08/08/11 11:03
PCB 1260	< .017	mg/kg			WG549310	08/08/11 11:03
Decachlorobiphenyl		% Rec.	108.9	18.9-115.8	WG549310	08/08/11 11:03
Tetrachloro-m-xylene		% Rec.	102.5	31.8-115.7	WG549310	08/08/11 11:03
1,1,1,2-Tetrachloroethane	< .001	mg/l			WG549500	08/08/11 12:18
1,1,1-Trichloroethane	< .001	mg/l			WG549500	08/08/11 12:18
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG549500	08/08/11 12:18
1,1,2-Trichloroethane	< .001	mg/l			WG549500	08/08/11 12:18
1,1,2-Trichloro-1,2,2-trifluoroethane	< .001	mg/l			WG549500	08/08/11 12:18
1,1-Dichloroethane	< .001	mg/l			WG549500	08/08/11 12:18
1,1-Dichloroethene	< .001	mg/l			WG549500	08/08/11 12:18
1,1-Dichloropropene	< .001	mg/l			WG549500	08/08/11 12:18
1,2,3-Trichlorobenzene	< .001	mg/l			WG549500	08/08/11 12:18
1,2,3-Trichloropropane	< .001	mg/l			WG549500	08/08/11 12:18
1,2,3-Trimethylbenzene	< .001	mg/l			WG549500	08/08/11 12:18
1,2,4-Trichlorobenzene	< .001	mg/l			WG549500	08/08/11 12:18
1,2,4-Trimethylbenzene	< .001	mg/l			WG549500	08/08/11 12:18
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG549500	08/08/11 12:18
1,2-Dibromoethane	< .001	mg/l			WG549500	08/08/11 12:18
1,2-Dichlorobenzene	< .001	mg/l			WG549500	08/08/11 12:18
1,2-Dichloroethane	< .001	mg/l			WG549500	08/08/11 12:18
1,2-Dichloropropene	< .001	mg/l			WG549500	08/08/11 12:18
1,3,5-Trimethylbenzene	< .001	mg/l			WG549500	08/08/11 12:18
1,3-Dichlorobenzene	< .001	mg/l			WG549500	08/08/11 12:18
1,3-Dichloropropene	< .001	mg/l			WG549500	08/08/11 12:18
1,4-Dichlorobenzene	< .001	mg/l			WG549500	08/08/11 12:18
2,2-Dichloropropene	< .001	mg/l			WG549500	08/08/11 12:18
2-Butanone (MEK)	< .01	mg/l			WG549500	08/08/11 12:18
2-Chloroethyl vinyl ether	< .05	mg/l			WG549500	08/08/11 12:18
2-Chlorotoluene	< .001	mg/l			WG549500	08/08/11 12:18
4-Chlorotoluene	< .001	mg/l			WG549500	08/08/11 12:18
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG549500	08/08/11 12:18
Acetone	< .05	mg/l			WG549500	08/08/11 12:18
Acrolein	< .025	mg/l			WG549500	08/08/11 12:18
Acrylonitrile	< .01	mg/l			WG549500	08/08/11 12:18
Benzene	< .001	mg/l			WG549500	08/08/11 12:18
Bromobenzene	< .001	mg/l			WG549500	08/08/11 12:18
Bromodichloromethane	< .001	mg/l			WG549500	08/08/11 12:18
Bromoform	< .001	mg/l			WG549500	08/08/11 12:18
Bromomethane	< .005	mg/l			WG549500	08/08/11 12:18
Carbon tetrachloride	< .001	mg/l			WG549500	08/08/11 12:18
Chlorobenzene	< .001	mg/l			WG549500	08/08/11 12:18
Chlorodibromomethane	< .001	mg/l			WG549500	08/08/11 12:18
Chloroethane	< .005	mg/l			WG549500	08/08/11 12:18
Chloroform	< .005	mg/l			WG549500	08/08/11 12:18
Chloromethane	< .0025	mg/l			WG549500	08/08/11 12:18
cis-1,2-Dichloroethene	< .001	mg/l			WG549500	08/08/11 12:18
cis-1,3-Dichloropropene	< .001	mg/l			WG549500	08/08/11 12:18
Di-isopropyl ether	< .001	mg/l			WG549500	08/08/11 12:18
Dibromomethane	< .001	mg/l			WG549500	08/08/11 12:18
Dichlorodifluoromethane	< .005	mg/l			WG549500	08/08/11 12:18
Ethylbenzene	< .001	mg/l			WG549500	08/08/11 12:18

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Level II

L529577

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

August 11, 2011

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Hexachloro-1,3-butadiene	< .001	mg/l			WG549500	08/08/11 12:18
Isopropylbenzene	< .001	mg/l			WG549500	08/08/11 12:18
Methyl tert-butyl ether	< .001	mg/l			WG549500	08/08/11 12:18
Methylene Chloride	< .005	mg/l			WG549500	08/08/11 12:18
n-Butylbenzene	< .001	mg/l			WG549500	08/08/11 12:18
n-Propylbenzene	< .001	mg/l			WG549500	08/08/11 12:18
Naphthalene	< .005	mg/l			WG549500	08/08/11 12:18
p-Isopropyltoluene	< .001	mg/l			WG549500	08/08/11 12:18
sec-Butylbenzene	< .001	mg/l			WG549500	08/08/11 12:18
Styrene	< .001	mg/l			WG549500	08/08/11 12:18
tert-Butylbenzene	< .001	mg/l			WG549500	08/08/11 12:18
Tetrachloroethene	< .001	mg/l			WG549500	08/08/11 12:18
Toluene	< .005	mg/l			WG549500	08/08/11 12:18
trans-1,2-Dichloroethene	< .001	mg/l			WG549500	08/08/11 12:18
trans-1,3-Dichloropropene	< .001	mg/l			WG549500	08/08/11 12:18
Trichloroethene	< .001	mg/l			WG549500	08/08/11 12:18
Trichlorofluoromethane	< .005	mg/l			WG549500	08/08/11 12:18
Vinyl chloride	< .001	mg/l			WG549500	08/08/11 12:18
Xylenes, Total	< .003	mg/l			WG549500	08/08/11 12:18
4-Bromofluorobenzene		% Rec.	108.1	75-128	WG549500	08/08/11 12:18
Dibromofluoromethane		% Rec.	103.2	79-125	WG549500	08/08/11 12:18
Toluene-d8		% Rec.	103.5	87-114	WG549500	08/08/11 12:18
Trichloroethene	< .001	mg/l			WG549466	08/08/11 13:13
4-Bromofluorobenzene		% Rec.	95.02	75-128	WG549466	08/08/11 13:13
Dibromofluoromethane		% Rec.	120.1	79-125	WG549466	08/08/11 13:13
Toluene-d8		% Rec.	105.0	87-114	WG549466	08/08/11 13:13
Mercury, Dissolved	< .0002	mg/l			WG548951	08/08/11 14:41
Diesel	< 4	mg/kg			WG549376	08/08/11 15:56
Gasoline	< 4	mg/kg			WG549376	08/08/11 15:56
Motor Oil	< 10	mg/kg			WG549376	08/08/11 15:56
o-Terphenyl		% Rec.	98.68	50-150	WG549376	08/08/11 15:56
Diesel	< .1	mg/l			WG549303	08/09/11 10:07
Gasoline	< .1	mg/l			WG549303	08/09/11 10:07
Motor Oil	< .25	mg/l			WG549303	08/09/11 10:07
o-Terphenyl		% Rec.	84.99	50-150	WG549303	08/09/11 10:07
Barium, Dissolved	< .005	mg/l			WG549777	08/10/11 10:14
1,2,4-Trichlorobenzene	< .333	mg/kg			WG549703	08/10/11 13:04
2,4,6-Trichlorophenol	< .333	mg/kg			WG549703	08/10/11 13:04
2,4-Dichlorophenol	< .333	mg/kg			WG549703	08/10/11 13:04
2,4-Dimethylphenol	< .333	mg/kg			WG549703	08/10/11 13:04
2,4-Dinitrophenol	< .333	mg/kg			WG549703	08/10/11 13:04
2,4-Dinitrotoluene	< .333	mg/kg			WG549703	08/10/11 13:04
2,6-Dinitrotoluene	< .333	mg/kg			WG549703	08/10/11 13:04
2-Chloronaphthalene	< .033	mg/kg			WG549703	08/10/11 13:04
2-Chlorophenol	< .333	mg/kg			WG549703	08/10/11 13:04
2-Nitrophenol	< .333	mg/kg			WG549703	08/10/11 13:04
3,3-Dichlorobenzidine	< .333	mg/kg			WG549703	08/10/11 13:04

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Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
4,6-Dinitro-2-methylphenol	< .333	mg/kg			WG549703	08/10/11 13:04
4-Bromophenyl-phenylether	< .333	mg/kg			WG549703	08/10/11 13:04
4-Chloro-3-methylphenol	< .333	mg/kg			WG549703	08/10/11 13:04
4-Chlorophenyl-phenylether	< .333	mg/kg			WG549703	08/10/11 13:04
4-Nitrophenol	< .333	mg/kg			WG549703	08/10/11 13:04
Acenaphthene	< .033	mg/kg			WG549703	08/10/11 13:04
Acenaphthylene	< .033	mg/kg			WG549703	08/10/11 13:04
Anthracene	< .033	mg/kg			WG549703	08/10/11 13:04
Benzidine	< .333	mg/kg			WG549703	08/10/11 13:04
Benzo(a)anthracene	< .033	mg/kg			WG549703	08/10/11 13:04
Benzo(a)pyrene	< .033	mg/kg			WG549703	08/10/11 13:04
Benzo(b)fluoranthene	< .033	mg/kg			WG549703	08/10/11 13:04
Benzo(g,h,i)perylene	< .033	mg/kg			WG549703	08/10/11 13:04
Benzo(k)fluoranthene	< .033	mg/kg			WG549703	08/10/11 13:04
Benzylbutyl phthalate	< .333	mg/kg			WG549703	08/10/11 13:04
Bis(2-chlorethoxy)methane	< .333	mg/kg			WG549703	08/10/11 13:04
Bis(2-chloroethyl)ether	< .333	mg/kg			WG549703	08/10/11 13:04
Bis(2-chloroisopropyl)ether	< .333	mg/kg			WG549703	08/10/11 13:04
Bis(2-ethylhexyl)phthalate	< .333	mg/kg			WG549703	08/10/11 13:04
Chrysene	< .033	mg/kg			WG549703	08/10/11 13:04
Di-n-butyl phthalate	< .333	mg/kg			WG549703	08/10/11 13:04
Di-n-octyl phthalate	< .333	mg/kg			WG549703	08/10/11 13:04
Dibenz(a,h)anthracene	< .033	mg/kg			WG549703	08/10/11 13:04
Diethyl phthalate	< .333	mg/kg			WG549703	08/10/11 13:04
Dimethyl phthalate	< .333	mg/kg			WG549703	08/10/11 13:04
Fluoranthene	< .033	mg/kg			WG549703	08/10/11 13:04
Fluorene	< .033	mg/kg			WG549703	08/10/11 13:04
Hexachloro-1,3-butadiene	< .333	mg/kg			WG549703	08/10/11 13:04
Hexachlorobenzene	< .333	mg/kg			WG549703	08/10/11 13:04
Hexachlorocyclopentadiene	< .333	mg/kg			WG549703	08/10/11 13:04
Hexachloroethane	< .333	mg/kg			WG549703	08/10/11 13:04
Indeno(1,2,3-cd)pyrene	< .033	mg/kg			WG549703	08/10/11 13:04
Isophorone	< .333	mg/kg			WG549703	08/10/11 13:04
n-Nitrosodi-n-propylamine	< .333	mg/kg			WG549703	08/10/11 13:04
n-Nitrosodimethylamine	< .333	mg/kg			WG549703	08/10/11 13:04
n-Nitrosodiphenylamine	< .333	mg/kg			WG549703	08/10/11 13:04
Naphthalene	< .033	mg/kg			WG549703	08/10/11 13:04
Nitrobenzene	< .333	mg/kg			WG549703	08/10/11 13:04
Pentachlorophenol	< .333	mg/kg			WG549703	08/10/11 13:04
Phenanthrene	< .033	mg/kg			WG549703	08/10/11 13:04
Phenol	< .333	mg/kg			WG549703	08/10/11 13:04
Pyrene	< .033	mg/kg			WG549703	08/10/11 13:04
2,4,6-Tribromophenol		mg/kg	71.37	16-136	WG549703	08/10/11 13:04
2-Fluorobiphenyl		mg/kg	73.44	37-119	WG549703	08/10/11 13:04
2-Fluorophenol		mg/kg	74.28	22-114	WG549703	08/10/11 13:04
Nitrobenzene-d5		mg/kg	64.40	20-114	WG549703	08/10/11 13:04
Phenol-d5		mg/kg	90.86	26-127	WG549703	08/10/11 13:04
p-Terphenyl-d14		mg/kg	81.63	15-174	WG549703	08/10/11 13:04

Analyte	Units	Result	Duplicate		RPD	Limit	Ref Samp	Batch
			Duplicate					
Barium,Dissolved	mg/l	0.390	0.400		2.79	20	L529577-14	WG549210
Cadmium,Dissolved	mg/l	0	0		0	20	L529577-14	WG549210
Chromium,Dissolved	mg/l	0	0		0	20	L529577-14	WG549210
Lead,Dissolved	mg/l	0.00600	0.00820		31.3*	20	L529577-14	WG549210
Selenium,Dissolved	mg/l	0.0450	0.0470		4.57	20	L529577-14	WG549210
Silver,Dissolved	mg/l	0	0		0	20	L529577-14	WG549210

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Analyte	Units	Duplicate		RPD	Limit	Ref Samp	Batch
		Result	Duplicate				
Arsenic,Dissolved	mg/l	0	0	0	20	L529170-01	WG549323
Arsenic	mg/kg	10.0	10.0	3.92	20	L529569-11	WG549236
Barium	mg/kg	160.	140.	14.0	20	L529569-11	WG549236
Cadmium	mg/kg	1.20	1.70	36.1*	20	L529569-11	WG549236
Chromium	mg/kg	29.0	26.0	11.9	20	L529569-11	WG549236
Lead	mg/kg	29.0	20.0	35.4*	20	L529569-11	WG549236
Silver	mg/kg	1.20	1.10	12.0	20	L529569-11	WG549236
Selenium	mg/kg	0	0	0	20	L529569-11	WG549236
Mercury	mg/kg	0.0470	0.0460	2.58	20	L529569-11	WG549217
Mercury,Dissolved	mg/l	0	0	0	20	L529127-11	WG548951
Barium,Dissolved	mg/l	0.00840	0.00920	9.09	20	L529648-01	WG549777
Analyte	Units	Laboratory Known	Control Val	Sample Result	% Rec	Limit	Batch
Diesel	mg/kg	30		24.1	80.4	50-150	WG549312
Motor Oil	mg/kg	30		23.0	76.5	50-150	WG549312
Total (C7-C40)	mg/kg	0		47.1	0	0-0	WG549312
o-terphenyl					69.64	50-150	WG549312
1,1,1,2-Tetrachloroethane	mg/l	.025		0.0245	98.0	75-134	WG549212
1,1,1-Trichloroethane	mg/l	.025		0.0185	74.0	67-137	WG549212
1,1,2,2-Tetrachloroethane	mg/l	.025		0.0219	87.7	72-128	WG549212
1,1,2-Trichloroethane	mg/l	.025		0.0230	91.9	79-123	WG549212
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	.025		0.0177	70.9	51-149	WG549212
1,1-Dichloroethane	mg/l	.025		0.0183	73.1	67-133	WG549212
1,1-Dichloroethene	mg/l	.025		0.0176	70.3	60-130	WG549212
1,1-Dichloropropene	mg/l	.025		0.0157	62.9*	68-132	WG549212
1,2,3-Trichlorobenzene	mg/l	.025		0.0227	91.0	63-138	WG549212
1,2,3-Trichloropropane	mg/l	.025		0.0225	89.9	68-130	WG549212
1,2,3-Trimethylbenzene	mg/l	.025		0.0202	80.7	70-127	WG549212
1,2,4-Trichlorobenzene	mg/l	.025		0.0237	95.0	65-137	WG549212
1,2,4-Trimethylbenzene	mg/l	.025		0.0215	86.2	72-135	WG549212
1,2-Dibromo-3-Chloropropane	mg/l	.025		0.0217	86.7	55-134	WG549212
1,2-Dibromoethane	mg/l	.025		0.0221	88.5	75-126	WG549212
1,2-Dichlorobenzene	mg/l	.025		0.0224	89.4	75-122	WG549212
1,2-Dichloroethane	mg/l	.025		0.0166	66.3	63-137	WG549212
1,2-Dichloropropane	mg/l	.025		0.0189	75.5	74-122	WG549212
1,3,5-Trimethylbenzene	mg/l	.025		0.0219	87.6	73-134	WG549212
1,3-Dichlorobenzene	mg/l	.025		0.0232	92.7	73-131	WG549212
1,3-Dichloropropane	mg/l	.025		0.0208	83.1	77-119	WG549212
1,4-Dichlorobenzene	mg/l	.025		0.0222	88.9	70-121	WG549212
2,2-Dichloropropane	mg/l	.025		0.0198	79.2	46-151	WG549212
2-Butanone (MEK)	mg/l	.125		0.0798	63.9	53-132	WG549212
2-Chloroethyl vinyl ether	mg/l	.125		0.0935	74.8	0-171	WG549212
2-Chlorotoluene	mg/l	.025		0.0215	86.1	74-128	WG549212
4-Chlorotoluene	mg/l	.025		0.0213	85.1	74-130	WG549212
4-Methyl-2-pentanone (MIBK)	mg/l	.125		0.0930	74.4	60-142	WG549212
Acetone	mg/l	.125		0.0839	67.2	48-134	WG549212

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Analyte	Units	Laboratory Control Known Val	Sample Result	% Rec	Limit	Batch
Acrolein	mg/l	.125	0.0186	14.9	6-182	WG549212
Acrylonitrile	mg/l	.125	0.0854	68.3	60-140	WG549212
Benzene	mg/l	.025	0.0174	69.8	67-126	WG549212
Bromobenzene	mg/l	.025	0.0209	83.6	76-123	WG549212
Bromodichloromethane	mg/l	.025	0.0200	80.1	68-133	WG549212
Bromoform	mg/l	.025	0.0219	87.6	60-139	WG549212
Bromomethane	mg/l	.025	0.0136	54.4	45-175	WG549212
Carbon tetrachloride	mg/l	.025	0.0186	74.4	64-141	WG549212
Chlorobenzene	mg/l	.025	0.0225	89.9	77-125	WG549212
Chlorodibromomethane	mg/l	.025	0.0235	94.0	73-138	WG549212
Chloroethane	mg/l	.025	0.0134	53.5	49-155	WG549212
Chloroform	mg/l	.025	0.0189	75.5	66-126	WG549212
Chloromethane	mg/l	.025	0.0122	48.7	45-152	WG549212
cis-1,2-Dichloroethene	mg/l	.025	0.0190	75.9	72-128	WG549212
cis-1,3-Dichloropropene	mg/l	.025	0.0201	80.3	73-131	WG549212
Di-isopropyl ether	mg/l	.025	0.0176	70.3	63-139	WG549212
Dibromomethane	mg/l	.025	0.0190	76.0	73-125	WG549212
Dichlorodifluoromethane	mg/l	.025	0.0125	50.2	39-189	WG549212
Ethylbenzene	mg/l	.025	0.0220	88.1	76-129	WG549212
Hexachloro-1,3-butadiene	mg/l	.025	0.0220	88.0	67-135	WG549212
Isopropylbenzene	mg/l	.025	0.0243	97.2	73-132	WG549212
Methyl tert-butyl ether	mg/l	.025	0.0198	79.3	51-142	WG549212
Methylene Chloride	mg/l	.025	0.0187	74.8	64-125	WG549212
n-Butylbenzene	mg/l	.025	0.0200	80.2	63-142	WG549212
n-Propylbenzene	mg/l	.025	0.0212	84.7	71-132	WG549212
Naphthalene	mg/l	.025	0.0218	87.4	56-145	WG549212
p-Isopropyltoluene	mg/l	.025	0.0222	88.6	68-138	WG549212
sec-Butylbenzene	mg/l	.025	0.0219	87.6	70-135	WG549212
Styrene	mg/l	.025	0.0163	65.4*	78-130	WG549212
tert-Butylbenzene	mg/l	.025	0.0229	91.8	72-134	WG549212
Tetrachloroethene	mg/l	.025	0.0211	84.5	67-135	WG549212
Toluene	mg/l	.025	0.0190	76.0	72-122	WG549212
trans-1,2-Dichloroethene	mg/l	.025	0.0170	68.2	67-129	WG549212
trans-1,3-Dichloropropene	mg/l	.025	0.0173	69.1	66-137	WG549212
Trichlorofluoromethane	mg/l	.025	0.0146	58.4	54-156	WG549212
Vinyl chloride	mg/l	.025	0.0124	49.6*	55-153	WG549212
Xylenes, Total	mg/l	.075	0.0659	87.9	75-128	WG549212
4-Bromofluorobenzene				100.3	75-128	WG549212
Dibromofluoromethane				92.21	79-125	WG549212
Toluene-d8				100.2	87-114	WG549212
Barium, Dissolved	mg/l	1.13	1.16	103.	85-115	WG549210
Cadmium, Dissolved	mg/l	1.13	1.16	103.	85-115	WG549210
Chromium, Dissolved	mg/l	1.13	1.17	104.	85-115	WG549210
Lead, Dissolved	mg/l	1.13	1.12	99.1	85-115	WG549210
Selenium, Dissolved	mg/l	1.13	1.01	89.4	85-115	WG549210
Silver, Dissolved	mg/l	1.13	1.12	99.1	85-115	WG549210
Arsenic, Dissolved	mg/l	.0567	0.0524	92.4	85-115	WG549323
1,2,4-Trichlorobenzene	mg/l	.01	0.00663	66.3	34-97	WG549127
2,4,6-Trichlorophenol	mg/l	.01	0.00802	80.2	38-113	WG549127
2,4-Dichlorophenol	mg/l	.01	0.00794	79.4	46-105	WG549127
2,4-Dimethylphenol	mg/l	.01	0.00711	71.1	47-108	WG549127
2,4-Dinitrophenol	mg/l	.01	0.00754	75.4	10-121	WG549127
2,4-Dinitrotoluene	mg/l	.01	0.00798	79.8	59-117	WG549127

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Tax I.D. 62-0814289

Est. 1970

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Analyte	Units	Laboratory Control Known Val	Sample Result	% Rec	Limit	Batch
2,6-Dinitrotoluene	mg/l	.01	0.00799	79.9	57-110	WG549127
2-Chloronaphthalene	mg/l	.01	0.00752	75.2	47-106	WG549127
2-Chlorophenol	mg/l	.01	0.00639	63.9	37-90	WG549127
2-Nitrophenol	mg/l	.01	0.00815	81.5	40-112	WG549127
3,3-Dichlorobenzidine	mg/l	.01	0.00693	69.3	58-116	WG549127
4,6-Dinitro-2-methylphenol	mg/l	.01	0.00861	86.1	21-119	WG549127
4-Bromophenyl-phenylether	mg/l	.01	0.00812	81.2	63-120	WG549127
4-Chloro-3-methylphenol	mg/l	.01	0.00734	73.4	50-105	WG549127
4-Chlorophenyl-phenylether	mg/l	.01	0.00736	73.6	58-115	WG549127
4-Nitrophenol	mg/l	.01	0.00214	21.4	10-53	WG549127
Acenaphthene	mg/l	.01	0.00802	80.2	52-107	WG549127
Acenaphthylene	mg/l	.01	0.00850	85.0	55-119	WG549127
Anthracene	mg/l	.01	0.00814	81.4	65-114	WG549127
Benidine	mg/l	.01	0.00243	24.3	10-55	WG549127
Benzo(a)anthracene	mg/l	.01	0.00856	85.6	68-113	WG549127
Benzo(a)pyrene	mg/l	.01	0.00817	81.7	68-115	WG549127
Benzo(b)fluoranthene	mg/l	.01	0.00793	79.3	67-114	WG549127
Benzo(g,h,i)perylene	mg/l	.01	0.00706	70.6	52-132	WG549127
Benzo(k)fluoranthene	mg/l	.01	0.00853	85.3	62-116	WG549127
Benzybutyl phthalate	mg/l	.01	0.00424	42.4	12-166	WG549127
Bis(2-chlorethoxy)methane	mg/l	.01	0.00852	85.2	56-116	WG549127
Bis(2-chloroethyl)ether	mg/l	.01	0.00718	71.8	39-109	WG549127
Bis(2-chloroisopropyl)ether	mg/l	.01	0.00770	77.0	43-108	WG549127
Bis(2-ethylhexyl)phthalate	mg/l	.01	0.00867	86.7	61-147	WG549127
Chrysene	mg/l	.01	0.00818	81.8	65-114	WG549127
Di-n-butyl phthalate	mg/l	.01	0.00586	58.6	56-133	WG549127
Di-n-octyl phthalate	mg/l	.01	0.00823	82.3	59-143	WG549127
Dibenz(a,h)anthracene	mg/l	.01	0.00716	71.6	54-130	WG549127
Diethyl phthalate	mg/l	.01	0.00515	51.5	33-136	WG549127
Dimethyl phthalate	mg/l	.01	0.00281	28.1	10-152	WG549127
Fluoranthene	mg/l	.01	0.00784	78.4	66-120	WG549127
Fluorene	mg/l	.01	0.00779	77.9	58-110	WG549127
Hexachloro-1,3-butadiene	mg/l	.01	0.00684	68.4	34-115	WG549127
Hexachlorobenzene	mg/l	.01	0.00716	71.6	55-117	WG549127
Hexachlorocyclopentadiene	mg/l	.01	0.00542	54.2	20-121	WG549127
Hexachloroethane	mg/l	.01	0.00704	70.4	24-93	WG549127
Indeno(1,2,3-cd)pyrene	mg/l	.01	0.00734	73.4	56-129	WG549127
Isophorone	mg/l	.01	0.00720	72.0	55-108	WG549127
n-Nitrosodi-n-propylamine	mg/l	.01	0.00793	79.3	50-115	WG549127
n-Nitrosodimethylamine	mg/l	.01	0.00478	47.8	12-68	WG549127
n-Nitrosodiphenylamine	mg/l	.01	0.00808	80.8	55-98	WG549127
Naphthalene	mg/l	.01	0.00763	76.3	42-103	WG549127
Nitrobenzene	mg/l	.01	0.00834	83.4	39-102	WG549127
Pentachlorophenol	mg/l	.01	0.00759	75.9	10-101	WG549127
Phenanthrene	mg/l	.01	0.00822	82.2	61-110	WG549127
Phenol	mg/l	.01	0.00214	21.4	10-53	WG549127
Pyrene	mg/l	.01	0.00847	84.7	65-116	WG549127
2,4,6-Tribromophenol				84.08	16-147	WG549127
2-Fluorobiphenyl				78.47	29-127	WG549127
2-Fluorophenol				35.47	10-75	WG549127
Nitrobenzene-d5				85.51	17-119	WG549127
Phenol-d5				24.24	10-63	WG549127
p-Terphenyl-d14				76.70	40-174	WG549127
1,2,4-Trichlorobenzene	mg/l	.01	0.00631	63.1	34-97	WG549308
2,4,6-Trichlorophenol	mg/l	.01	0.00749	74.9	38-113	WG549308
2,4-Dichlorophenol	mg/l	.01	0.00743	74.3	46-105	WG549308
2,4-Dimethylphenol	mg/l	.01	0.00707	70.7	47-108	WG549308

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Analyte	Units	Laboratory Control Known Val	Sample Result	% Rec	Limit	Batch
2,4-Dinitrophenol	mg/l	.01	0.00723	72.3	10-121	WG549308
2,4-Dinitrotoluene	mg/l	.01	0.00849	84.9	59-117	WG549308
2,6-Dinitrotoluene	mg/l	.01	0.00886	88.6	57-110	WG549308
2-Chloronaphthalene	mg/l	.01	0.00768	76.8	47-106	WG549308
2-Chlorophenol	mg/l	.01	0.00613	61.3	37-90	WG549308
2-Nitrophenol	mg/l	.01	0.00727	72.7	40-112	WG549308
3,3-Dichlorobenzidine	mg/l	.01	0.00668	66.8	58-116	WG549308
4,6-Dinitro-2-methylphenol	mg/l	.01	0.00774	77.4	21-119	WG549308
4-Bromophenyl-phenylether	mg/l	.01	0.00795	79.5	63-120	WG549308
4-Chloro-3-methylphenol	mg/l	.01	0.00738	73.8	50-105	WG549308
4-Chlorophenyl-phenylether	mg/l	.01	0.00744	74.4	58-115	WG549308
4-Nitrophenol	mg/l	.01	0.00324	32.4	10-53	WG549308
Acenaphthene	mg/l	.01	0.00795	79.5	52-107	WG549308
Acenaphthylene	mg/l	.01	0.00820	82.0	55-119	WG549308
Anthracene	mg/l	.01	0.00847	84.7	65-114	WG549308
Benzidine	mg/l	.01	0.00117	11.7	10-55	WG549308
Benzo(a)anthracene	mg/l	.01	0.00886	88.6	68-113	WG549308
Benzo(a)pyrene	mg/l	.01	0.00883	88.3	68-115	WG549308
Benzo(b)fluoranthene	mg/l	.01	0.00851	85.1	67-114	WG549308
Benzo(g,h,i)perylene	mg/l	.01	0.00735	73.5	52-132	WG549308
Benzo(k)fluoranthene	mg/l	.01	0.00896	89.6	62-116	WG549308
Benzylbutyl phthalate	mg/l	.01	0.00709	70.9	12-166	WG549308
Bis(2-chlorethoxy)methane	mg/l	.01	0.00867	86.7	56-116	WG549308
Bis(2-chloroethyl)ether	mg/l	.01	0.00678	67.8	39-109	WG549308
Bis(2-chloroisopropyl)ether	mg/l	.01	0.00713	71.3	43-108	WG549308
Bis(2-ethylhexyl)phthalate	mg/l	.01	0.00945	94.5	61-147	WG549308
Chrysene	mg/l	.01	0.00894	89.4	65-114	WG549308
Di-n-butyl phthalate	mg/l	.01	0.00750	75.0	56-133	WG549308
Di-n-octyl phthalate	mg/l	.01	0.00887	88.7	59-143	WG549308
Dibenz(a,h)anthracene	mg/l	.01	0.00757	75.7	54-130	WG549308
Diethyl phthalate	mg/l	.01	0.00659	65.9	33-136	WG549308
Dimethyl phthalate	mg/l	.01	0.00469	46.9	10-152	WG549308
Fluoranthene	mg/l	.01	0.00813	81.3	66-120	WG549308
Fluorene	mg/l	.01	0.00793	79.3	58-110	WG549308
Hexachloro-1,3-butadiene	mg/l	.01	0.00672	67.2	34-115	WG549308
Hexachlorobenzene	mg/l	.01	0.00689	68.9	55-117	WG549308
Hexachlorocyclopentadiene	mg/l	.01	0.00562	56.2	20-121	WG549308
Hexachloroethane	mg/l	.01	0.00620	62.0	24-93	WG549308
Indeno(1,2,3-cd)pyrene	mg/l	.01	0.00779	77.9	56-129	WG549308
Isophorone	mg/l	.01	0.00741	74.1	55-108	WG549308
n-Nitrosodi-n-propylamine	mg/l	.01	0.00793	79.3	50-115	WG549308
n-Nitrosodimethylamine	mg/l	.01	0.00532	53.2	12-68	WG549308
n-Nitrosodiphenylamine	mg/l	.01	0.00819	81.9	55-98	WG549308
Naphthalene	mg/l	.01	0.00719	71.9	42-103	WG549308
Nitrobenzene	mg/l	.01	0.00806	80.6	39-102	WG549308
Pentachlorophenol	mg/l	.01	0.00690	69.0	10-101	WG549308
Phenanthrene	mg/l	.01	0.00821	82.1	61-110	WG549308
Phenol	mg/l	.01	0.00308	30.8	10-53	WG549308
Pyrene	mg/l	.01	0.00901	90.1	65-116	WG549308
2,4,6-Tribromophenol				74.31	16-147	WG549308
2-Fluorobiphenyl				74.63	29-127	WG549308
2-Fluorophenol				43.70	10-75	WG549308
Nitrobenzene-d5				78.01	17-119	WG549308
Phenol-d5				34.69	10-63	WG549308
p-Terphenyl-d14				79.28	40-174	WG549308
Arsenic	mg/kg	192	179.	93.2	78.6-120.8	WG549236
Barium	mg/kg	420	386.	91.9	78.8-121.4	WG549236

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Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Cadmium	mg/kg	70.1	67.7	96.6	78.5-121.5	WG549236
Chromium	mg/kg	168	170.	101.	80.4-120.2	WG549236
Lead	mg/kg	113	113.	100.	77.3-122.1	WG549236
Selenium	mg/kg	176	168.	95.5	75.6-125.0	WG549236
Silver	mg/kg	115	112.	97.4	66-133.9	WG549236
1,1,1,2-Tetrachloroethane	mg/kg	.025	0.0270	108.	73-134	WG549226
1,1,1-Trichloroethane	mg/kg	.025	0.0243	97.0	62-135	WG549226
1,1,2,2-Tetrachloroethane	mg/kg	.025	0.0242	96.8	74-129	WG549226
1,1,2-Trichloroethane	mg/kg	.025	0.0249	99.7	77-124	WG549226
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	.025	0.0294	118.	49-155	WG549226
1,1-Dichloroethane	mg/kg	.025	0.0229	91.7	61-134	WG549226
1,1-Dichloroethene	mg/kg	.025	0.0314	125.	53-136	WG549226
1,1-Dichloropropene	mg/kg	.025	0.0229	91.5	63-132	WG549226
1,2,3-Trichlorobenzene	mg/kg	.025	0.0262	105.	62-146	WG549226
1,2,3-Trichloropropane	mg/kg	.025	0.0228	91.2	70-133	WG549226
1,2,3-Trimethylbenzene	mg/kg	.025	0.0215	85.8	73-126	WG549226
1,2,4-Trichlorobenzene	mg/kg	.025	0.0279	111.	61-148	WG549226
1,2,4-Trimethylbenzene	mg/kg	.025	0.0239	95.7	68-135	WG549226
1,2-Dibromo-3-Chloropropane	mg/kg	.025	0.0271	108.	61-134	WG549226
1,2-Dibromoethane	mg/kg	.025	0.0248	99.1	76-127	WG549226
1,2-Dichlorobenzene	mg/kg	.025	0.0244	97.6	77-123	WG549226
1,2-Dichloroethane	mg/kg	.025	0.0198	79.4	58-141	WG549226
1,2-Dichloropropane	mg/kg	.025	0.0212	84.8	71-128	WG549226
1,3,5-Trimethylbenzene	mg/kg	.025	0.0253	101.	71-133	WG549226
1,3-Dichlorobenzene	mg/kg	.025	0.0259	104.	71-132	WG549226
1,3-Dichloropropane	mg/kg	.025	0.0229	91.8	76-120	WG549226
1,4-Dichlorobenzene	mg/kg	.025	0.0244	97.6	72-123	WG549226
2,2-Dichloropropane	mg/kg	.025	0.0248	99.1	50-147	WG549226
2-Butanone (MEK)	mg/kg	.125	0.0994	79.5	51-131	WG549226
2-Chloroethyl vinyl ether	mg/kg	.125	0.0989	79.1	0-188	WG549226
2-Chlorotoluene	mg/kg	.025	0.0244	97.7	73-128	WG549226
4-Chlorotoluene	mg/kg	.025	0.0239	95.7	72-129	WG549226
4-Methyl-2-pentanone (MIBK)	mg/kg	.125	0.118	94.1	61-143	WG549226
Acetone	mg/kg	.125	0.126	100.	44-140	WG549226
Acrylonitrile	mg/kg	.125	0.118	94.3	55-143	WG549226
Benzene	mg/kg	.025	0.0220	88.1	65-128	WG549226
Bromobenzene	mg/kg	.025	0.0227	90.9	75-123	WG549226
Bromodichloromethane	mg/kg	.025	0.0214	85.5	66-126	WG549226
Bromoform	mg/kg	.025	0.0283	113.	64-139	WG549226
Bromomethane	mg/kg	.025	0.0237	94.7	41-175	WG549226
Carbon tetrachloride	mg/kg	.025	0.0241	96.5	60-140	WG549226
Chlorobenzene	mg/kg	.025	0.0246	98.5	75-125	WG549226
Chlorodibromomethane	mg/kg	.025	0.0259	103.	72-137	WG549226
Chloroethane	mg/kg	.025	0.0250	100.	44-159	WG549226
Chloroform	mg/kg	.025	0.0229	91.7	63-123	WG549226
Chloromethane	mg/kg	.025	0.0203	81.3	42-149	WG549226
cis-1,2-Dichloroethene	mg/kg	.025	0.0252	101.	71-129	WG549226
cis-1,3-Dichloropropene	mg/kg	.025	0.0213	85.0	73-132	WG549226
Di-isopropyl ether	mg/kg	.025	0.0203	81.2	59-143	WG549226
Dibromomethane	mg/kg	.025	0.0242	96.9	70-130	WG549226
Dichlorodifluoromethane	mg/kg	.025	0.0235	94.0	26-186	WG549226
Ethylbenzene	mg/kg	.025	0.0259	104.	74-128	WG549226
Hexachloro-1,3-butadiene	mg/kg	.025	0.0264	105.	65-137	WG549226
Isopropylbenzene	mg/kg	.025	0.0282	113.	73-130	WG549226
Methyl tert-butyl ether	mg/kg	.025	0.0236	94.4	44-148	WG549226
Methylene Chloride	mg/kg	.025	0.0250	100.	57-129	WG549226
n-Butylbenzene	mg/kg	.025	0.0231	92.6	60-145	WG549226

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n-Propylbenzene	mg/kg	.025	0.0249	99.5	71-132	WG549226
Naphthalene	mg/kg	.025	0.0252	101.	61-142	WG549226
p-Isopropyltoluene	mg/kg	.025	0.0264	106.	67-138	WG549226
sec-Butylbenzene	mg/kg	.025	0.0258	103.	71-134	WG549226
Styrene	mg/kg	.025	0.0175	69.8*	76-133	WG549226
tert-Butylbenzene	mg/kg	.025	0.0268	107.	72-132	WG549226
Tetrachloroethene	mg/kg	.025	0.0275	110.	65-135	WG549226
Toluene	mg/kg	.025	0.0222	89.0	70-120	WG549226
trans-1,2-Dichloroethene	mg/kg	.025	0.0245	98.1	61-133	WG549226
trans-1,3-Dichloropropene	mg/kg	.025	0.0198	79.0	70-135	WG549226
Trichloroethene	mg/kg	.025	0.0261	104.	71-126	WG549226
Trichlorofluoromethane	mg/kg	.025	0.0261	104.	52-147	WG549226
Vinyl chloride	mg/kg	.025	0.0216	86.6	50-151	WG549226
Xylenes, Total	mg/kg	.075	0.0775	103.	74-127	WG549226
4-Bromofluorobenzene				99.62	59-140	WG549226
Dibromofluoromethane				96.31	63-139	WG549226
Toluene-d8				96.77	84-116	WG549226
Mercury	mg/kg	8.77	9.94	113.	71.6-127.7	WG549217
1,2,4-Trichlorobenzene	mg/kg	.333	0.222	66.7	48-87	WG549404
2,4,6-Trichlorophenol	mg/kg	.333	0.232	69.6	50-98	WG549404
2,4-Dichlorophenol	mg/kg	.333	0.234	70.4	56-96	WG549404
2,4-Dimethylphenol	mg/kg	.333	0.243	73.0	52-101	WG549404
2,4-Dinitrophenol	mg/kg	.333	0.223	66.9	10-109	WG549404
2,4-Dinitrotoluene	mg/kg	.333	0.251	75.3	54-103	WG549404
2,6-Dinitrotoluene	mg/kg	.333	0.241	72.3	53-99	WG549404
2-Chloronaphthalene	mg/kg	.333	0.241	72.3	55-96	WG549404
2-Chlorophenol	mg/kg	.333	0.225	67.5	52-88	WG549404
2-Nitrophenol	mg/kg	.333	0.244	73.3	55-106	WG549404
3,3-Dichlorobenzidine	mg/kg	.333	0.164	49.2	36-84	WG549404
4,6-Dinitro-2-methylphenol	mg/kg	.333	0.272	81.6	24-98	WG549404
4-Bromophenyl-phenylether	mg/kg	.333	0.244	73.3	58-111	WG549404
4-Chloro-3-methylphenol	mg/kg	.333	0.253	75.9	58-98	WG549404
4-Chlorophenyl-phenylether	mg/kg	.333	0.236	71.0	59-103	WG549404
4-Nitrophenol	mg/kg	.333	0.238	71.4	34-101	WG549404
Acenaphthene	mg/kg	.333	0.246	74.0	55-96	WG549404
Acenaphthylene	mg/kg	.333	0.251	75.2	61-107	WG549404
Anthracene	mg/kg	.333	0.242	72.6	58-105	WG549404
Benzidine	mg/kg	.333	0.0478	14.4	10-21	WG549404
Benzo(a)anthracene	mg/kg	.333	0.244	73.2	56-103	WG549404
Benzo(a)pyrene	mg/kg	.333	0.245	73.6	57-103	WG549404
Benzo(b)fluoranthene	mg/kg	.333	0.240	72.1	52-106	WG549404
Benzo(g,h,i)perylene	mg/kg	.333	0.254	76.4	47-112	WG549404
Benzo(k)fluoranthene	mg/kg	.333	0.251	75.4	53-104	WG549404
Benzylbutyl phthalate	mg/kg	.333	0.243	73.1	61-118	WG549404
Bis(2-chloroethoxy)methane	mg/kg	.333	0.255	76.6	58-104	WG549404
Bis(2-chloroethyl)ether	mg/kg	.333	0.235	70.6	51-103	WG549404
Bis(2-chloroisopropyl)ether	mg/kg	.333	0.235	70.7	56-95	WG549404
Bis(2-ethylhexyl)phthalate	mg/kg	.333	0.241	72.4	56-120	WG549404
Chrysene	mg/kg	.333	0.243	73.0	55-102	WG549404
Di-n-butyl phthalate	mg/kg	.333	0.235	70.7	59-114	WG549404
Di-n-octyl phthalate	mg/kg	.333	0.243	73.1	51-119	WG549404
Dibenz(a,h)anthracene	mg/kg	.333	0.247	74.2	49-111	WG549404
Diethyl phthalate	mg/kg	.333	0.257	77.2	61-105	WG549404
Dimethyl phthalate	mg/kg	.333	0.247	74.2	60-106	WG549404
Fluoranthene	mg/kg	.333	0.233	70.1	59-108	WG549404

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Level II

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Est. 1970

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Analyte	Units	Laboratory Control Known Val	Sample Result	% Rec	Limit	Batch
Fluorene	mg/kg	.333	0.231	69.4	59-100	WG549404
Hexachloro-1,3-butadiene	mg/kg	.333	0.243	73.1	53-106	WG549404
Hexachlorobenzene	mg/kg	.333	0.223	67.0	50-108	WG549404
Hexachlorocyclopentadiene	mg/kg	.333	0.275	82.7	36-117	WG549404
Hexachloroethane	mg/kg	.333	0.228	68.5	45-83	WG549404
Indeno(1,2,3-cd)pyrene	mg/kg	.333	0.252	75.7	50-110	WG549404
Isophorone	mg/kg	.333	0.211	63.3	51-99	WG549404
n-Nitrosodi-n-propylamine	mg/kg	.333	0.251	75.5	52-103	WG549404
n-Nitrosodimethylamine	mg/kg	.333	0.232	69.6	31-107	WG549404
n-Nitrosodiphenylamine	mg/kg	.333	0.241	72.2	57-121	WG549404
Naphthalene	mg/kg	.333	0.235	70.6	55-91	WG549404
Nitrobenzene	mg/kg	.333	0.254	76.2	47-92	WG549404
Pentachlorophenol	mg/kg	.333	0.188	56.3	10-89	WG549404
Phenanthrene	mg/kg	.333	0.237	71.1	55-103	WG549404
Phenol	mg/kg	.333	0.231	69.4	49-99	WG549404
Pyrene	mg/kg	.333	0.233	69.9	54-104	WG549404
2,4,6-Tribromophenol				69.19	16-136	WG549404
2-Fluorobiphenyl				71.40	37-119	WG549404
2-Fluorophenol				70.92	22-114	WG549404
Nitrobenzene-d5				75.77	20-114	WG549404
Phenol-d5				79.68	26-127	WG549404
p-Terphenyl-d14				71.79	15-174	WG549404
PCB 1016	mg/kg	.167	0.164	98.4	64-120	WG549310
PCB 1260	mg/kg	.167	0.193	115.	72-130	WG549310
Decachlorobiphenyl				116.4*	18.9-115.8	WG549310
Tetrachloro-m-xylene				102.1	31.8-115.7	WG549310
1,1,1,2-Tetrachloroethane	mg/l	.025	0.0240	96.1	75-134	WG549500
1,1,1-Trichloroethane	mg/l	.025	0.0247	98.7	67-137	WG549500
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0235	93.9	72-128	WG549500
1,1,2-Trichloroethane	mg/l	.025	0.0227	90.8	79-123	WG549500
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	.025	0.0245	98.2	51-149	WG549500
1,1-Dichloroethane	mg/l	.025	0.0237	94.9	67-133	WG549500
1,1-Dichloroethene	mg/l	.025	0.0238	95.2	60-130	WG549500
1,1-Dichloropropene	mg/l	.025	0.0213	85.0	68-132	WG549500
1,2,3-Trichlorobenzene	mg/l	.025	0.0256	102.	63-138	WG549500
1,2,3-Trichloropropane	mg/l	.025	0.0241	96.6	68-130	WG549500
1,2,3-Trimethylbenzene	mg/l	.025	0.0225	89.9	70-127	WG549500
1,2,4-Trichlorobenzene	mg/l	.025	0.0266	106.	65-137	WG549500
1,2,4-Trimethylbenzene	mg/l	.025	0.0238	95.4	72-135	WG549500
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0226	90.2	55-134	WG549500
1,2-Dibromoethane	mg/l	.025	0.0218	87.2	75-126	WG549500
1,2-Dichlorobenzene	mg/l	.025	0.0238	95.1	75-122	WG549500
1,2-Dichloroethane	mg/l	.025	0.0223	89.1	63-137	WG549500
1,2-Dichloropropane	mg/l	.025	0.0226	90.5	74-122	WG549500
1,3,5-Trimethylbenzene	mg/l	.025	0.0239	95.4	73-134	WG549500
1,3-Dichlorobenzene	mg/l	.025	0.0233	93.3	73-131	WG549500
1,3-Dichloropropane	mg/l	.025	0.0215	86.0	77-119	WG549500
1,4-Dichlorobenzene	mg/l	.025	0.0228	91.1	70-121	WG549500
2,2-Dichloropropane	mg/l	.025	0.0272	109.	46-151	WG549500
2-Butanone (MEK)	mg/l	.125	0.118	94.5	53-132	WG549500
2-Chloroethyl vinyl ether	mg/l	.125	0.113	90.2	0-171	WG549500
2-Chlorotoluene	mg/l	.025	0.0234	93.8	74-128	WG549500
4-Chlorotoluene	mg/l	.025	0.0233	93.2	74-130	WG549500
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.135	108.	60-142	WG549500
Acetone	mg/l	.125	0.127	101.	48-134	WG549500

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Analyte	Units	Laboratory Control Known Val	Sample Result	% Rec	Limit	Batch
Acrolein	mg/l	.125	0.0144	11.5	6-182	WG549500
Acrylonitrile	mg/l	.125	0.124	98.9	60-140	WG549500
Benzene	mg/l	.025	0.0216	86.4	67-126	WG549500
Bromobenzene	mg/l	.025	0.0223	89.2	76-123	WG549500
Bromodichloromethane	mg/l	.025	0.0232	93.0	68-133	WG549500
Bromoform	mg/l	.025	0.0279	112.	60-139	WG549500
Bromomethane	mg/l	.025	0.0208	83.1	45-175	WG549500
Carbon tetrachloride	mg/l	.025	0.0219	87.7	64-141	WG549500
Chlorobenzene	mg/l	.025	0.0216	86.4	77-125	WG549500
Chlorodibromomethane	mg/l	.025	0.0228	91.0	73-138	WG549500
Chloroethane	mg/l	.025	0.0182	72.8	49-155	WG549500
Chloroform	mg/l	.025	0.0239	95.8	66-126	WG549500
Chloromethane	mg/l	.025	0.0153	61.4	45-152	WG549500
cis-1,2-Dichloroethene	mg/l	.025	0.0232	93.0	72-128	WG549500
cis-1,3-Dichloropropene	mg/l	.025	0.0224	89.4	73-131	WG549500
Di-isopropyl ether	mg/l	.025	0.0250	100.	63-139	WG549500
Dibromomethane	mg/l	.025	0.0225	90.1	73-125	WG549500
Dichlorodifluoromethane	mg/l	.025	0.0171	68.3	39-189	WG549500
Ethylbenzene	mg/l	.025	0.0233	93.0	76-129	WG549500
Hexachloro-1,3-butadiene	mg/l	.025	0.0237	94.9	67-135	WG549500
Isopropylbenzene	mg/l	.025	0.0264	106.	73-132	WG549500
Methyl tert-butyl ether	mg/l	.025	0.0269	107.	51-142	WG549500
Methylene Chloride	mg/l	.025	0.0218	87.4	64-125	WG549500
n-Butylbenzene	mg/l	.025	0.0251	100.	63-142	WG549500
n-Propylbenzene	mg/l	.025	0.0233	93.3	71-132	WG549500
Naphthalene	mg/l	.025	0.0262	105.	56-145	WG549500
p-Isopropyltoluene	mg/l	.025	0.0245	98.0	68-138	WG549500
sec-Butylbenzene	mg/l	.025	0.0242	96.8	70-135	WG549500
Styrene	mg/l	.025	0.0174	69.5*	78-130	WG549500
tert-Butylbenzene	mg/l	.025	0.0216	86.4	72-134	WG549500
Tetrachloroethene	mg/l	.025	0.0204	81.8	67-135	WG549500
Toluene	mg/l	.025	0.0212	84.9	72-122	WG549500
trans-1,2-Dichloroethene	mg/l	.025	0.0206	82.5	67-129	WG549500
trans-1,3-Dichloropropene	mg/l	.025	0.0224	89.8	66-137	WG549500
Trichloroethene	mg/l	.025	0.0215	86.0	74-126	WG549500
Trichlorofluoromethane	mg/l	.025	0.0202	80.8	54-156	WG549500
Vinyl chloride	mg/l	.025	0.0168	67.3	55-153	WG549500
Xylenes, Total	mg/l	.075	0.0696	92.8	75-128	WG549500
4-Bromofluorobenzene				101.8	75-128	WG549500
Dibromofluoromethane				104.7	79-125	WG549500
Toluene-d8				105.6	87-114	WG549500
Trichloroethene	mg/l	.025	0.0186	74.4	74-126	WG549466
4-Bromofluorobenzene				94.62	75-128	WG549466
Dibromofluoromethane				115.5	79-125	WG549466
Toluene-d8				106.3	87-114	WG549466
Mercury, Dissolved	mg/l	.003	0.00293	97.7	85-115	WG548951
Diesel	mg/kg	30	28.8	96.1	50-150	WG549376
Motor Oil	mg/kg	30	30.9	103.	50-150	WG549376
o-terphenyl				94.62	50-150	WG549376
Diesel	mg/l	.75	0.514	68.6	50-150	WG549303
Motor Oil	mg/l	.75	0.644	85.8	50-150	WG549303

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Analyte	Units	Laboratory Control Known Val	Sample Result	% Rec	Limit	Batch
o-terphenyl				63.66	50-150	
Barium, Dissolved	mg/l	1.13	1.12	99.1	85-115	WG549777
1,2,4-Trichlorobenzene	mg/kg	.333	0.215	64.6	48-87	WG549703
2,4,6-Trichlorophenol	mg/kg	.333	0.242	72.6	50-98	WG549703
2,4-Dichlorophenol	mg/kg	.333	0.245	73.5	56-96	WG549703
2,4-Dimethylphenol	mg/kg	.333	0.229	68.8	52-101	WG549703
2,4-Dinitrophenol	mg/kg	.333	0.174	52.1	10-109	WG549703
2,4-Dinitrotoluene	mg/kg	.333	0.269	80.7	54-103	WG549703
2,6-Dinitrotoluene	mg/kg	.333	0.254	76.2	53-99	WG549703
2-Chloronaphthalene	mg/kg	.333	0.248	74.3	55-96	WG549703
2-Chlorophenol	mg/kg	.333	0.235	70.5	52-88	WG549703
2-Nitrophenol	mg/kg	.333	0.227	68.1	55-106	WG549703
3,3-Dichlorobenzidine	mg/kg	.333	0.218	65.5	36-84	WG549703
4,6-Dinitro-2-methylphenol	mg/kg	.333	0.223	67.0	24-98	WG549703
4-Bromophenyl-phenylether	mg/kg	.333	0.240	72.0	58-111	WG549703
4-Chloro-3-methylphenol	mg/kg	.333	0.251	75.5	58-98	WG549703
4-Chlorophenyl-phenylether	mg/kg	.333	0.251	75.3	59-103	WG549703
4-Nitrophenol	mg/kg	.333	0.246	73.8	34-101	WG549703
Acenaphthene	mg/kg	.333	0.253	76.0	55-96	WG549703
Acenaphthylene	mg/kg	.333	0.268	80.5	61-107	WG549703
Anthracene	mg/kg	.333	0.265	79.5	58-105	WG549703
Benzidine	mg/kg	.333	0.0183	5.50*	10-21	WG549703
Benzo(a)anthracene	mg/kg	.333	0.278	83.6	56-103	WG549703
Benzo(a)pyrene	mg/kg	.333	0.277	83.2	57-103	WG549703
Benzo(b)fluoranthene	mg/kg	.333	0.274	82.2	52-106	WG549703
Benzo(g,h,i)perylene	mg/kg	.333	0.250	75.1	47-112	WG549703
Benzo(k)fluoranthene	mg/kg	.333	0.260	78.2	53-104	WG549703
Benzylbutyl phthalate	mg/kg	.333	0.286	86.0	61-118	WG549703
Bis(2-chlorethoxy)methane	mg/kg	.333	0.259	77.9	58-104	WG549703
Bis(2-chloroethyl)ether	mg/kg	.333	0.248	74.4	51-103	WG549703
Bis(2-chloroisopropyl)ether	mg/kg	.333	0.224	67.3	56-95	WG549703
Bis(2-ethylhexyl)phthalate	mg/kg	.333	0.292	87.7	56-120	WG549703
Chrysene	mg/kg	.333	0.275	82.6	55-102	WG549703
Di-n-butyl phthalate	mg/kg	.333	0.274	82.4	59-114	WG549703
Di-n-octyl phthalate	mg/kg	.333	0.285	85.7	51-119	WG549703
Dibenz(a,h)anthracene	mg/kg	.333	0.246	73.9	49-111	WG549703
Diethyl phthalate	mg/kg	.333	0.264	79.3	61-105	WG549703
Dimethyl phthalate	mg/kg	.333	0.274	82.2	60-106	WG549703
Fluoranthene	mg/kg	.333	0.248	74.4	59-108	WG549703
Fluorene	mg/kg	.333	0.254	76.3	59-100	WG549703
Hexachloro-1,3-butadiene	mg/kg	.333	0.234	70.4	53-106	WG549703
Hexachlorobenzene	mg/kg	.333	0.222	66.6	50-108	WG549703
Hexachlorocyclopentadiene	mg/kg	.333	0.222	66.8	36-117	WG549703
Hexachloroethane	mg/kg	.333	0.237	71.1	45-83	WG549703
Indeno(1,2,3-cd)pyrene	mg/kg	.333	0.254	76.3	50-110	WG549703
Isophorone	mg/kg	.333	0.212	63.6	51-99	WG549703
n-Nitrosodi-n-propylamine	mg/kg	.333	0.267	80.1	52-103	WG549703
n-Nitrosodimethylamine	mg/kg	.333	0.291	87.3	31-107	WG549703
n-Nitrosodiphenylamine	mg/kg	.333	0.253	76.1	57-121	WG549703
Naphthalene	mg/kg	.333	0.234	70.2	55-91	WG549703
Nitrobenzene	mg/kg	.333	0.247	74.3	47-92	WG549703
Pentachlorophenol	mg/kg	.333	0.203	61.0	10-89	WG549703
Phenanthrene	mg/kg	.333	0.250	74.9	55-103	WG549703
Phenol	mg/kg	.333	0.247	74.0	49-99	WG549703
Pyrene	mg/kg	.333	0.269	80.8	54-104	WG549703
2,4,6-Tribromophenol				76.09	16-136	WG549703
2-Fluorobiphenyl				75.97	37-119	WG549703

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Analyte	Laboratory Control Sample Duplicate				Limit	RPD	Limit	Batch
	Units	Result	Ref	%Rec				
2-Fluorophenol					75.89		22-114	
Nitrobenzene-d5					82.12		20-114	
Phenol-d5					86.68		26-127	
p-Terphenyl-d14					82.13		15-174	

Analyte	Laboratory Control Sample Duplicate				Limit	RPD	Limit	Batch
	Units	Result	Ref	%Rec				
Diesel	mg/kg	23.4	24.1	78.0	50-150	3.07	20	WG549312
Motor Oil	mg/kg	22.4	23.0	74.0	50-150	2.65	25	WG549312
Total (C7-C40)	mg/kg	45.7	47.1	4575*	-	2.86*	0	WG549312
o-terphenyl				69.91	50-150			WG549312
1,1,1,2-Tetrachloroethane	mg/l	0.0258	0.0245	103.	75-134	5.27	20	WG549212
1,1,1-Trichloroethane	mg/l	0.0186	0.0185	74.0	67-137	0.520	20	WG549212
1,1,2,2-Tetrachloroethane	mg/l	0.0232	0.0219	93.0	72-128	5.92	20	WG549212
1,1,2-Trichloroethane	mg/l	0.0238	0.0230	95.0	79-123	3.71	20	WG549212
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	0.0178	0.0177	71.0	51-149	0.660	20	WG549212
1,1-Dichloroethane	mg/l	0.0182	0.0183	73.0	67-133	0.570	20	WG549212
1,1-Dichloroethene	mg/l	0.0182	0.0176	73.0	60-130	3.31	20	WG549212
1,1-Dichloropropene	mg/l	0.0160	0.0157	64*	68-132	1.84	20	WG549212
1,2,3-Trichlorobenzene	mg/l	0.0234	0.0227	94.0	63-138	2.87	20	WG549212
1,2,3-Trichloropropane	mg/l	0.0233	0.0225	93.0	68-130	3.69	20	WG549212
1,2,3-Trimethylbenzene	mg/l	0.0205	0.0202	82.0	70-127	1.57	20	WG549212
1,2,4-Trichlorobenzene	mg/l	0.0242	0.0237	97.0	65-137	1.86	20	WG549212
1,2,4-Trimethylbenzene	mg/l	0.0223	0.0215	89.0	72-135	3.42	20	WG549212
1,2-Dibromo-3-Chloropropane	mg/l	0.0239	0.0217	96.0	55-134	9.81	20	WG549212
1,2-Dibromoethane	mg/l	0.0232	0.0221	93.0	75-126	4.74	20	WG549212
1,2-Dichlorobenzene	mg/l	0.0223	0.0224	89.0	75-122	0.240	20	WG549212
1,2-Dichloroethane	mg/l	0.0166	0.0166	66.0	63-137	0.190	20	WG549212
1,2-Dichloropropane	mg/l	0.0188	0.0189	75.0	74-122	0.360	20	WG549212
1,3,5-Trimethylbenzene	mg/l	0.0232	0.0219	93.0	73-134	5.59	20	WG549212
1,3-Dichlorobenzene	mg/l	0.0242	0.0232	97.0	73-131	4.38	20	WG549212
1,3-Dichloropropane	mg/l	0.0219	0.0208	88.0	77-119	5.44	20	WG549212
1,4-Dichlorobenzene	mg/l	0.0224	0.0222	89.0	70-121	0.630	20	WG549212
2,2-Dichloropropane	mg/l	0.0201	0.0198	80.0	46-151	1.54	20	WG549212
2-Butanone (MEK)	mg/l	0.0856	0.0798	68.0	53-132	6.94	20	WG549212
2-Chloroethyl vinyl ether	mg/l	0.0959	0.0935	77.0	0-171	2.58	27	WG549212
2-Chlorotoluene	mg/l	0.0222	0.0215	89.0	74-128	3.24	20	WG549212
4-Chlorotoluene	mg/l	0.0222	0.0213	89.0	74-130	4.00	20	WG549212
4-Methyl-2-pentanone (MIBK)	mg/l	0.0967	0.0930	77.0	60-142	3.86	20	WG549212
Acetone	mg/l	0.0888	0.0839	71.0	48-134	5.66	20	WG549212
Acrolein	mg/l	0.0181	0.0186	14.0	6-182	2.84	39	WG549212
Acrylonitrile	mg/l	0.0887	0.0854	71.0	60-140	3.74	20	WG549212
Benzene	mg/l	0.0175	0.0174	70.0	67-126	0.180	20	WG549212
Bromobenzene	mg/l	0.0218	0.0209	87.0	76-123	4.41	20	WG549212
Bromodichloromethane	mg/l	0.0199	0.0200	80.0	68-133	0.660	20	WG549212
Bromoform	mg/l	0.0233	0.0219	93.0	60-139	6.27	20	WG549212
Bromomethane	mg/l	0.0139	0.0136	56.0	45-175	2.36	20	WG549212
Carbon tetrachloride	mg/l	0.0188	0.0186	75.0	64-141	1.23	20	WG549212
Chlorobenzene	mg/l	0.0233	0.0225	93.0	77-125	3.57	20	WG549212
Chlorodibromomethane	mg/l	0.0245	0.0235	98.0	73-138	4.35	20	WG549212
Chloroethane	mg/l	0.0137	0.0134	55.0	49-155	2.50	20	WG549212
Chloroform	mg/l	0.0187	0.0189	75.0	66-126	0.920	20	WG549212
Chloromethane	mg/l	0.0124	0.0122	50.0	45-152	2.20	20	WG549212
cis-1,2-Dichloroethene	mg/l	0.0190	0.0190	76.0	72-128	0.100	20	WG549212
cis-1,3-Dichloropropene	mg/l	0.0203	0.0201	81.0	73-131	1.16	20	WG549212
Di-isopropyl ether	mg/l	0.0174	0.0176	69.0	63-139	1.14	20	WG549212

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Est. 1970

Quality Assurance Report
Level II

L529577

August 11, 2011

Analyte	Laboratory Control Sample Duplicate				Limit	RPD	Limit	Batch
	Units	Result	Ref	%Rec				
Dibromomethane	mg/l	0.0190	0.0190	76.0	73-125	0.270	20	WG549212
Dichlorodifluoromethane	mg/l	0.0128	0.0125	51.0	39-189	1.60	24	WG549212
Ethylbenzene	mg/l	0.0229	0.0220	92.0	76-129	3.88	20	WG549212
Hexachloro-1,3-butadiene	mg/l	0.0222	0.0220	89.0	67-135	1.15	20	WG549212
Isopropylbenzene	mg/l	0.0253	0.0243	101.	73-132	4.07	20	WG549212
Methyl tert-butyl ether	mg/l	0.0198	0.0198	79.0	51-142	0.290	20	WG549212
Methylene Chloride	mg/l	0.0187	0.0187	75.0	64-125	0.210	20	WG549212
n-Butylbenzene	mg/l	0.0204	0.0200	82.0	63-142	1.79	20	WG549212
n-Propylbenzene	mg/l	0.0222	0.0212	89.0	71-132	4.82	20	WG549212
Naphthalene	mg/l	0.0231	0.0218	92.0	56-145	5.42	20	WG549212
p-Isopropyltoluene	mg/l	0.0235	0.0222	94.0	68-138	6.07	20	WG549212
sec-Butylbenzene	mg/l	0.0233	0.0219	93.0	70-135	6.24	20	WG549212
Styrene	mg/l	0.0168	0.0163	67*	78-130	2.52	20	WG549212
tert-Butylbenzene	mg/l	0.0241	0.0229	96.0	72-134	4.95	20	WG549212
Tetrachloroethene	mg/l	0.0220	0.0211	88.0	67-135	4.24	20	WG549212
Toluene	mg/l	0.0190	0.0190	76.0	72-122	0.110	20	WG549212
trans-1,2-Dichloroethene	mg/l	0.0169	0.0170	68.0	67-129	0.650	20	WG549212
trans-1,3-Dichloropropene	mg/l	0.0173	0.0173	69.0	66-137	0.210	20	WG549212
Trichlorofluoromethane	mg/l	0.0149	0.0146	59.0	54-156	1.84	20	WG549212
Vinyl chloride	mg/l	0.0125	0.0124	50*	55-153	1.18	20	WG549212
Xylenes, Total	mg/l	0.0678	0.0659	90.0	75-128	2.89	20	WG549212
4-Bromofluorobenzene				104.0	75-128			WG549212
Dibromofluoromethane				90.79	79-125			WG549212
Toluene-d8				99.75	87-114			WG549212
1,2,4-Trichlorobenzene	mg/l	0.00628	0.00663	63.0	34-97	5.47	21	WG549127
2,4,6-Trichlorophenol	mg/l	0.00793	0.00802	79.0	38-113	1.15	29	WG549127
2,4-Dichlorophenol	mg/l	0.00768	0.00794	77.0	46-105	3.36	20	WG549127
2,4-Dimethylphenol	mg/l	0.00739	0.00711	74.0	47-108	3.87	20	WG549127
2,4-Dinitrophenol	mg/l	0.00797	0.00754	80.0	10-121	5.64	40	WG549127
2,4-Dinitrotoluene	mg/l	0.00835	0.00798	84.0	59-117	4.51	20	WG549127
2,6-Dinitrotoluene	mg/l	0.00821	0.00799	82.0	57-110	2.71	20	WG549127
2-Chloronaphthalene	mg/l	0.00759	0.00752	76.0	47-106	0.877	20	WG549127
2-Chlorophenol	mg/l	0.00582	0.00639	58.0	37-90	9.31	21	WG549127
2-Nitrophenol	mg/l	0.00790	0.00815	79.0	40-112	3.15	22	WG549127
3,3-Dichlorobenzidine	mg/l	0.00756	0.00693	76.0	58-116	8.61	20	WG549127
4,6-Dinitro-2-methylphenol	mg/l	0.00895	0.00861	90.0	21-119	3.94	40	WG549127
4-Bromophenyl-phenylether	mg/l	0.00819	0.00812	82.0	63-120	0.831	20	WG549127
4-Chloro-3-methylphenol	mg/l	0.00755	0.00734	75.0	50-105	2.76	20	WG549127
4-Chlorophenyl-phenylether	mg/l	0.00740	0.00736	74.0	58-115	0.544	20	WG549127
4-Nitrophenol	mg/l	0.00170	0.00214	17.0	10-53	23.3	40	WG549127
Acenaphthene	mg/l	0.00793	0.00802	79.0	52-107	1.15	20	WG549127
Acenaphthylene	mg/l	0.00820	0.00850	82.0	55-119	3.65	20	WG549127
Anthracene	mg/l	0.00892	0.00814	89.0	65-114	9.20	20	WG549127
Benzidine	mg/l	0.00252	0.00243	25.0	10-55	3.53	40	WG549127
Benzo(a)anthracene	mg/l	0.00910	0.00856	91.0	68-113	6.20	20	WG549127
Benzo(a)pyrene	mg/l	0.00870	0.00817	87.0	68-115	6.20	20	WG549127
Benzo(b)fluoranthene	mg/l	0.00906	0.00793	91.0	67-114	13.3	20	WG549127
Benzo(g,h,i)perylene	mg/l	0.00711	0.00706	71.0	52-132	0.702	20	WG549127
Benzo(k)fluoranthene	mg/l	0.00888	0.00853	89.0	62-116	3.96	20	WG549127
Benzylbutyl phthalate	mg/l	0.00354	0.00424	35.0	12-166	18.0	20	WG549127
Bis(2-chlorethoxy)methane	mg/l	0.00850	0.00852	85.0	56-116	0.279	20	WG549127
Bis(2-chloroethyl)ether	mg/l	0.00644	0.00718	64.0	39-109	10.9	23	WG549127
Bis(2-chloroisopropyl)ether	mg/l	0.00714	0.00770	71.0	43-108	7.57	20	WG549127
Bis(2-ethylhexyl)phthalate	mg/l	0.00958	0.00867	96.0	61-147	10.0	20	WG549127
Chrysene	mg/l	0.00917	0.00818	92.0	65-114	11.4	20	WG549127
Di-n-butyl phthalate	mg/l	0.00473	0.00586	47*	56-133	21.4*	20	WG549127
Di-n-octyl phthalate	mg/l	0.00917	0.00823	92.0	59-143	10.8	20	WG549127

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Est. 1970

Quality Assurance Report
Level II

L529577

August 11, 2011

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Dibenz(a,h)anthracene	mg/l	0.00729	0.00716	73.0	54-130	1.83	20	WG549127
Diethyl phthalate	mg/l	0.00368	0.00515	37.0	33-136	33.2*	20	WG549127
Dimethyl phthalate	mg/l	0.00234	0.00281	23.0	10-152	18.2	22	WG549127
Fluoranthene	mg/l	0.00846	0.00784	85.0	66-120	7.67	20	WG549127
Fluorene	mg/l	0.00782	0.00779	78.0	58-110	0.386	20	WG549127
Hexachloro-1,3-butadiene	mg/l	0.00656	0.00684	66.0	34-115	4.16	22	WG549127
Hexachlorobenzene	mg/l	0.00733	0.00716	73.0	55-117	2.40	20	WG549127
Hexachlorocyclopentadiene	mg/l	0.00485	0.00542	48.0	20-121	11.3	27	WG549127
Hexachloroethane	mg/l	0.00629	0.00704	63.0	24-93	11.3	25	WG549127
Indeno(1,2,3-cd)pyrene	mg/l	0.00760	0.00734	76.0	56-129	3.47	20	WG549127
Isophorone	mg/l	0.00732	0.00720	73.0	55-108	1.75	20	WG549127
n-Nitrosodi-n-propylamine	mg/l	0.00794	0.00793	79.0	50-115	0.0788	20	WG549127
n-Nitrosodimethylamine	mg/l	0.00390	0.00478	39.0	12-68	20.3	31	WG549127
n-Nitrosodiphenylamine	mg/l	0.00855	0.00808	85.0	55-98	5.61	20	WG549127
Naphthalene	mg/l	0.00729	0.00763	73.0	42-103	4.62	20	WG549127
Nitrobenzene	mg/l	0.00795	0.00834	80.0	39-102	4.72	20	WG549127
Pentachlorophenol	mg/l	0.00797	0.00759	80.0	10-101	4.96	40	WG549127
Phenanthrene	mg/l	0.00837	0.00822	84.0	61-110	1.85	20	WG549127
Phenol	mg/l	0.00192	0.00214	19.0	10-53	10.7	20	WG549127
Pyrene	mg/l	0.00941	0.00847	94.0	65-116	10.5	20	WG549127
2,4,6-Tribromophenol				87.15	16-147			WG549127
2-Fluorobiphenyl				75.68	29-127			WG549127
2-Fluorophenol				31.43	10-75			WG549127
Nitrobenzene-d5				80.08	17-119			WG549127
Phenol-d5				21.57	10-63			WG549127
p-Terphenyl-d14				85.32	40-174			WG549127
1,2,4-Trichlorobenzene	mg/l	0.00621	0.00631	62.0	34-97	1.60	21	WG549308
2,4,6-Trichlorophenol	mg/l	0.00727	0.00749	73.0	38-113	2.90	29	WG549308
2,4-Dichlorophenol	mg/l	0.00731	0.00743	73.0	46-105	1.61	20	WG549308
2,4-Dimethylphenol	mg/l	0.00684	0.00707	68.0	47-108	3.33	20	WG549308
2,4-Dinitrophenol	mg/l	0.00679	0.00723	68.0	10-121	6.28	40	WG549308
2,4-Dinitrotoluene	mg/l	0.00843	0.00849	84.0	59-117	0.737	20	WG549308
2,6-Dinitrotoluene	mg/l	0.00820	0.00886	82.0	57-110	7.71	20	WG549308
2-Chloronaphthalene	mg/l	0.00753	0.00768	75.0	47-106	1.94	20	WG549308
2-Chlorophenol	mg/l	0.00636	0.00613	64.0	37-90	3.74	21	WG549308
2-Nitrophenol	mg/l	0.00743	0.00727	74.0	40-112	2.20	22	WG549308
3,3-Dichlorobenzidine	mg/l	0.00728	0.00668	73.0	58-116	8.60	20	WG549308
4,6-Dinitro-2-methylphenol	mg/l	0.00770	0.00774	77.0	21-119	0.502	40	WG549308
4-Bromophenyl-phenylether	mg/l	0.00795	0.00795	80.0	63-120	0.0312	20	WG549308
4-Chloro-3-methylphenol	mg/l	0.00711	0.00738	71.0	50-105	3.72	20	WG549308
4-Chlorophenyl-phenylether	mg/l	0.00771	0.00744	77.0	58-115	3.52	20	WG549308
4-Nitrophenol	mg/l	0.00264	0.00324	26.0	10-53	20.7	40	WG549308
Acenaphthene	mg/l	0.00810	0.00795	81.0	52-107	1.83	20	WG549308
Acenaphthylene	mg/l	0.00851	0.00820	85.0	55-119	3.73	20	WG549308
Anthracene	mg/l	0.00860	0.00847	86.0	65-114	1.50	20	WG549308
Benzo(a)anthracene	mg/l	0.00150	0.00117	15.0	10-55	25.4	40	WG549308
Benzo(a)pyrene	mg/l	0.00890	0.00886	89.0	68-113	0.366	20	WG549308
Benzo(b)fluoranthene	mg/l	0.00880	0.00883	88.0	68-115	0.319	20	WG549308
Benzo(g,h,i)perylene	mg/l	0.00864	0.00851	86.0	67-114	1.56	20	WG549308
Benzo(k)fluoranthene	mg/l	0.00739	0.00735	74.0	52-132	0.432	20	WG549308
Benzylbutyl phthalate	mg/l	0.00909	0.00896	91.0	62-116	1.38	20	WG549308
Benzylbutyl phthalate	mg/l	0.00717	0.00709	72.0	12-166	1.09	20	WG549308
Bis(2-chloroethoxy)methane	mg/l	0.00819	0.00867	82.0	56-116	5.63	20	WG549308
Bis(2-chloroethyl)ether	mg/l	0.00677	0.00678	68.0	39-109	0.104	23	WG549308
Bis(2-chloroisopropyl)ether	mg/l	0.00728	0.00713	73.0	43-108	2.06	20	WG549308
Bis(2-ethylhexyl)phthalate	mg/l	0.00947	0.00945	95.0	61-147	0.264	20	WG549308
Chrysene	mg/l	0.00888	0.00894	89.0	65-114	0.697	20	WG549308

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Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
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Di-n-butyl phthalate	mg/l	0.00754	0.00750	75.0	56-133	0.451	20	WG549308
Di-n-octyl phthalate	mg/l	0.00905	0.00887	90.0	59-143	1.94	20	WG549308
Dibenz(a,h)anthracene	mg/l	0.00753	0.00757	75.0	54-130	0.586	20	WG549308
Diethyl phthalate	mg/l	0.00682	0.00659	68.0	33-136	3.42	20	WG549308
Dimethyl phthalate	mg/l	0.00470	0.00469	47.0	10-152	0.240	22	WG549308
Fluoranthene	mg/l	0.00816	0.00813	82.0	66-120	0.347	20	WG549308
Fluorene	mg/l	0.00807	0.00793	81.0	58-110	1.80	20	WG549308
Hexachloro-1,3-butadiene	mg/l	0.00628	0.00672	63.0	34-115	6.74	22	WG549308
Hexachlorobenzene	mg/l	0.00684	0.00689	68.0	55-117	0.715	20	WG549308
Hexachlorocyclopentadiene	mg/l	0.00571	0.00562	57.0	20-121	1.53	27	WG549308
Hexachloroethane	mg/l	0.00623	0.00620	62.0	24-93	0.533	25	WG549308
Indeno(1,2,3-cd)pyrene	mg/l	0.00776	0.00779	78.0	56-129	0.409	20	WG549308
Isophorone	mg/l	0.00720	0.00741	72.0	55-108	2.99	20	WG549308
n-Nitrosodi-n-propylamine	mg/l	0.00803	0.00793	80.0	50-115	1.24	20	WG549308
n-Nitrosodimethylamine	mg/l	0.00534	0.00532	53.0	12-68	0.358	31	WG549308
n-Nitrosodiphenylamine	mg/l	0.00822	0.00819	82.0	55-98	0.306	20	WG549308
Naphthalene	mg/l	0.00699	0.00719	70.0	42-103	2.77	20	WG549308
Nitrobenzene	mg/l	0.00789	0.00806	79.0	39-102	2.07	20	WG549308
Pentachlorophenol	mg/l	0.00673	0.00690	67.0	10-101	2.54	40	WG549308
Phenanthrene	mg/l	0.00828	0.00821	83.0	61-110	0.887	20	WG549308
Phenol	mg/l	0.00313	0.00308	31.0	10-53	1.54	20	WG549308
Pyrene	mg/l	0.00916	0.00901	92.0	65-116	1.62	20	WG549308
2,4,6-Tribromophenol				77.42	16-147			WG549308
2-Fluorobiphenyl				73.59	29-127			WG549308
2-Fluorophenol				43.93	10-75			WG549308
Nitrobenzene-d5				76.67	17-119			WG549308
Phenol-d5				35.05	10-63			WG549308
p-Terphenyl-d14				81.02	40-174			WG549308
1,1,1,2-Tetrachloroethane	mg/kg	0.0254	0.0270	102.	73-134	5.94	20	WG549226
1,1,1-Trichloroethane	mg/kg	0.0217	0.0243	87.0	62-135	10.9	20	WG549226
1,1,2,2-Tetrachloroethane	mg/kg	0.0243	0.0242	97.0	74-129	0.460	20	WG549226
1,1,2-Trichloroethane	mg/kg	0.0260	0.0249	104.	77-124	4.29	20	WG549226
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	0.0255	0.0294	102.	49-155	14.0	20	WG549226
1,1-Dichloroethane	mg/kg	0.0211	0.0229	84.0	61-134	8.03	20	WG549226
1,1-Dichloroethene	mg/kg	0.0271	0.0314	108.	53-136	14.5	20	WG549226
1,1-Dichloropropene	mg/kg	0.0210	0.0229	84.0	63-132	8.40	20	WG549226
1,2,3-Trichlorobenzene	mg/kg	0.0234	0.0262	94.0	62-146	11.3	20	WG549226
1,2,3-Trichloropropane	mg/kg	0.0260	0.0228	104.	70-133	13.0	20	WG549226
1,2,3-Trimethylbenzene	mg/kg	0.0197	0.0215	79.0	73-126	8.29	20	WG549226
1,2,4-Trichlorobenzene	mg/kg	0.0245	0.0279	98.0	61-148	12.7	20	WG549226
1,2,4-Trimethylbenzene	mg/kg	0.0228	0.0239	91.0	68-135	4.58	20	WG549226
1,2-Dibromo-3-Chloropropane	mg/kg	0.0253	0.0271	101.	61-134	6.99	21	WG549226
1,2-Dibromoethane	mg/kg	0.0258	0.0248	103.	76-127	4.04	20	WG549226
1,2-Dichlorobenzene	mg/kg	0.0228	0.0244	91.0	77-123	6.69	20	WG549226
1,2-Dichloroethane	mg/kg	0.0187	0.0198	75.0	58-141	5.75	20	WG549226
1,2-Dichloropropane	mg/kg	0.0206	0.0212	82.0	71-128	2.82	20	WG549226
1,3,5-Trimethylbenzene	mg/kg	0.0234	0.0253	94.0	71-133	7.93	20	WG549226
1,3-Dichlorobenzene	mg/kg	0.0255	0.0259	102.	71-132	1.67	20	WG549226
1,3-Dichloropropane	mg/kg	0.0239	0.0229	96.0	76-120	4.29	20	WG549226
1,4-Dichlorobenzene	mg/kg	0.0229	0.0244	92.0	72-123	6.24	20	WG549226
2,2-Dichloropropane	mg/kg	0.0217	0.0248	87.0	50-147	13.0	20	WG549226
2-Butanone (MEK)	mg/kg	0.107	0.0994	85.0	51-131	7.05	25	WG549226
2-Chloroethyl vinyl ether	mg/kg	0.113	0.0989	90.0	0-188	13.5	39	WG549226
2-Chlorotoluene	mg/kg	0.0232	0.0244	93.0	73-128	5.02	20	WG549226
4-Chlorotoluene	mg/kg	0.0236	0.0239	94.0	72-129	1.35	20	WG549226
4-Methyl-2-pentanone (MIBK)	mg/kg	0.124	0.118	99.0	61-143	5.13	23	WG549226
Acetone	mg/kg	0.124	0.126	99.0	44-140	1.60	25	WG549226

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Est. 1970

Terracon - Cedar Rapids
Kirk Johnson
2640 12th Street SW

Quality Assurance Report
Level II

Cedar Rapids, IA 52404

August 11, 2011

L529577

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Acrylonitrile	mg/kg	0.114	0.118	91.0	55-143	3.63	20	WG549226
Benzene	mg/kg	0.0208	0.0220	83.0	65-128	5.90	20	WG549226
Bromobenzene	mg/kg	0.0224	0.0227	90.0	75-123	1.37	20	WG549226
Bromodichloromethane	mg/kg	0.0208	0.0214	83.0	66-126	2.77	20	WG549226
Bromoform	mg/kg	0.0290	0.0283	116.	64-139	2.67	20	WG549226
Bromomethane	mg/kg	0.0211	0.0237	84.0	41-175	11.5	20	WG549226
Carbon tetrachloride	mg/kg	0.0208	0.0241	83.0	60-140	14.6	20	WG549226
Chlorobenzene	mg/kg	0.0245	0.0246	98.0	75-125	0.490	20	WG549226
Chlorodibromomethane	mg/kg	0.0259	0.0259	104.	72-137	0.210	20	WG549226
Chloroethane	mg/kg	0.0213	0.0250	85.0	44-159	15.8	20	WG549226
Chloroform	mg/kg	0.0213	0.0229	85.0	63-123	7.46	20	WG549226
Chloromethane	mg/kg	0.0180	0.0203	72.0	42-149	12.2	20	WG549226
cis-1,2-Dichloroethene	mg/kg	0.0227	0.0252	91.0	71-129	10.4	20	WG549226
cis-1,3-Dichloropropene	mg/kg	0.0223	0.0213	89.0	73-132	4.83	20	WG549226
Di-isopropyl ether	mg/kg	0.0192	0.0203	77.0	59-143	5.65	20	WG549226
Dibromomethane	mg/kg	0.0234	0.0242	94.0	70-130	3.24	20	WG549226
Dichlorodifluoromethane	mg/kg	0.0199	0.0235	80.0	26-186	16.6	22	WG549226
Ethylbenzene	mg/kg	0.0244	0.0259	98.0	74-128	5.99	20	WG549226
Hexachloro-1,3-butadiene	mg/kg	0.0238	0.0264	95.0	65-137	10.2	20	WG549226
Isopropylbenzene	mg/kg	0.0263	0.0282	105.	73-130	6.71	20	WG549226
Methyl tert-butyl ether	mg/kg	0.0222	0.0236	89.0	44-148	6.12	20	WG549226
Methylene Chloride	mg/kg	0.0221	0.0250	88.0	57-129	12.3	20	WG549226
n-Butylbenzene	mg/kg	0.0207	0.0231	83.0	60-145	11.2	20	WG549226
n-Propylbenzene	mg/kg	0.0238	0.0249	95.0	71-132	4.61	20	WG549226
Naphthalene	mg/kg	0.0230	0.0252	92.0	61-142	9.11	20	WG549226
p-Isopropyltoluene	mg/kg	0.0247	0.0264	99.0	67-138	6.59	20	WG549226
sec-Butylbenzene	mg/kg	0.0240	0.0258	96.0	71-134	7.09	20	WG549226
Styrene	mg/kg	0.0175	0.0175	70*	76-133	0.390	20	WG549226
tert-Butylbenzene	mg/kg	0.0252	0.0268	101.	72-132	5.83	20	WG549226
Tetrachloroethene	mg/kg	0.0261	0.0275	104.	65-135	5.39	20	WG549226
Toluene	mg/kg	0.0220	0.0222	88.0	70-120	0.960	20	WG549226
trans-1,2-Dichloroethene	mg/kg	0.0214	0.0245	86.0	61-133	13.5	20	WG549226
trans-1,3-Dichloropropene	mg/kg	0.0211	0.0198	84.0	70-135	6.76	20	WG549226
Trichloroethene	mg/kg	0.0242	0.0261	97.0	71-126	7.63	20	WG549226
Trichlorofluoromethane	mg/kg	0.0228	0.0261	91.0	52-147	13.5	20	WG549226
Vinyl chloride	mg/kg	0.0189	0.0216	76.0	50-151	13.6	20	WG549226
Xylenes, Total	mg/kg	0.0738	0.0775	98.0	74-127	4.98	20	WG549226
4-Bromofluorobenzene				100.8	59-140			WG549226
Dibromofluoromethane				92.10	63-139			WG549226
Toluene-d8				98.33	84-116			WG549226
1,2,4-Trichlorobenzene	mg/kg	0.205	0.222	62.0	48-87	8.11	20	WG549404
2,4,6-Trichlorophenol	mg/kg	0.214	0.232	64.0	50-98	7.96	20	WG549404
2,4-Dichlorophenol	mg/kg	0.238	0.234	71.0	56-96	1.42	20	WG549404
2,4-Dimethylphenol	mg/kg	0.241	0.243	72.0	52-101	0.673	20	WG549404
2,4-Dinitrophenol	mg/kg	0.218	0.223	66.0	10-109	2.08	39	WG549404
2,4-Dinitrotoluene	mg/kg	0.231	0.251	69.0	54-103	8.24	20	WG549404
2,6-Dinitrotoluene	mg/kg	0.222	0.241	66.0	53-99	8.26	20	WG549404
2-Chloronaphthalene	mg/kg	0.224	0.241	67.0	55-96	6.98	20	WG549404
2-Chlorophenol	mg/kg	0.220	0.225	66.0	52-88	2.00	20	WG549404
2-Nitrophenol	mg/kg	0.227	0.244	68.0	55-106	7.22	20	WG549404
3,3-Dichlorobenzidine	mg/kg	0.157	0.164	47.0	36-84	4.11	20	WG549404
4,6-Dinitro-2-methylphenol	mg/kg	0.276	0.272	83.0	24-98	1.47	32	WG549404
4-Bromophenyl-phenylether	mg/kg	0.238	0.244	72.0	58-111	2.29	20	WG549404
4-Chloro-3-methylphenol	mg/kg	0.232	0.253	70.0	58-98	8.66	20	WG549404
4-Chlorophenyl-phenylether	mg/kg	0.213	0.236	64.0	59-103	10.3	20	WG549404
4-Nitrophenol	mg/kg	0.222	0.238	67.0	34-101	6.77	26	WG549404
Acenaphthene	mg/kg	0.224	0.246	67.0	55-96	9.64	20	WG549404

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Quality Assurance Report
Level II

L529577

August 11, 2011

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Acenaphthylene	mg/kg	0.237	0.251	71.0	61-107	5.40	20	WG549404
Anthracene	mg/kg	0.239	0.242	72.0	58-105	1.32	20	WG549404
Benzidine	mg/kg	0.0549	0.0478	16.0	10-21	13.9	40	WG549404
Benzo(a)anthracene	mg/kg	0.236	0.244	71.0	56-103	3.13	20	WG549404
Benzo(a)pyrene	mg/kg	0.241	0.245	72.0	57-103	1.52	20	WG549404
Benzo(b)fluoranthene	mg/kg	0.230	0.240	69.0	52-106	4.28	20	WG549404
Benzo(g,h,i)perylene	mg/kg	0.254	0.254	76.0	47-112	0.0197	20	WG549404
Benzo(k)fluoranthene	mg/kg	0.253	0.251	76.0	53-104	0.646	20	WG549404
Benzylbutyl phthalate	mg/kg	0.226	0.243	68.0	61-118	7.26	20	WG549404
Bis(2-chlorethoxy)methane	mg/kg	0.248	0.255	74.0	58-104	2.87	20	WG549404
Bis(2-chloroethyl)ether	mg/kg	0.249	0.235	75.0	51-103	5.82	20	WG549404
Bis(2-chloroisopropyl)ether	mg/kg	0.229	0.235	69.0	56-95	2.59	20	WG549404
Bis(2-ethylhexyl)phthalate	mg/kg	0.228	0.241	68.0	56-120	5.68	20	WG549404
Chrysene	mg/kg	0.228	0.243	68.0	55-102	6.67	20	WG549404
Di-n-butyl phthalate	mg/kg	0.242	0.235	73.0	59-114	2.89	20	WG549404
Di-n-octyl phthalate	mg/kg	0.222	0.243	66.0	51-119	9.30	22	WG549404
Dibenz(a,h)anthracene	mg/kg	0.247	0.247	74.0	49-111	0.0309	20	WG549404
Diethyl phthalate	mg/kg	0.235	0.257	70.0	61-105	9.22	20	WG549404
Dimethyl phthalate	mg/kg	0.229	0.247	69.0	60-106	7.75	20	WG549404
Fluoranthene	mg/kg	0.236	0.233	71.0	59-108	1.26	20	WG549404
Fluorene	mg/kg	0.213	0.231	64.0	59-100	8.22	20	WG549404
Hexachloro-1,3-butadiene	mg/kg	0.233	0.243	70.0	53-106	4.38	20	WG549404
Hexachlorobenzene	mg/kg	0.213	0.223	64.0	50-108	4.83	20	WG549404
Hexachlorocyclopentadiene	mg/kg	0.268	0.275	80.0	36-117	2.84	20	WG549404
Hexachloroethane	mg/kg	0.219	0.228	66.0	45-83	4.26	20	WG549404
Indeno(1,2,3-cd)pyrene	mg/kg	0.247	0.252	74.0	50-110	2.08	20	WG549404
Isophorone	mg/kg	0.204	0.211	61.0	51-99	3.11	20	WG549404
n-Nitrosodi-n-propylamine	mg/kg	0.243	0.251	73.0	52-103	3.47	20	WG549404
n-Nitrosodimethylamine	mg/kg	0.211	0.232	63.0	31-107	9.17	23	WG549404
n-Nitrosodiphenylamine	mg/kg	0.250	0.241	75.0	57-121	3.95	20	WG549404
Naphthalene	mg/kg	0.223	0.235	67.0	55-91	5.08	20	WG549404
Nitrobenzene	mg/kg	0.250	0.254	75.0	47-92	1.49	20	WG549404
Pentachlorophenol	mg/kg	0.199	0.188	60.0	10-89	6.09	28	WG549404
Phenanthrene	mg/kg	0.245	0.237	74.0	55-103	3.53	20	WG549404
Phenol	mg/kg	0.225	0.231	68.0	49-99	2.58	20	WG549404
Pyrene	mg/kg	0.226	0.233	68.0	54-104	3.04	20	WG549404
2,4,6-Tribromophenol				72.81	16-136			WG549404
2-Fluorobiphenyl				69.06	37-119			WG549404
2-Fluorophenol				69.11	22-114			WG549404
Nitrobenzene-d5				73.15	20-114			WG549404
Phenol-d5				78.75	26-127			WG549404
p-Terphenyl-d14				69.86	15-174			WG549404
PCB 1016	mg/kg	0.160	0.164	96.0	64-120	2.74	20	WG549310
PCB 1260	mg/kg	0.188	0.193	112.	72-130	2.73	20	WG549310
Decachlorobiphenyl				105.7	18.9-115.8			WG549310
Tetrachloro-m-xylene				101.1	31.8-115.7			WG549310
1,1,1,2-Tetrachloroethane	mg/l	0.0243	0.0240	97.0	75-134	1.29	20	WG549500
1,1,1-Trichloroethane	mg/l	0.0252	0.0247	101.	67-137	1.92	20	WG549500
1,1,2,2-Tetrachloroethane	mg/l	0.0243	0.0235	97.0	72-128	3.32	20	WG549500
1,1,2-Trichloroethane	mg/l	0.0238	0.0227	95.0	79-123	4.65	20	WG549500
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	0.0252	0.0245	101.	51-149	2.47	20	WG549500
1,1-Dichloroethane	mg/l	0.0242	0.0237	97.0	67-133	1.80	20	WG549500
1,1-Dichloroethene	mg/l	0.0240	0.0238	96.0	60-130	1.00	20	WG549500
1,1-Dichloropropene	mg/l	0.0221	0.0213	88.0	68-132	4.09	20	WG549500
1,2,3-Trichlorobenzene	mg/l	0.0248	0.0256	99.0	63-138	3.14	20	WG549500

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August 11, 2011

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
1,2,3-Trichloropropane	mg/l	0.0243	0.0241	97.0	68-130	0.630	20	WG549500
1,2,3-Trimethylbenzene	mg/l	0.0225	0.0225	90.0	70-127	0.340	20	WG549500
1,2,4-Trichlorobenzene	mg/l	0.0264	0.0266	105.	65-137	0.960	20	WG549500
1,2,4-Trimethylbenzene	mg/l	0.0239	0.0238	96.0	72-135	0.210	20	WG549500
1,2-Dibromo-3-Chloropropane	mg/l	0.0222	0.0226	89.0	55-134	1.76	20	WG549500
1,2-Dibromoethane	mg/l	0.0235	0.0218	94.0	75-126	7.37	20	WG549500
1,2-Dichlorobenzene	mg/l	0.0238	0.0238	95.0	75-122	0.0400	20	WG549500
1,2-Dichloroethane	mg/l	0.0233	0.0223	93.0	63-137	4.40	20	WG549500
1,2-Dichloropropane	mg/l	0.0229	0.0226	92.0	74-122	1.34	20	WG549500
1,3,5-Trimethylbenzene	mg/l	0.0243	0.0239	97.0	73-134	1.84	20	WG549500
1,3-Dichlorobenzene	mg/l	0.0234	0.0233	94.0	73-131	0.420	20	WG549500
1,3-Dichloropropane	mg/l	0.0232	0.0215	93.0	77-119	7.85	20	WG549500
1,4-Dichlorobenzene	mg/l	0.0234	0.0228	94.0	70-121	2.94	20	WG549500
2,2-Dichloropropane	mg/l	0.0264	0.0272	106.	46-151	3.07	20	WG549500
2-Butanone (MEK)	mg/l	0.123	0.118	98.0	53-132	3.95	20	WG549500
2-Chloroethyl vinyl ether	mg/l	0.125	0.113	100.	0-171	10.2	27	WG549500
2-Chlorotoluene	mg/l	0.0238	0.0234	95.0	74-128	1.63	20	WG549500
4-Chlorotoluene	mg/l	0.0240	0.0233	96.0	74-130	2.95	20	WG549500
4-Methyl-2-pentanone (MIBK)	mg/l	0.137	0.135	110.	60-142	1.33	20	WG549500
Acetone	mg/l	0.129	0.127	103.	48-134	1.62	20	WG549500
Acrolein	mg/l	0.0160	0.0144	13.0	6-182	10.9	39	WG549500
Acrylonitrile	mg/l	0.127	0.124	101.	60-140	2.51	20	WG549500
Benzene	mg/l	0.0225	0.0216	90.0	67-126	3.97	20	WG549500
Bromobenzene	mg/l	0.0229	0.0223	92.0	76-123	2.59	20	WG549500
Bromodichloromethane	mg/l	0.0238	0.0232	95.0	68-133	2.36	20	WG549500
Bromoform	mg/l	0.0286	0.0279	114.	60-139	2.31	20	WG549500
Bromomethane	mg/l	0.0212	0.0208	85.0	45-175	2.20	20	WG549500
Carbon tetrachloride	mg/l	0.0225	0.0219	90.0	64-141	2.45	20	WG549500
Chlorobenzene	mg/l	0.0229	0.0216	91.0	77-125	5.60	20	WG549500
Chlorodibromomethane	mg/l	0.0239	0.0228	96.0	73-138	5.06	20	WG549500
Chloroethane	mg/l	0.0182	0.0182	73.0	49-155	0.130	20	WG549500
Chloroform	mg/l	0.0244	0.0239	97.0	66-126	1.78	20	WG549500
Chloromethane	mg/l	0.0155	0.0153	62.0	45-152	1.32	20	WG549500
cis-1,2-Dichloroethene	mg/l	0.0235	0.0232	94.0	72-128	0.900	20	WG549500
cis-1,3-Dichloropropene	mg/l	0.0238	0.0224	95.0	73-131	6.29	20	WG549500
Di-isopropyl ether	mg/l	0.0254	0.0250	102.	63-139	1.52	20	WG549500
Dibromomethane	mg/l	0.0232	0.0225	93.0	73-125	2.84	20	WG549500
Dichlorodifluoromethane	mg/l	0.0171	0.0171	68.0	39-189	0.260	24	WG549500
Ethylbenzene	mg/l	0.0239	0.0233	96.0	76-129	2.76	20	WG549500
Hexachloro-1,3-butadiene	mg/l	0.0245	0.0237	98.0	67-135	3.44	20	WG549500
Isopropylbenzene	mg/l	0.0271	0.0264	108.	73-132	2.84	20	WG549500
Methyl tert-butyl ether	mg/l	0.0265	0.0269	106.	51-142	1.51	20	WG549500
Methylene Chloride	mg/l	0.0220	0.0218	88.0	64-125	0.780	20	WG549500
n-Butylbenzene	mg/l	0.0257	0.0251	103.	63-142	2.22	20	WG549500
n-Propylbenzene	mg/l	0.0241	0.0233	96.0	71-132	3.05	20	WG549500
Naphthalene	mg/l	0.0256	0.0262	102.	56-145	2.32	20	WG549500
p-Isopropyltoluene	mg/l	0.0249	0.0245	100.	68-138	1.61	20	WG549500
sec-Butylbenzene	mg/l	0.0244	0.0242	97.0	70-135	0.740	20	WG549500
Styrene	mg/l	0.0180	0.0174	72*	78-130	3.42	20	WG549500
tert-Butylbenzene	mg/l	0.0222	0.0216	89.0	72-134	2.70	20	WG549500
Tetrachloroethene	mg/l	0.0211	0.0204	84.0	67-135	3.40	20	WG549500
Toluene	mg/l	0.0218	0.0212	87.0	72-122	2.72	20	WG549500
trans-1,2-Dichloroethene	mg/l	0.0209	0.0206	83.0	67-129	1.15	20	WG549500
trans-1,3-Dichloropropene	mg/l	0.0244	0.0224	98.0	66-137	8.40	20	WG549500
Trichloroethene	mg/l	0.0220	0.0215	88.0	74-126	2.49	20	WG549500
Trichlorofluoromethane	mg/l	0.0203	0.0202	81.0	54-156	0.540	20	WG549500
Vinyl chloride	mg/l	0.0168	0.0168	67.0	55-153	0.100	20	WG549500
Xylenes, Total	mg/l	0.0712	0.0696	95.0	75-128	2.26	20	WG549500
4-Bromofluorobenzene				103.8	75-128			WG549500

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Cedar Rapids, IA 52404

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Tax I.D. 62-0814289

Est. 1970

Quality Assurance Report
Level II

L529577

August 11, 2011

Analyte	Laboratory Control Sample Duplicate				Limit	RPD	Limit	Batch
	Units	Result	Ref	%Rec				
Dibromofluoromethane				103.5	79-125			
Toluene-d8				104.5	87-114			
Trichloroethene	mg/l	0.0202	0.0186	81.0	74-126	8.17	20	WG549466
4-Bromofluorobenzene				94.34	75-128			WG549466
Dibromofluoromethane				112.6	79-125			WG549466
Toluene-d8				104.3	87-114			WG549466
Diesel	mg/kg	26.8	28.8	89.0	50-150	7.23	20	WG549376
Motor Oil	mg/kg	27.2	30.9	91.0	50-150	12.8	25	WG549376
o-terphenyl				91.05	50-150			WG549376
Diesel	mg/l	0.485	0.514	65.0	50-150	5.88	20	WG549303
Motor Oil	mg/l	0.659	0.644	88.0	50-150	2.37	25	WG549303
o-terphenyl				61.20	50-150			WG549303
Barium, Dissolved	mg/l	1.17	1.12	104.	85-115	4.37	20	WG549777
1,2,4-Trichlorobenzene	mg/kg	0.197	0.215	59.0	48-87	8.64	20	WG549703
2,4,6-Trichlorophenol	mg/kg	0.219	0.242	66.0	50-98	10.1	20	WG549703
2,4-Dichlorophenol	mg/kg	0.230	0.245	69.0	56-96	6.31	20	WG549703
2,4-Dimethylphenol	mg/kg	0.211	0.229	63.0	52-101	8.10	20	WG549703
2,4-Dinitrophenol	mg/kg	0.153	0.174	46.0	10-109	12.6	39	WG549703
2,4-Dinitrotoluene	mg/kg	0.236	0.269	71.0	54-103	13.1	20	WG549703
2,6-Dinitrotoluene	mg/kg	0.250	0.254	75.0	53-99	1.51	20	WG549703
2-Chloronaphthalene	mg/kg	0.241	0.248	72.0	55-96	2.72	20	WG549703
2-Chlorophenol	mg/kg	0.212	0.235	64.0	52-88	10.3	20	WG549703
2-Nitrophenol	mg/kg	0.217	0.227	65.0	55-106	4.48	20	WG549703
3,3-Dichlorobenzidine	mg/kg	0.211	0.218	63.0	36-84	3.13	20	WG549703
4,6-Dinitro-2-methylphenol	mg/kg	0.186	0.223	56.0	24-98	18.2	32	WG549703
4-Bromophenyl-phenylether	mg/kg	0.213	0.240	64.0	58-111	11.8	20	WG549703
4-Chloro-3-methylphenol	mg/kg	0.243	0.251	73.0	58-98	3.46	20	WG549703
4-Chlorophenyl-phenylether	mg/kg	0.226	0.251	68.0	59-103	10.4	20	WG549703
4-Nitrophenol	mg/kg	0.228	0.246	68.0	34-101	7.45	26	WG549703
Acenaphthene	mg/kg	0.234	0.253	70.0	55-96	8.05	20	WG549703
Acenaphthylene	mg/kg	0.247	0.268	74.0	61-107	8.25	20	WG549703
Anthracene	mg/kg	0.233	0.265	70.0	58-105	12.8	20	WG549703
Benzidine	mg/kg	0.00929	0.0183	3*	10-21	65.3*	40	WG549703
Benzo(a)anthracene	mg/kg	0.269	0.278	81.0	56-103	3.43	20	WG549703
Benzo(a)pyrene	mg/kg	0.250	0.277	75.0	57-103	10.3	20	WG549703
Benzo(b)fluoranthene	mg/kg	0.262	0.274	78.0	52-106	4.51	20	WG549703
Benzo(g,h,i)perylene	mg/kg	0.238	0.250	71.0	47-112	5.04	20	WG549703
Benzo(k)fluoranthene	mg/kg	0.230	0.260	69.0	53-104	12.6	20	WG549703
Benzylbutyl phthalate	mg/kg	0.270	0.286	81.0	61-118	5.91	20	WG549703
Bis(2-chlorethoxy)methane	mg/kg	0.243	0.259	73.0	58-104	6.48	20	WG549703
Bis(2-chloroethyl)ether	mg/kg	0.193	0.248	58.0	51-103	24.8*	20	WG549703
Bis(2-chloroisopropyl)ether	mg/kg	0.217	0.224	65.0	56-95	3.23	20	WG549703
Bis(2-ethylhexyl)phthalate	mg/kg	0.267	0.292	80.0	55-120	8.88	20	WG549703
Chrysene	mg/kg	0.259	0.275	78.0	55-102	5.84	20	WG549703
Di-n-butyl phthalate	mg/kg	0.236	0.274	71.0	59-114	14.8	20	WG549703
Di-n-octyl phthalate	mg/kg	0.263	0.285	79.0	51-119	8.13	22	WG549703
Dibenz(a,h)anthracene	mg/kg	0.227	0.246	68.0	49-111	7.84	20	WG549703
Diethyl phthalate	mg/kg	0.247	0.264	74.0	61-105	6.68	20	WG549703
Dimethyl phthalate	mg/kg	0.251	0.274	76.0	60-106	8.48	20	WG549703
Fluoranthene	mg/kg	0.230	0.248	69.0	59-108	7.63	20	WG549703
Fluorene	mg/kg	0.232	0.254	70.0	59-100	9.08	20	WG549703

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August 11, 2011

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Hexachloro-1,3-butadiene	mg/kg	0.203	0.234	61.0	53-106	14.5	20	WG549703
Hexachlorobenzene	mg/kg	0.210	0.222	63.0	50-108	5.30	20	WG549703
Hexachlorocyclopentadiene	mg/kg	0.206	0.222	62.0	36-117	7.71	20	WG549703
Hexachloroethane	mg/kg	0.218	0.237	66.0	45-83	8.13	20	WG549703
Indeno(1,2,3-cd)pyrene	mg/kg	0.233	0.254	70.0	50-110	8.51	20	WG549703
Isophorone	mg/kg	0.198	0.212	59.0	51-99	6.96	20	WG549703
n-Nitrosodi-n-propylamine	mg/kg	0.263	0.267	79.0	52-103	1.47	20	WG549703
n-Nitrosodimethylamine	mg/kg	0.268	0.291	80.0	31-107	8.27	23	WG549703
n-Nitrosodiphenylamine	mg/kg	0.225	0.253	67.0	57-121	12.0	20	WG549703
Naphthalene	mg/kg	0.214	0.234	64.0	55-91	8.72	20	WG549703
Nitrobenzene	mg/kg	0.212	0.247	64.0	47-92	15.5	20	WG549703
Pentachlorophenol	mg/kg	0.174	0.203	52.0	10-89	15.2	28	WG549703
Phenanthrene	mg/kg	0.221	0.250	66.0	55-103	11.9	20	WG549703
Phenol	mg/kg	0.237	0.247	71.0	49-99	4.14	20	WG549703
Pyrene	mg/kg	0.276	0.269	83.0	54-104	2.55	20	WG549703
2,4,6-Tribromophenol				63.40	16-136			WG549703
2-Fluorobiphenyl				69.52	37-119			WG549703
2-Fluorophenol				64.31	22-114			WG549703
Nitrobenzene-d5				71.30	20-114			WG549703
Phenol-d5				83.76	26-127			WG549703
p-Terphenyl-d14				78.67	15-174			WG549703

Analyte	Units	Matrix Spike			% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV				
Diesel	mg/kg	23.3	0	30	77.8	50-150	L529659-02	WG549312
Motor Oil	mg/kg	26.8	30.0	30	0*	50-150	L529659-02	WG549312
o-terphenyl					60.11	50-150		WG549312
1,1,1,2-Tetrachloroethane	mg/l	0.0264	0	.025	106.	45-152	L529553-02	WG549212
1,1,1-Trichloroethane	mg/l	0.0247	0	.025	98.8	31-161	L529553-02	WG549212
1,1,2,2-Tetrachloroethane	mg/l	0.0244	0	.025	97.6	49-149	L529553-02	WG549212
1,1,2-Trichloroethane	mg/l	0.0244	0	.025	97.7	46-145	L529553-02	WG549212
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	0.0258	0	.025	103.	14-168	L529553-02	WG549212
1,1-Dichloroethane	mg/l	0.0229	0	.025	91.6	30-159	L529553-02	WG549212
1,1-Dichloroethene	mg/l	0.0276	0	.025	110.	10-162	L529553-02	WG549212
1,1-Dichloropropene	mg/l	0.0241	0	.025	96.4	14-162	L529553-02	WG549212
1,2,3-Trichlorobenzene	mg/l	0.0245	0	.025	98.1	32-143	L529553-02	WG549212
1,2,3-Trichloropropane	mg/l	0.0245	0	.025	97.8	48-148	L529553-02	WG549212
1,2,3-Trimethylbenzene	mg/l	0.0227	0	.025	90.6	36-141	L529553-02	WG549212
1,2,4-Trichlorobenzene	mg/l	0.0267	0	.025	107.	27-142	L529553-02	WG549212
1,2,4-Trimethylbenzene	mg/l	0.0246	0	.025	98.4	29-153	L529553-02	WG549212
1,2-Dibromo-3-Chloropropane	mg/l	0.0266	0	.025	106.	37-148	L529553-02	WG549212
1,2-Dibromoethane	mg/l	0.0249	0	.025	99.6	41-149	L529553-02	WG549212
1,2-Dichlorobenzene	mg/l	0.0241	0	.025	96.2	40-139	L529553-02	WG549212
1,2-Dichloroethane	mg/l	0.0201	0	.025	80.3	29-167	L529553-02	WG549212
1,2-Dichloropropane	mg/l	0.0209	0	.025	83.5	39-148	L529553-02	WG549212
1,3,5-Trimethylbenzene	mg/l	0.0260	0	.025	104.	33-149	L529553-02	WG549212
1,3-Dichlorobenzene	mg/l	0.0255	0	.025	102.	32-148	L529553-02	WG549212
1,3-Dichloropropane	mg/l	0.0227	0	.025	90.9	44-142	L529553-02	WG549212
1,4-Dichlorobenzene	mg/l	0.0247	0	.025	98.6	32-136	L529553-02	WG549212
2,2-Dichloropropane	mg/l	0.0256	0	.025	102.	14-158	L529553-02	WG549212
2-Butanone (MEK)	mg/l	0.0996	0	.125	79.7	32-151	L529553-02	WG549212
2-Chloroethyl vinyl ether	mg/l	0.00306	0	.125	2.45	0-175	L529553-02	WG549212
2-Chlorotoluene	mg/l	0.0249	0	.025	99.5	35-147	L529553-02	WG549212
4-Chlorotoluene	mg/l	0.0242	0	.025	96.8	33-147	L529553-02	WG549212
4-Methyl-2-pentanone (MIBK)	mg/l	0.110	0	.125	88.0	40-160	L529553-02	WG549212
Acetone	mg/l	0.0936	0	.125	74.9	25-157	L529553-02	WG549212

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Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Acrolein	mg/l	0.0216	0	.125	17.2	0-179	L529553-02	WG549212
Acrylonitrile	mg/l	0.107	0	.125	85.7	37-162	L529553-02	WG549212
Benzene	mg/l	0.0224	0	.025	89.6	16-158	L529553-02	WG549212
Bromobenzene	mg/l	0.0235	0	.025	93.9	37-147	L529553-02	WG549212
Bromodichloromethane	mg/l	0.0221	0	.025	88.4	45-147	L529553-02	WG549212
Bromoform	mg/l	0.0237	0	.025	94.6	38-152	L529553-02	WG549212
Bromomethane	mg/l	0.0198	0	.025	79.2	0-191	L529553-02	WG549212
Carbon tetrachloride	mg/l	0.0268	0	.025	107.	22-168	L529553-02	WG549212
Chlorobenzene	mg/l	0.0250	0	.025	100.	33-148	L529553-02	WG549212
Chlorodibromomethane	mg/l	0.0250	0	.025	100.	48-151	L529553-02	WG549212
Chloroethane	mg/l	0.0199	0	.025	79.8	4-176	L529553-02	WG549212
Chloroform	mg/l	0.0223	0	.025	89.4	37-147	L529553-02	WG549212
Chloromethane	mg/l	0.0204	0	.025	81.5	10-174	L529553-02	WG549212
cis-1,2-Dichloroethene	mg/l	0.0318	0.0100	.025	87.4	29-156	L529553-02	WG549212
cis-1,3-Dichloropropene	mg/l	0.0224	0	.025	89.7	35-148	L529553-02	WG549212
Di-isopropyl ether	mg/l	0.0205	0	.025	81.9	39-160	L529553-02	WG549212
Dibromomethane	mg/l	0.0215	0	.025	85.9	36-152	L529553-02	WG549212
Dichlorodifluoromethane	mg/l	0.0236	0	.025	94.6	0-200	L529553-02	WG549212
Ethylbenzene	mg/l	0.0264	0	.025	106.	29-150	L529553-02	WG549212
Hexachloro-1,3-butadiene	mg/l	0.0283	0	.025	113.	28-144	L529553-02	WG549212
Isopropylbenzene	mg/l	0.0295	0	.025	118.	35-147	L529553-02	WG549212
Methyl tert-butyl ether	mg/l	0.0221	0	.025	88.3	24-167	L529553-02	WG549212
Methylene Chloride	mg/l	0.0226	0	.025	90.6	23-151	L529553-02	WG549212
n-Butylbenzene	mg/l	0.0260	0	.025	104.	22-151	L529553-02	WG549212
n-Propylbenzene	mg/l	0.0260	0	.025	104.	26-150	L529553-02	WG549212
Naphthalene	mg/l	0.0247	0	.025	98.9	24-160	L529553-02	WG549212
p-Isopropyltoluene	mg/l	0.0273	0	.025	109.	28-151	L529553-02	WG549212
sec-Butylbenzene	mg/l	0.0270	0	.025	108.	32-149	L529553-02	WG549212
Styrene	mg/l	0.0178	0	.025	71.4	38-149	L529553-02	WG549212
tert-Butylbenzene	mg/l	0.0277	0	.025	111.	36-149	L529553-02	WG549212
Tetrachloroethene	mg/l	0.0284	0	.025	114.	13-157	L529553-02	WG549212
Toluene	mg/l	0.0228	0	.025	91.4	22-152	L529553-02	WG549212
trans-1,2-Dichloroethene	mg/l	0.0247	0	.025	98.6	11-160	L529553-02	WG549212
trans-1,3-Dichloropropene	mg/l	0.0194	0	.025	77.8	33-153	L529553-02	WG549212
Trichlorofluoromethane	mg/l	0.0237	0	.025	95.0	10-177	L529553-02	WG549212
Vinyl chloride	mg/l	0.0218	0	.025	87.1	0-179	L529553-02	WG549212
Xylenes, Total	mg/l	0.0768	0	.075	102.	27-151	L529553-02	WG549212
4-Bromofluorobenzene					99.81	75-128		WG549212
Dibromofluoromethane					94.15	79-125		WG549212
Toluene-d8					97.79	87-114		WG549212
Barium, Dissolved	mg/l	1.57	0.400	1.13	104.	75-125	L529577-14	WG549210
Cadmium, Dissolved	mg/l	1.19	0	1.13	105.	75-125	L529577-14	WG549210
Chromium, Dissolved	mg/l	1.20	0	1.13	106.	75-125	L529577-14	WG549210
Lead, Dissolved	mg/l	1.19	0.00820	1.13	104.	75-125	L529577-14	WG549210
Selenium, Dissolved	mg/l	1.15	0.0470	1.13	97.6	75-125	L529577-14	WG549210
Silver, Dissolved	mg/l	0.580	0	1.13	51.3*	75-125	L529577-14	WG549210
Arsenic, Dissolved	mg/l	0.0549	0	.0567	96.8	75-125	L529170-01	WG549323
Arsenic	mg/kg	55.4	10.0	50	90.8	75-125	L529569-11	WG549236
Barium	mg/kg	183.	140.	50	86.0	75-125	L529569-11	WG549236
Cadmium	mg/kg	45.6	1.70	50	87.8	75-125	L529569-11	WG549236
Chromium	mg/kg	70.6	26.0	50	89.2	75-125	L529569-11	WG549236
Lead	mg/kg	65.8	20.0	50	91.6	75-125	L529569-11	WG549236
Silver	mg/kg	48.6	1.10	50	95.0	75-125	L529569-11	WG549236

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Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
1,1,1,2-Tetrachloroethane	mg/kg	0.126	0	.025	100.	29-145	L529577-01	WG549226
1,1,1-Trichloroethane	mg/kg	0.123	0	.025	98.5	23-147	L529577-01	WG549226
1,1,2,2-Tetrachloroethane	mg/kg	0.0177	0	.025	14.1*	18-150	L529577-01	WG549226
1,1,2-Trichloroethane	mg/kg	0.126	0	.025	101.	35-140	L529577-01	WG549226
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	0.138	0	.025	111.	10-145	L529577-01	WG549226
1,1-Dichloroethane	mg/kg	0.116	0	.025	92.9	24-148	L529577-01	WG549226
1,1-Dichloroethene	mg/kg	0.162	0	.025	130.	10-149	L529577-01	WG549226
1,1-Dichloropropene	mg/kg	0.118	0	.025	94.1	10-141	L529577-01	WG549226
1,2,3-Trichlorobenzene	mg/kg	0.0750	0	.025	60.0	10-129	L529577-01	WG549226
1,2,3-Trichloropropane	mg/kg	0.122	0	.025	97.6	30-148	L529577-01	WG549226
1,2,3-Trimethylbenzene	mg/kg	0.0843	0	.025	67.5	10-137	L529577-01	WG549226
1,2,4-Trichlorobenzene	mg/kg	0.0815	0	.025	65.2	10-119	L529577-01	WG549226
1,2,4-Trimethylbenzene	mg/kg	0.0963	0	.025	77.1	10-145	L529577-01	WG549226
1,2-Dibromo-3-Chloropropane	mg/kg	0.115	0	.025	91.6	19-145	L529577-01	WG549226
1,2-Dibromoethane	mg/kg	0.127	0	.025	101.	24-145	L529577-01	WG549226
1,2-Dichlorobenzene	mg/kg	0.0977	0	.025	78.2	12-130	L529577-01	WG549226
1,2-Dichloroethane	mg/kg	0.100	0	.025	80.4	21-155	L529577-01	WG549226
1,2-Dichloropropane	mg/kg	0.105	0	.025	84.2	28-144	L529577-01	WG549226
1,3,5-Trimethylbenzene	mg/kg	0.101	0	.025	80.8	10-135	L529577-01	WG549226
1,3-Dichlorobenzene	mg/kg	0.109	0	.025	87.2	10-129	L529577-01	WG549226
1,3-Dichloropropane	mg/kg	0.115	0	.025	92.3	31-137	L529577-01	WG549226
1,4-Dichlorobenzene	mg/kg	0.101	0	.025	80.8	10-121	L529577-01	WG549226
2,2-Dichloropropane	mg/kg	0.127	0	.025	102.	18-144	L529577-01	WG549226
2-Butanone (MEK)	mg/kg	0.507	0	.125	81.1	21-143	L529577-01	WG549226
2-Chloroethyl vinyl ether	mg/kg	0.531	0	.125	84.9	0-176	L529577-01	WG549226
2-Chlorotoluene	mg/kg	0.103	0	.025	82.0	10-132	L529577-01	WG549226
4-Chlorotoluene	mg/kg	0.104	0	.025	82.9	10-129	L529577-01	WG549226
4-Methyl-2-pentanone (MIBK)	mg/kg	0.567	0	.125	90.7	31-151	L529577-01	WG549226
Acetone	mg/kg	0.604	0	.125	96.6	13-158	L529577-01	WG549226
Acrylonitrile	mg/kg	0.553	0	.125	88.5	20-154	L529577-01	WG549226
Benzene	mg/kg	0.113	0	.025	90.2	16-143	L529577-01	WG549226
Bromobenzene	mg/kg	0.105	0	.025	83.9	14-135	L529577-01	WG549226
Bromodichloromethane	mg/kg	0.104	0	.025	83.2	27-139	L529577-01	WG549226
Bromoform	mg/kg	0.138	0	.025	110.	21-144	L529577-01	WG549226
Bromomethane	mg/kg	0.118	0	.025	94.8	0-180	L529577-01	WG549226
Carbon tetrachloride	mg/kg	0.115	0	.025	92.2	12-149	L529577-01	WG549226
Chlorobenzene	mg/kg	0.122	0	.025	97.5	17-134	L529577-01	WG549226
Chlorodibromomethane	mg/kg	0.126	0	.025	101.	28-147	L529577-01	WG549226
Chloroethane	mg/kg	0.119	0	.025	94.9	0-172	L529577-01	WG549226
Chloroform	mg/kg	0.117	0	.025	93.4	28-138	L529577-01	WG549226
Chloromethane	mg/kg	0.108	0	.025	86.1	10-158	L529577-01	WG549226
cis-1,2-Dichloroethene	mg/kg	0.128	0	.025	102.	21-147	L529577-01	WG549226
cis-1,3-Dichloropropene	mg/kg	0.111	0	.025	88.7	17-145	L529577-01	WG549226
Di-isopropyl ether	mg/kg	0.0991	0	.025	79.2	31-153	L529577-01	WG549226
Dibromomethane	mg/kg	0.117	0	.025	93.6	24-147	L529577-01	WG549226
Dichlorodifluoromethane	mg/kg	0.132	0	.025	105.	0-192	L529577-01	WG549226
Ethylbenzene	mg/kg	0.122	0	.025	97.9	12-137	L529577-01	WG549226
Hexachloro-1,3-butadiene	mg/kg	0.0458	0	.025	36.7	10-123	L529577-01	WG549226
Isopropylbenzene	mg/kg	0.118	0	.025	94.5	14-134	L529577-01	WG549226
Methyl tert-butyl ether	mg/kg	0.113	0	.025	90.7	21-157	L529577-01	WG549226
Methylene Chloride	mg/kg	0.124	0	.025	99.6	12-149	L529577-01	WG549226
n-Butylbenzene	mg/kg	0.0678	0	.025	54.3	10-130	L529577-01	WG549226
n-Propylbenzene	mg/kg	0.101	0	.025	81.0	10-130	L529577-01	WG549226
Naphthalene	mg/kg	0.0880	0	.025	70.4	0-146	L529577-01	WG549226
p-Isopropyltoluene	mg/kg	0.0894	0	.025	71.5	10-131	L529577-01	WG549226
sec-Butylbenzene	mg/kg	0.0870	0	.025	69.6	10-134	L529577-01	WG549226
Styrene	mg/kg	0.0832	0	.025	66.5	10-140	L529577-01	WG549226
tert-Butylbenzene	mg/kg	0.101	0	.025	81.0	11-137	L529577-01	WG549226
Tetrachloroethene	mg/kg	0.132	0	.025	106.	10-131	L529577-01	WG549226

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Kirk Johnson
2640 12th Street SW

Cedar Rapids, IA 52404

Quality Assurance Report
Level II

L529577

12065 Lebanon Rd.
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(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

August 11, 2011

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Toluene	mg/kg	0.113	0	.025	90.2	12-136	L529577-01	WG549226
trans-1,2-Dichloroethene	mg/kg	0.126	0	.025	100.	10-143	L529577-01	WG549226
trans-1,3-Dichloropropene	mg/kg	0.102	0	.025	81.3	16-147	L529577-01	WG549226
Trichloroethene	mg/kg	0.224	0	.025	179.*	10-155	L529577-01	WG549226
Trichlorofluoromethane	mg/kg	0.127	0	.025	101.	10-154	L529577-01	WG549226
Vinyl chloride	mg/kg	0.115	0	.025	91.8	10-159	L529577-01	WG549226
Xylenes, Total	mg/kg	0.355	0	.075	94.6	10-138	L529577-01	WG549226
4-Bromofluorobenzene					100.4	59-140		WG549226
Dibromofluoromethane					83.32	63-139		WG549226
Toluene-d8					97.97	84-116		WG549226
Selenium	mg/kg	42.2	0	50	16.9*	75-125	L529569-11	WG549236
Mercury	mg/kg	0.384	0.0460	.25	135.*	70-130	L529569-11	WG549217
PCB 1016	mg/kg	0.152	0	.167	90.9	10-165	L529577-01	WG549310
PCB 1260	mg/kg	0.163	0	.167	97.4	10-175	L529577-01	WG549310
Decachlorobiphenyl					97.21	18.9-115.8		WG549310
Tetrachloro-m-xylene					103.4	31.8-115.7		WG549310
1,1,1,2-Tetrachloroethane	mg/l	0.0220	0	.025	87.9	45-152	L529783-07	WG549500
1,1,1-Trichloroethane	mg/l	0.0237	0	.025	94.7	31-161	L529783-07	WG549500
1,1,2,2-Tetrachloroethane	mg/l	0.0236	0	.025	94.2	49-149	L529783-07	WG549500
1,1,2-Trichloroethane	mg/l	0.0209	0	.025	83.4	46-145	L529783-07	WG549500
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	0.0237	0	.025	94.8	14-168	L529783-07	WG549500
1,1-Dichloroethane	mg/l	0.0219	0	.025	87.6	30-159	L529783-07	WG549500
1,1-Dichloroethene	mg/l	0.0245	0	.025	98.1	10-162	L529783-07	WG549500
1,1-Dichloropropene	mg/l	0.0200	0	.025	79.8	14-162	L529783-07	WG549500
1,2,3-Trichlorobenzene	mg/l	0.0232	0	.025	92.8	32-143	L529783-07	WG549500
1,2,3-Trichloropropane	mg/l	0.0237	0	.025	94.6	48-148	L529783-07	WG549500
1,2,3-Trimethylbenzene	mg/l	0.0202	0	.025	80.7	36-141	L529783-07	WG549500
1,2,4-Trichlorobenzene	mg/l	0.0248	0	.025	99.2	27-142	L529783-07	WG549500
1,2,4-Trimethylbenzene	mg/l	0.0218	0	.025	87.3	29-153	L529783-07	WG549500
1,2-Dibromo-3-Chloropropane	mg/l	0.0229	0	.025	91.7	37-148	L529783-07	WG549500
1,2-Dibromoethane	mg/l	0.0199	0	.025	79.7	41-149	L529783-07	WG549500
1,2-Dichlorobenzene	mg/l	0.0214	0	.025	85.5	40-139	L529783-07	WG549500
1,2-Dichloroethane	mg/l	0.0204	0	.025	81.7	29-167	L529783-07	WG549500
1,2-Dichloropropane	mg/l	0.0206	0	.025	82.3	39-148	L529783-07	WG549500
1,3,5-Trimethylbenzene	mg/l	0.0223	0	.025	89.1	33-149	L529783-07	WG549500
1,3-Dichlorobenzene	mg/l	0.0215	0.000530	.025	83.9	32-148	L529783-07	WG549500
1,3-Dichloropropane	mg/l	0.0195	0	.025	78.1	44-142	L529783-07	WG549500
1,4-Dichlorobenzene	mg/l	0.0220	0.00160	.025	81.8	32-136	L529783-07	WG549500
2,2-Dichloropropane	mg/l	0.0259	0	.025	104.	14-158	L529783-07	WG549500
2-Butanone (MEK)	mg/l	0.118	0.00450	.125	91.1	32-151	L529783-07	WG549500
2-Chloroethyl vinyl ether	mg/l	0.110	0	.125	88.0	0-175	L529783-07	WG549500
2-Chlorotoluene	mg/l	0.0210	0	.025	84.0	35-147	L529783-07	WG549500
4-Chlorotoluene	mg/l	0.0208	0	.025	83.3	33-147	L529783-07	WG549500
4-Methyl-2-pentanone (MIBK)	mg/l	0.133	0	.125	107.	40-160	L529783-07	WG549500
Acetone	mg/l	0.131	0	.125	105.	25-157	L529783-07	WG549500
Acrolein	mg/l	0.0107	0	.125	8.58	0-179	L529783-07	WG549500
Acrylonitrile	mg/l	0.123	0	.125	98.6	37-162	L529783-07	WG549500
Benzene	mg/l	0.0200	0	.025	80.0	16-158	L529783-07	WG549500
Bromobenzene	mg/l	0.0200	0	.025	79.8	37-147	L529783-07	WG549500
Bromodichloromethane	mg/l	0.0211	0	.025	84.4	45-147	L529783-07	WG549500
Bromoform	mg/l	0.0257	0	.025	103.	38-152	L529783-07	WG549500

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Tax I.D. 62-0814289

Est. 1970

August 11, 2011

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Bromomethane	mg/l	0.0184	0	.025	73.6	0-191	L529783-07	WG549500
Carbon tetrachloride	mg/l	0.0211	0	.025	84.4	22-168	L529783-07	WG549500
Chlorobenzene	mg/l	0.0299	0.0110	.025	75.5	33-148	L529783-07	WG549500
Chlorodibromomethane	mg/l	0.0204	0	.025	81.6	48-151	L529783-07	WG549500
Chloroethane	mg/l	0.0173	0	.025	69.2	4-176	L529783-07	WG549500
Chloroform	mg/l	0.0217	0	.025	86.8	37-147	L529783-07	WG549500
Chloromethane	mg/l	0.0143	0	.025	57.2	10-174	L529783-07	WG549500
cis-1,2-Dichloroethene	mg/l	0.0211	0	.025	84.4	29-156	L529783-07	WG549500
cis-1,3-Dichloropropene	mg/l	0.0202	0	.025	80.8	35-148	L529783-07	WG549500
Di-isopropyl ether	mg/l	0.0224	0	.025	89.5	39-160	L529783-07	WG549500
Dibromomethane	mg/l	0.0206	0	.025	82.3	36-152	L529783-07	WG549500
Dichlorodifluoromethane	mg/l	0.0165	0	.025	66.0	0-200	L529783-07	WG549500
Ethylbenzene	mg/l	0.0209	0	.025	83.6	29-150	L529783-07	WG549500
Hexachloro-1,3-butadiene	mg/l	0.0236	0	.025	94.2	28-144	L529783-07	WG549500
Isopropylbenzene	mg/l	0.0256	0.00110	.025	98.1	35-147	L529783-07	WG549500
Methyl tert-butyl ether	mg/l	0.0240	0	.025	96.0	24-167	L529783-07	WG549500
Methylene Chloride	mg/l	0.0199	0	.025	79.5	23-151	L529783-07	WG549500
n-Butylbenzene	mg/l	0.0233	0	.025	93.3	22-151	L529783-07	WG549500
n-Propylbenzene	mg/l	0.0229	0.00150	.025	85.6	26-150	L529783-07	WG549500
Naphthalene	mg/l	0.0271	0.00110	.025	104.	24-160	L529783-07	WG549500
p-Isopropyltoluene	mg/l	0.0235	0	.025	93.9	28-151	L529783-07	WG549500
sec-Butylbenzene	mg/l	0.0250	0.00160	.025	93.8	32-149	L529783-07	WG549500
Styrene	mg/l	0.0154	0	.025	61.4	38-149	L529783-07	WG549500
tert-Butylbenzene	mg/l	0.0284	0.00780	.025	82.6	36-149	L529783-07	WG549500
Tetrachloroethene	mg/l	0.0183	0	.025	73.3	13-157	L529783-07	WG549500
Toluene	mg/l	0.0197	0	.025	78.7	22-152	L529783-07	WG549500
trans-1,2-Dichloroethene	mg/l	0.0187	0	.025	74.9	11-160	L529783-07	WG549500
trans-1,3-Dichloropropene	mg/l	0.0209	0	.025	83.5	33-153	L529783-07	WG549500
Trichloroethene	mg/l	0.0196	0	.025	78.4	18-163	L529783-07	WG549500
Trichlorofluoromethane	mg/l	0.0195	0	.025	77.9	10-177	L529783-07	WG549500
Vinyl chloride	mg/l	0.0162	0	.025	64.9	0-179	L529783-07	WG549500
Xylenes, Total	mg/l	0.0621	0	.075	82.9	27-151	L529783-07	WG549500
4-Bromofluorobenzene					102.9	75-128		WG549500
Dibromofluoromethane					105.9	79-125		WG549500
Toluene-d8					106.3	87-114		WG549500
Trichloroethene	mg/l	0.0231	0	.025	92.4	18-163	L529206-01	WG549466
4-Bromofluorobenzene					109.4	75-128		WG549466
Dibromofluoromethane					106.6	79-125		WG549466
Toluene-d8					102.7	87-114		WG549466
Mercury, Dissolved	mg/l	0.00315	0	.003	105.	70-130	L529127-11	WG548951
Diesel	mg/kg	25.8	0	30	86.1	50-150	L529577-07	WG549376
Motor Oil	mg/kg	27.6	0	30	92.1	50-150	L529577-07	WG549376
o-terphenyl					86.62	50-150		WG549376
1,2,4-Trichlorobenzene	mg/kg	0.290	0	.333	87.1	27-118	L529771-01	WG549404
2,4,6-Trichlorophenol	mg/kg	0.322	0	.333	96.6	18-140	L529771-01	WG549404
2,4-Dichlorophenol	mg/kg	0.328	0	.333	98.5	30-134	L529771-01	WG549404
2,4-Dimethylphenol	mg/kg	0.304	0	.333	91.2	13-147	L529771-01	WG549404
2,4-Dinitrophenol	mg/kg	0.166	0	.333	49.9	10-110	L529771-01	WG549404
2,4-Dinitrotoluene	mg/kg	0.308	0	.333	92.5	12-146	L529771-01	WG549404
2,6-Dinitrotoluene	mg/kg	0.312	0	.333	93.6	10-150	L529771-01	WG549404
2-Chloronaphthalene	mg/kg	0.341	0	.333	102.	31-127	L529771-01	WG549404

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Est. 1970

August 11, 2011

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
2-Chlorophenol	mg/kg	0.305	0	.333	91.5	26-120	L529771-01	WG549404
2-Nitrophenol	mg/kg	0.315	0	.333	94.7	10-156	L529771-01	WG549404
3,3-Dichlorobenzidine	mg/kg	0.265	0	.333	79.7	10-127	L529771-01	WG549404
4,6-Dinitro-2-methylphenol	mg/kg	0.267	0	.333	80.3	10-124	L529771-01	WG549404
4-Bromophenyl-phenylether	mg/kg	0.319	0	.333	95.8	27-150	L529771-01	WG549404
4-Chloro-3-methylphenol	mg/kg	0.302	0	.333	90.6	24-140	L529771-01	WG549404
4-Chlorophenyl-phenylether	mg/kg	0.317	0	.333	95.0	27-142	L529771-01	WG549404
4-Nitrophenol	mg/kg	0.229	0	.333	68.7	10-166	L529771-01	WG549404
Acenaphthene	mg/kg	0.336	0	.333	101.	30-132	L529771-01	WG549404
Acenaphthylene	mg/kg	0.341	0	.333	102.	31-144	L529771-01	WG549404
Anthracene	mg/kg	0.318	0	.333	95.6	27-140	L529771-01	WG549404
Benidine	mg/kg	0.0340	0	.333	10.2	10-55	L529771-01	WG549404
Benzo(a)anthracene	mg/kg	0.320	0	.333	96.2	22-139	L529771-01	WG549404
Benzo(a)pyrene	mg/kg	0.283	0	.333	85.1	16-148	L529771-01	WG549404
Benzo(b)fluoranthene	mg/kg	0.313	0	.333	94.1	13-152	L529771-01	WG549404
Benzo(g,h,i)perylene	mg/kg	0.192	0	.333	57.7	10-137	L529771-01	WG549404
Benzo(k)fluoranthene	mg/kg	0.286	0	.333	85.9	15-152	L529771-01	WG549404
Benzylbutyl phthalate	mg/kg	0.371	0	.333	111.	20-168	L529771-01	WG549404
Bis(2-chlorethoxy)methane	mg/kg	0.334	0	.333	100.	32-141	L529771-01	WG549404
Bis(2-chloroethyl)ether	mg/kg	0.339	0	.333	102.	25-139	L529771-01	WG549404
Bis(2-chloroisopropyl)ether	mg/kg	0.324	0	.333	97.3	32-128	L529771-01	WG549404
Bis(2-ethylhexyl)phthalate	mg/kg	0.394	0	.333	118.	20-163	L529771-01	WG549404
Chrysene	mg/kg	0.335	0	.333	101.	20-139	L529771-01	WG549404
Di-n-butyl phthalate	mg/kg	0.334	0	.333	100.	24-149	L529771-01	WG549404
Di-n-octyl phthalate	mg/kg	0.375	0	.333	112.	14-164	L529771-01	WG549404
Dibenz(a,h)anthracene	mg/kg	0.148	0	.333	44.6	10-137	L529771-01	WG549404
Diethyl phthalate	mg/kg	0.331	0	.333	99.4	28-142	L529771-01	WG549404
Dimethyl phthalate	mg/kg	0.330	0	.333	99.2	31-142	L529771-01	WG549404
Fluoranthene	mg/kg	0.305	0	.333	91.7	24-145	L529771-01	WG549404
Fluorene	mg/kg	0.323	0	.333	97.0	30-138	L529771-01	WG549404
Hexachloro-1,3-butadiene	mg/kg	0.320	0	.333	96.2	29-136	L529771-01	WG549404
Hexachlorobenzene	mg/kg	0.293	0	.333	87.9	26-136	L529771-01	WG549404
Hexachlorocyclopentadiene	mg/kg	0.266	0	.333	79.8	10-124	L529771-01	WG549404
Hexachloroethane	mg/kg	0.327	0	.333	98.2	21-107	L529771-01	WG549404
Indeno(1,2,3-cd)pyrene	mg/kg	0.172	0	.333	51.5	10-139	L529771-01	WG549404
Isophorone	mg/kg	0.271	0	.333	81.4	26-134	L529771-01	WG549404
n-Nitrosodi-n-propylamine	mg/kg	0.365	0	.333	110.	24-141	L529771-01	WG549404
n-Nitrosodimethylamine	mg/kg	0.394	0	.333	118.	18-126	L529771-01	WG549404
n-Nitrosodiphenylamine	mg/kg	0.315	0	.333	94.7	16-128	L529771-01	WG549404
Naphthalene	mg/kg	0.325	0	.333	97.5	31-124	L529771-01	WG549404
Nitrobenzene	mg/kg	0.319	0	.333	95.8	22-122	L529771-01	WG549404
Pentachlorophenol	mg/kg	0.281	0	.333	84.3	10-124	L529771-01	WG549404
Phenanthrene	mg/kg	0.320	0	.333	96.0	25-139	L529771-01	WG549404
Phenol	mg/kg	0.300	0	.333	90.0	22-129	L529771-01	WG549404
Pyrene	mg/kg	0.362	0	.333	109.	23-145	L529771-01	WG549404
2,4,6-Tribromophenol					97.91	16-136		WG549404
2-Fluorobiphenyl					98.64	37-119		WG549404
2-Fluorophenol					98.75	22-114		WG549404
Nitrobenzene-d5					91.27	20-114		WG549404
Phenol-d5					112.0	26-127		WG549404
p-Terphenyl-d14					106.1	15-174		WG549404
1,2,4-Trichlorobenzene	mg/kg	0.235	0	.333	70.6	27-118	L529705-01	WG549703
2,4,6-Trichlorophenol	mg/kg	0.271	0	.333	81.4	18-140	L529705-01	WG549703
2,4-Dichlorophenol	mg/kg	0.277	0	.333	83.1	30-134	L529705-01	WG549703
2,4-Dimethylphenol	mg/kg	0.262	0	.333	78.6	13-147	L529705-01	WG549703
2,4-Dinitrophenol	mg/kg	0.146	0	.333	43.9	10-110	L529705-01	WG549703
2,4-Dinitrotoluene	mg/kg	0.272	0	.333	81.8	12-146	L529705-01	WG549703

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Kirk Johnson
2640 12th Street SW

Cedar Rapids, IA 52404

Quality Assurance Report
Level II

L529577

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

August 11, 2011

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
2,6-Dinitrotoluene	mg/kg	0.275	0	.333	82.5	10-150	L529705-01	WG549703
2-Chloronaphthalene	mg/kg	0.268	0	.333	80.6	31-127	L529705-01	WG549703
2-Chlorophenol	mg/kg	0.234	0	.333	70.3	26-120	L529705-01	WG549703
2-Nitrophenol	mg/kg	0.271	0	.333	81.4	10-156	L529705-01	WG549703
3,3-Dichlorobenzidine	mg/kg	0.237	0	.333	71.2	10-127	L529705-01	WG549703
4,6-Dinitro-2-methylphenol	mg/kg	0.205	0	.333	61.7	10-124	L529705-01	WG549703
4-Bromophenyl-phenylether	mg/kg	0.259	0	.333	77.9	27-150	L529705-01	WG549703
4-Chloro-3-methylphenol	mg/kg	0.270	0	.333	81.2	24-140	L529705-01	WG549703
4-Chlorophenyl-phenylether	mg/kg	0.262	0	.333	78.8	27-142	L529705-01	WG549703
4-Nitrophenol	mg/kg	0.250	0	.333	75.2	10-166	L529705-01	WG549703
Acenaphthene	mg/kg	0.265	0	.333	79.6	30-132	L529705-01	WG549703
Acenaphthylene	mg/kg	0.280	0	.333	84.0	31-144	L529705-01	WG549703
Anthracene	mg/kg	0.276	0	.333	82.8	27-140	L529705-01	WG549703
Benidine	mg/kg	0.0362	0	.333	10.9	10-55	L529705-01	WG549703
Benzo(a)anthracene	mg/kg	0.266	0	.333	80.0	22-139	L529705-01	WG549703
Benzo(a)pyrene	mg/kg	0.284	0	.333	85.2	16-148	L529705-01	WG549703
Benzo(b)fluoranthene	mg/kg	0.296	0	.333	89.0	13-152	L529705-01	WG549703
Benzo(g,h,i)perylene	mg/kg	0.172	0	.333	51.5	10-137	L529705-01	WG549703
Benzo(k)fluoranthene	mg/kg	0.279	0	.333	83.9	15-152	L529705-01	WG549703
Benzylbutyl phthalate	mg/kg	0.266	0	.333	79.8	20-168	L529705-01	WG549703
Bis(2-chlorethoxy)methane	mg/kg	0.277	0	.333	83.1	32-141	L529705-01	WG549703
Bis(2-chloroethyl)ether	mg/kg	0.251	0	.333	75.5	25-139	L529705-01	WG549703
Bis(2-chloroisopropyl)ether	mg/kg	0.247	0	.333	74.2	32-128	L529705-01	WG549703
Bis(2-ethylhexyl)phthalate	mg/kg	0.259	0	.333	77.8	20-163	L529705-01	WG549703
Chrysene	mg/kg	0.276	0	.333	82.9	20-139	L529705-01	WG549703
Di-n-butyl phthalate	mg/kg	0.282	0	.333	84.6	24-149	L529705-01	WG549703
Di-n-octyl phthalate	mg/kg	0.249	0	.333	74.7	14-164	L529705-01	WG549703
Dibenz(a,h)anthracene	mg/kg	0.192	0	.333	57.7	10-137	L529705-01	WG549703
Diethyl phthalate	mg/kg	0.287	0	.333	86.2	28-142	L529705-01	WG549703
Dimethyl phthalate	mg/kg	0.280	0	.333	84.0	31-142	L529705-01	WG549703
Fluoranthene	mg/kg	0.280	0	.333	84.0	24-145	L529705-01	WG549703
Fluorene	mg/kg	0.260	0	.333	78.2	30-138	L529705-01	WG549703
Hexachloro-1,3-butadiene	mg/kg	0.244	0	.333	73.3	29-136	L529705-01	WG549703
Hexachlorobenzene	mg/kg	0.249	0	.333	74.7	26-136	L529705-01	WG549703
Hexachlorocyclopentadiene	mg/kg	0.169	0	.333	50.8	10-124	L529705-01	WG549703
Hexachloroethane	mg/kg	0.265	0	.333	79.6	21-107	L529705-01	WG549703
Indeno(1,2,3-cd)pyrene	mg/kg	0.196	0	.333	59.0	10-139	L529705-01	WG549703
Isophorone	mg/kg	0.223	0	.333	66.8	26-134	L529705-01	WG549703
n-Nitrosodi-n-propylamine	mg/kg	0.288	0	.333	86.6	24-141	L529705-01	WG549703
n-Nitrosodimethylamine	mg/kg	0.194	0	.333	58.3	18-126	L529705-01	WG549703
n-Nitrosodiphenylamine	mg/kg	0.272	0	.333	81.5	16-128	L529705-01	WG549703
Naphthalene	mg/kg	0.258	0	.333	77.5	31-124	L529705-01	WG549703
Nitrobenzene	mg/kg	0.268	0	.333	80.5	22-122	L529705-01	WG549703
Pentachlorophenol	mg/kg	0.256	0	.333	76.8	10-124	L529705-01	WG549703
Phenanthrene	mg/kg	0.272	0	.333	81.7	25-139	L529705-01	WG549703
Phenol	mg/kg	0.260	0	.333	77.9	22-129	L529705-01	WG549703
Pyrene	mg/kg	0.251	0	.333	75.4	23-145	L529705-01	WG549703
2,4,6-Tribromophenol					86.69	16-136		WG549703
2-Fluorobiphenyl					80.66	37-119		WG549703
2-Fluorophenol					77.67	22-114		WG549703
Nitrobenzene-d5					75.02	20-114		WG549703
Phenol-d5					88.76	26-127		WG549703
p-Terphenyl-d14					75.29	15-174		WG549703

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Diesel	mg/kg	25.9	23.3	86.2	50-150	10.3	20	L529659-02	WG549312
Motor Oil	mg/kg	28.3	26.8	0*	50-150	5.37	25	L529659-02	WG549312

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Quality Assurance Report
Level II

August 11, 2011

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Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref	Samp	Batch
			Ref	%Rec						
Total (C7-C40)	mg/kg	54.2	50.2	5420*	-	7.68*	0			WG549312
o-terphenyl				67.03	50-150					WG549312
1,1,1,2-Tetrachloroethane	mg/l	0.0268	0.0264	107.	45-152	1.60	21	L529553-02		WG549212
1,1,1-Trichloroethane	mg/l	0.0233	0.0247	93.1	31-161	5.89	23	L529553-02		WG549212
1,1,2,2-Tetrachloroethane	mg/l	0.0256	0.0244	102.	49-149	4.90	22	L529553-02		WG549212
1,1,2-Trichloroethane	mg/l	0.0255	0.0244	102.	46-145	4.24	20	L529553-02		WG549212
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	0.0243	0.0258	97.0	14-168	6.20	24	L529553-02		WG549212
1,1-Dichloroethane	mg/l	0.0216	0.0229	86.4	30-159	5.84	21	L529553-02		WG549212
1,1-Dichloroethene	mg/l	0.0255	0.0276	102.	10-162	7.90	23	L529553-02		WG549212
1,1-Dichloropropene	mg/l	0.0228	0.0241	91.3	14-162	5.50	23	L529553-02		WG549212
1,2,3-Trichlorobenzene	mg/l	0.0247	0.0245	98.9	32-143	0.780	33	L529553-02		WG549212
1,2,3-Trichloropropane	mg/l	0.0261	0.0245	104.	48-148	6.46	23	L529553-02		WG549212
1,2,3-Trimethylbenzene	mg/l	0.0226	0.0227	90.2	36-141	0.460	25	L529553-02		WG549212
1,2,4-Trichlorobenzene	mg/l	0.0260	0.0267	104.	27-142	2.57	30	L529553-02		WG549212
1,2,4-Trimethylbenzene	mg/l	0.0252	0.0246	101.	29-153	2.44	27	L529553-02		WG549212
1,2-Dibromo-3-Chloropropane	mg/l	0.0266	0.0266	106.	37-148	0.170	27	L529553-02		WG549212
1,2-Dibromoethane	mg/l	0.0259	0.0249	104.	41-149	3.92	21	L529553-02		WG549212
1,2-Dichlorobenzene	mg/l	0.0238	0.0241	95.3	40-139	0.940	23	L529553-02		WG549212
1,2-Dichloroethane	mg/l	0.0195	0.0201	78.0	29-167	2.89	21	L529553-02		WG549212
1,2-Dichloropropane	mg/l	0.0208	0.0209	83.1	39-148	0.480	20	L529553-02		WG549212
1,3,5-Trimethylbenzene	mg/l	0.0266	0.0260	106.	33-149	2.21	26	L529553-02		WG549212
1,3-Dichlorobenzene	mg/l	0.0264	0.0255	106.	32-148	3.51	24	L529553-02		WG549212
1,3-Dichloropropane	mg/l	0.0241	0.0227	96.4	44-142	5.85	20	L529553-02		WG549212
1,4-Dichlorobenzene	mg/l	0.0244	0.0247	97.6	32-136	1.02	23	L529553-02		WG549212
2,2-Dichloropropane	mg/l	0.0247	0.0256	98.7	14-158	3.90	23	L529553-02		WG549212
2-Butanone (MEK)	mg/l	0.101	0.0996	81.1	32-151	1.75	26	L529553-02		WG549212
2-Chloroethyl vinyl ether	mg/l	0.000785	0.00306	0.628	0-175	118.*	75	L529553-02		WG549212
2-Chlorotoluene	mg/l	0.0250	0.0249	100.	35-147	0.620	24	L529553-02		WG549212
4-Chlorotoluene	mg/l	0.0248	0.0242	99.2	33-147	2.43	25	L529553-02		WG549212
4-Methyl-2-pentanone (MIBK)	mg/l	0.111	0.110	89.0	40-160	1.13	28	L529553-02		WG549212
Acetone	mg/l	0.0935	0.0936	74.8	25-157	0.0800	26	L529553-02		WG549212
Acrolein	mg/l	0.0214	0.0216	17.1	0-179	0.690	39	L529553-02		WG549212
Acrylonitrile	mg/l	0.104	0.107	83.5	37-162	2.58	24	L529553-02		WG549212
Benzene	mg/l	0.0214	0.0224	85.7	16-158	4.36	21	L529553-02		WG549212
Bromobenzene	mg/l	0.0242	0.0235	96.6	37-147	2.89	23	L529553-02		WG549212
Bromodichloromethane	mg/l	0.0217	0.0221	86.8	45-147	1.82	20	L529553-02		WG549212
Bromoform	mg/l	0.0248	0.0237	99.2	38-152	4.74	20	L529553-02		WG549212
Bromomethane	mg/l	0.0193	0.0198	77.4	0-191	2.33	35	L529553-02		WG549212
Carbon tetrachloride	mg/l	0.0246	0.0268	98.5	22-168	8.31	24	L529553-02		WG549212
Chlorobenzene	mg/l	0.0254	0.0250	102.	33-148	1.55	22	L529553-02		WG549212
Chlorodibromomethane	mg/l	0.0260	0.0250	104.	48-151	3.95	21	L529553-02		WG549212
Chloroethane	mg/l	0.0193	0.0199	77.1	4-176	3.37	27	L529553-02		WG549212
Chloroform	mg/l	0.0212	0.0223	84.7	37-147	5.33	21	L529553-02		WG549212
Chloromethane	mg/l	0.0192	0.0204	76.8	10-174	5.92	28	L529553-02		WG549212
cis-1,2-Dichloroethene	mg/l	0.0311	0.0318	84.3	29-156	2.40	22	L529553-02		WG549212
cis-1,3-Dichloropropene	mg/l	0.0224	0.0224	89.5	35-148	0.200	21	L529553-02		WG549212
Di-isopropyl ether	mg/l	0.0196	0.0205	78.3	39-160	4.51	21	L529553-02		WG549212
Dibromomethane	mg/l	0.0213	0.0215	85.4	36-152	0.600	20	L529553-02		WG549212
Dichlorodifluoromethane	mg/l	0.0214	0.0236	85.7	0-200	9.77	26	L529553-02		WG549212
Ethylbenzene	mg/l	0.0263	0.0264	105.	29-150	0.400	24	L529553-02		WG549212
Hexachloro-1,3-butadiene	mg/l	0.0271	0.0283	108.	28-144	4.01	33	L529553-02		WG549212
Isopropylbenzene	mg/l	0.0297	0.0295	119.	35-147	0.500	25	L529553-02		WG549212
Methyl tert-butyl ether	mg/l	0.0214	0.0221	85.4	24-167	3.33	22	L529553-02		WG549212
Methylene Chloride	mg/l	0.0217	0.0226	86.9	23-151	4.20	21	L529553-02		WG549212
n-Butylbenzene	mg/l	0.0249	0.0260	99.8	22-151	4.18	29	L529553-02		WG549212
n-Propylbenzene	mg/l	0.0263	0.0260	105.	26-150	1.11	25	L529553-02		WG549212
Naphthalene	mg/l	0.0249	0.0247	99.5	24-160	0.610	37	L529553-02		WG549212

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Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref	Samp	Batch
			Ref	%Rec						
p-Isopropyltoluene	mg/l	0.0279	0.0273	112.	28-151	2.21	27	L529553-02		WG549212
sec-Butylbenzene	mg/l	0.0277	0.0270	111.	32-149	2.58	26	L529553-02		WG549212
Styrene	mg/l	0.0184	0.0178	73.5	38-149	2.93	23	L529553-02		WG549212
tert-Butylbenzene	mg/l	0.0281	0.0277	112.	36-149	1.20	26	L529553-02		WG549212
Tetrachloroethene	mg/l	0.0285	0.0284	114.	13-157	0.600	24	L529553-02		WG549212
Toluene	mg/l	0.0227	0.0228	90.7	22-152	0.750	22	L529553-02		WG549212
trans-1,2-Dichloroethene	mg/l	0.0233	0.0247	93.2	11-160	5.73	23	L529553-02		WG549212
trans-1,3-Dichloropropene	mg/l	0.0197	0.0194	78.8	33-153	1.30	22	L529553-02		WG549212
Trichlorofluoromethane	mg/l	0.0216	0.0237	86.6	10-177	9.22	24	L529553-02		WG549212
Vinyl chloride	mg/l	0.0203	0.0218	81.4	0-179	6.75	26	L529553-02		WG549212
Xylenes, Total	mg/l	0.0786	0.0768	105.	27-151	2.34	23	L529553-02		WG549212
4-Bromofluorobenzene				104.5	75-128					WG549212
Dibromofluoromethane				93.29	79-125					WG549212
Toluene-d8				97.89	87-114					WG549212
Barium, Dissolved	mg/l	1.56	1.57	103.	75-125	0.639	20	L529577-14		WG549210
Cadmium, Dissolved	mg/l	1.19	1.19	105.	75-125	0	20	L529577-14		WG549210
Chromium, Dissolved	mg/l	1.18	1.20	104.	75-125	1.68	20	L529577-14		WG549210
Lead, Dissolved	mg/l	1.15	1.19	101.	75-125	3.42	20	L529577-14		WG549210
Selenium, Dissolved	mg/l	1.11	1.15	94.1	75-125	3.54	20	L529577-14		WG549210
Silver, Dissolved	mg/l	0.700	0.580	61.9*	75-125	18.8	20	L529577-14		WG549210
Arsenic, Dissolved	mg/l	0.0546	0.0549	96.3	75-125	0.548	20	L529170-01		WG549323
Arsenic	mg/kg	57.2	55.4	94.4	75-125	3.20	20	L529569-11		WG549236
Barium	mg/kg	187.	183.	94.0	75-125	2.16	20	L529569-11		WG549236
Cadmium	mg/kg	45.3	45.6	87.2	75-125	0.660	20	L529569-11		WG549236
Chromium	mg/kg	74.3	70.6	96.6	75-125	5.11	20	L529569-11		WG549236
Lead	mg/kg	67.4	65.8	94.8	75-125	2.40	20	L529569-11		WG549236
Silver	mg/kg	49.4	48.6	96.6	75-125	1.63	20	L529569-11		WG549236
1,1,1,2-Tetrachloroethane	mg/kg	0.123	0.126	98.5	29-145	1.93	31	L529577-01		WG549226
1,1,1-Trichloroethane	mg/kg	0.116	0.123	92.5	23-147	6.36	32	L529577-01		WG549226
1,1,2,2-Tetrachloroethane	mg/kg	0.00562	0.0177	4.50*	18-150	103.*	33	L529577-01		WG549226
1,1,2-Trichloroethane	mg/kg	0.129	0.126	103.	35-140	1.83	29	L529577-01		WG549226
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	0.129	0.138	104.	10-145	6.56	35	L529577-01		WG549226
1,1-Dichloroethane	mg/kg	0.113	0.116	90.5	24-148	2.63	31	L529577-01		WG549226
1,1-Dichloroethene	mg/kg	0.154	0.162	123.	10-149	5.51	34	L529577-01		WG549226
1,1-Dichloropropene	mg/kg	0.111	0.118	89.2	10-141	5.37	34	L529577-01		WG549226
1,2,3-Trichlorobenzene	mg/kg	0.0817	0.0750	65.3	10-129	8.57	43	L529577-01		WG549226
1,2,3-Trichloropropane	mg/kg	0.119	0.122	95.4	30-148	2.25	32	L529577-01		WG549226
1,2,3-Trimethylbenzene	mg/kg	0.0852	0.0843	68.1	10-137	0.980	36	L529577-01		WG549226
1,2,4-Trichlorobenzene	mg/kg	0.0845	0.0815	67.6	10-119	3.61	44	L529577-01		WG549226
1,2,4-Trimethylbenzene	mg/kg	0.0949	0.0963	75.9	10-145	1.52	41	L529577-01		WG549226
1,2-Dibromo-3-Chloropropane	mg/kg	0.118	0.115	94.1	19-145	2.66	35	L529577-01		WG549226
1,2-Dibromoethane	mg/kg	0.125	0.127	99.7	24-145	1.83	31	L529577-01		WG549226
1,2-Dichlorobenzene	mg/kg	0.0966	0.0977	77.2	12-130	1.18	35	L529577-01		WG549226
1,2-Dichloroethane	mg/kg	0.0970	0.100	77.6	21-155	3.54	29	L529577-01		WG549226
1,2-Dichloropropane	mg/kg	0.105	0.105	84.1	28-144	0.0900	30	L529577-01		WG549226
1,3,5-Trimethylbenzene	mg/kg	0.0982	0.101	78.6	10-135	2.82	39	L529577-01		WG549226
1,3-Dichlorobenzene	mg/kg	0.107	0.109	85.4	10-129	2.15	38	L529577-01		WG549226
1,3-Dichloropropane	mg/kg	0.119	0.115	95.0	31-137	2.89	29	L529577-01		WG549226
1,4-Dichlorobenzene	mg/kg	0.100	0.101	80.0	10-121	0.950	36	L529577-01		WG549226
2,2-Dichloropropane	mg/kg	0.118	0.127	94.1	18-144	7.98	32	L529577-01		WG549226
2-Butanone (MEK)	mg/kg	0.505	0.507	80.7	21-143	0.470	37	L529577-01		WG549226

* Performance of this Analyte is outside of established criteria.

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YOUR LAB OF CHOICE

Terracon - Cedar Rapids
Kirk Johnson
2640 12th Street SW

Cedar Rapids, IA 52404

Quality Assurance Report
Level II

L529577

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

August 11, 2011

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
2-Chloroethyl vinyl ether	mg/kg	0.545	0.531	87.2	0-176	2.64	50	L529577-01	WG549226
2-Chlorotoluene	mg/kg	0.101	0.103	80.9	10-132	1.35	37	L529577-01	WG549226
4-Chlorotoluene	mg/kg	0.102	0.104	81.5	10-129	1.76	38	L529577-01	WG549226
4-Methyl-2-pentanone (MIBK)	mg/kg	0.576	0.567	92.1	31-151	1.58	36	L529577-01	WG549226
Acetone	mg/kg	0.589	0.604	94.3	13-158	2.39	34	L529577-01	WG549226
Acrylonitrile	mg/kg	0.558	0.553	89.3	20-154	0.890	35	L529577-01	WG549226
Benzene	mg/kg	0.112	0.113	89.5	16-143	0.800	31	L529577-01	WG549226
Bromobenzene	mg/kg	0.0998	0.105	79.8	14-135	4.93	39	L529577-01	WG549226
Bromodichloromethane	mg/kg	0.105	0.104	84.3	27-139	1.29	30	L529577-01	WG549226
Bromoform	mg/kg	0.136	0.138	108.	21-144	1.44	34	L529577-01	WG549226
Bromomethane	mg/kg	0.108	0.118	86.8	0-180	8.83	41	L529577-01	WG549226
Carbon tetrachloride	mg/kg	0.110	0.115	87.6	12-149	5.13	34	L529577-01	WG549226
Chlorobenzene	mg/kg	0.118	0.122	94.0	17-134	3.64	34	L529577-01	WG549226
Chlorodibromomethane	mg/kg	0.126	0.126	101.	28-147	0.440	32	L529577-01	WG549226
Chloroethane	mg/kg	0.115	0.119	92.0	0-172	3.12	38	L529577-01	WG549226
Chloroform	mg/kg	0.113	0.117	90.4	28-138	3.19	30	L529577-01	WG549226
Chloromethane	mg/kg	0.104	0.108	82.9	10-158	3.73	35	L529577-01	WG549226
cis-1,2-Dichloroethene	mg/kg	0.121	0.128	96.5	21-147	5.74	31	L529577-01	WG549226
cis-1,3-Dichloropropene	mg/kg	0.112	0.111	89.4	17-145	0.810	32	L529577-01	WG549226
Di-isopropyl ether	mg/kg	0.0976	0.0991	78.1	31-153	1.47	29	L529577-01	WG549226
Dibromomethane	mg/kg	0.115	0.117	92.3	24-147	1.35	30	L529577-01	WG549226
Dichlorodifluoromethane	mg/kg	0.121	0.132	96.6	0-192	8.80	38	L529577-01	WG549226
Ethylbenzene	mg/kg	0.117	0.122	93.8	12-137	4.18	36	L529577-01	WG549226
Hexachloro-1,3-butadiene	mg/kg	0.0523	0.0458	41.8	10-123	13.1	50	L529577-01	WG549226
Isopropylbenzene	mg/kg	0.114	0.118	91.2	14-134	3.56	37	L529577-01	WG549226
Methyl tert-butyl ether	mg/kg	0.112	0.113	89.5	21-157	1.37	31	L529577-01	WG549226
Methylene Chloride	mg/kg	0.119	0.124	95.6	12-149	4.12	31	L529577-01	WG549226
n-Butylbenzene	mg/kg	0.0712	0.0678	57.0	10-130	4.88	48	L529577-01	WG549226
n-Propylbenzene	mg/kg	0.0982	0.101	78.5	10-130	3.12	40	L529577-01	WG549226
Naphthalene	mg/kg	0.0953	0.0880	76.3	0-146	7.98	43	L529577-01	WG549226
p-Isopropyltoluene	mg/kg	0.0910	0.0894	72.8	10-131	1.70	43	L529577-01	WG549226
sec-Butylbenzene	mg/kg	0.0883	0.0870	70.6	10-134	1.47	43	L529577-01	WG549226
Styrene	mg/kg	0.0822	0.0832	65.7	10-140	1.23	35	L529577-01	WG549226
tert-Butylbenzene	mg/kg	0.102	0.101	81.4	11-137	0.570	39	L529577-01	WG549226
Tetrachloroethene	mg/kg	0.126	0.132	100.	10-131	5.01	35	L529577-01	WG549226
Toluene	mg/kg	0.112	0.113	89.6	12-136	0.590	32	L529577-01	WG549226
trans-1,2-Dichloroethene	mg/kg	0.120	0.126	96.0	10-143	4.46	33	L529577-01	WG549226
trans-1,3-Dichloropropene	mg/kg	0.106	0.102	84.7	16-147	4.07	32	L529577-01	WG549226
Trichloroethene	mg/kg	0.226	0.224	180.*	10-155	0.900	33	L529577-01	WG549226
Trichlorofluoromethane	mg/kg	0.120	0.127	96.1	10-154	5.36	32	L529577-01	WG549226
Vinyl chloride	mg/kg	0.108	0.115	86.1	10-159	6.46	36	L529577-01	WG549226
Xylenes, Total	mg/kg	0.347	0.355	92.6	10-138	2.03	36	L529577-01	WG549226
4-Bromofluorobenzene				99.11	59-140				WG549226
Dibromofluoromethane				81.57	63-139				WG549226
Toluene-d8				97.62	84-116				WG549226
Selenium	mg/kg	42.7	42.2	17.1*	75-125	1.18	20	L529569-11	WG549236
Mercury	mg/kg	0.289	0.384	97.2	70-130	28.2*	20	L529569-11	WG549217
PCB 1016	mg/kg	0.159	0.152	95.4	10-165	4.81	33	L529577-01	WG549310
PCB 1260	mg/kg	0.174	0.163	104.	10-175	6.55	23	L529577-01	WG549310
Decachlorobiphenyl				102.5	18.9-115.8				WG549310
Tetrachloro-m-xylene				107.3	31.8-115.7				WG549310

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Quality Assurance Report
Level II

August 11, 2011

L529577

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref	Samp	Batch
			Ref	%Rec						
1,1,1,2-Tetrachloroethane	mg/l	0.0231	0.0220	92.5	45-152	5.01	21	L529783-07		WG549500
1,1,1-Trichloroethane	mg/l	0.0256	0.0237	102.	31-161	7.67	23	L529783-07		WG549500
1,1,2,2-Tetrachloroethane	mg/l	0.0277	0.0236	111.	49-149	16.3	22	L529783-07		WG549500
1,1,2-Trichloroethane	mg/l	0.0242	0.0209	97.0	46-145	15.0	20	L529783-07		WG549500
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/l	0.0257	0.0237	103.	14-168	8.21	24	L529783-07		WG549500
1,1-Dichloroethane	mg/l	0.0243	0.0219	97.1	30-159	10.2	21	L529783-07		WG549500
1,1-Dichloroethene	mg/l	0.0244	0.0245	97.7	10-162	0.480	23	L529783-07		WG549500
1,1-Dichloropropene	mg/l	0.0224	0.0200	89.8	14-162	11.7	23	L529783-07		WG549500
1,2,3-Trichlorobenzene	mg/l	0.0246	0.0232	98.3	32-143	5.81	33	L529783-07		WG549500
1,2,3-Trichloropropane	mg/l	0.0270	0.0237	108.	48-148	13.2	23	L529783-07		WG549500
1,2,3-Trimethylbenzene	mg/l	0.0209	0.0202	83.8	36-141	3.78	25	L529783-07		WG549500
1,2,4-Trichlorobenzene	mg/l	0.0260	0.0248	104.	27-142	4.87	30	L529783-07		WG549500
1,2,4-Trimethylbenzene	mg/l	0.0235	0.0218	93.8	29-153	7.15	27	L529783-07		WG549500
1,2-Dibromo-3-Chloropropane	mg/l	0.0272	0.0229	109.	37-148	16.9	27	L529783-07		WG549500
1,2-Dibromoethane	mg/l	0.0239	0.0199	95.8	41-149	18.4	21	L529783-07		WG549500
1,2-Dichlorobenzene	mg/l	0.0232	0.0214	92.8	40-139	8.22	23	L529783-07		WG549500
1,2-Dichloroethane	mg/l	0.0236	0.0204	94.4	29-167	14.4	21	L529783-07		WG549500
1,2-Dichloropropane	mg/l	0.0228	0.0206	91.1	39-148	10.1	20	L529783-07		WG549500
1,3,5-Trimethylbenzene	mg/l	0.0238	0.0223	95.1	33-149	6.49	26	L529783-07		WG549500
1,3-Dichlorobenzene	mg/l	0.0237	0.0215	92.6	32-148	9.62	24	L529783-07		WG549500
1,3-Dichloropropane	mg/l	0.0231	0.0195	92.5	44-142	16.9	20	L529783-07		WG549500
1,4-Dichlorobenzene	mg/l	0.0241	0.0220	90.1	32-136	9.02	23	L529783-07		WG549500
2,2-Dichloropropane	mg/l	0.0280	0.0259	112.	14-158	7.52	23	L529783-07		WG549500
2-Butanone (MEK)	mg/l	0.150	0.118	117.	32-151	23.9	26	L529783-07		WG549500
2-Chloroethyl vinyl ether	mg/l	0.134	0.110	107.	0-175	19.9	75	L529783-07		WG549500
2-Chlorotoluene	mg/l	0.0234	0.0210	93.7	35-147	10.9	24	L529783-07		WG549500
4-Chlorotoluene	mg/l	0.0244	0.0208	97.6	33-147	15.8	25	L529783-07		WG549500
4-Methyl-2-pentanone (MIBK)	mg/l	0.162	0.133	130.	40-160	19.4	28	L529783-07		WG549500
Acetone	mg/l	0.155	0.131	124.	25-157	16.6	26	L529783-07		WG549500
Acrolein	mg/l	0.0141	0.0107	11.3	0-179	27.5	39	L529783-07		WG549500
Acrylonitrile	mg/l	0.150	0.123	120.	37-162	19.6	24	L529783-07		WG549500
Benzene	mg/l	0.0223	0.0200	89.3	16-158	11.1	21	L529783-07		WG549500
Bromobenzene	mg/l	0.0226	0.0200	90.6	37-147	12.6	23	L529783-07		WG549500
Bromodichloromethane	mg/l	0.0234	0.0211	93.7	45-147	10.5	20	L529783-07		WG549500
Bromoform	mg/l	0.0294	0.0257	118.	38-152	13.6	20	L529783-07		WG549500
Bromomethane	mg/l	0.0198	0.0184	79.0	0-191	7.03	35	L529783-07		WG549500
Carbon tetrachloride	mg/l	0.0226	0.0211	90.2	22-168	6.70	24	L529783-07		WG549500
Chlorobenzene	mg/l	0.0331	0.0299	88.2	33-148	10.2	22	L529783-07		WG549500
Chlorodibromomethane	mg/l	0.0233	0.0204	93.2	48-151	13.3	21	L529783-07		WG549500
Chloroethane	mg/l	0.0185	0.0173	74.2	4-176	7.01	27	L529783-07		WG549500
Chloroform	mg/l	0.0242	0.0217	96.7	37-147	10.8	21	L529783-07		WG549500
Chloromethane	mg/l	0.0167	0.0143	66.7	10-174	15.5	28	L529783-07		WG549500
cis-1,2-Dichloroethene	mg/l	0.0235	0.0211	93.8	29-156	10.5	22	L529783-07		WG549500
cis-1,3-Dichloropropene	mg/l	0.0236	0.0202	94.4	35-148	15.5	21	L529783-07		WG549500
Di-isopropyl ether	mg/l	0.0252	0.0224	101.	39-160	12.0	21	L529783-07		WG549500
Dibromomethane	mg/l	0.0236	0.0206	94.3	36-152	13.5	20	L529783-07		WG549500
Dichlorodifluoromethane	mg/l	0.0184	0.0165	73.7	0-200	11.1	26	L529783-07		WG549500
Ethylbenzene	mg/l	0.0234	0.0209	93.6	29-150	11.4	24	L529783-07		WG549500
Hexachloro-1,3-butadiene	mg/l	0.0235	0.0236	94.1	28-144	0.110	33	L529783-07		WG549500
Isopropylbenzene	mg/l	0.0276	0.0256	106.	35-147	7.27	25	L529783-07		WG549500
Methyl tert-butyl ether	mg/l	0.0276	0.0240	110.	24-167	13.9	22	L529783-07		WG549500
Methylene Chloride	mg/l	0.0217	0.0199	86.7	23-151	8.68	21	L529783-07		WG549500
n-Butylbenzene	mg/l	0.0251	0.0233	100.	22-151	7.36	29	L529783-07		WG549500
n-Propylbenzene	mg/l	0.0252	0.0229	94.8	26-150	9.58	25	L529783-07		WG549500
Naphthalene	mg/l	0.0298	0.0271	115.	24-160	9.56	37	L529783-07		WG549500
p-Isopropyltoluene	mg/l	0.0249	0.0235	99.7	28-151	5.93	27	L529783-07		WG549500
sec-Butylbenzene	mg/l	0.0261	0.0250	97.9	32-149	4.02	26	L529783-07		WG549500
Styrene	mg/l	0.0175	0.0154	69.8	38-149	12.9	23	L529783-07		WG549500
tert-Butylbenzene	mg/l	0.0301	0.0284	89.2	36-149	5.67	26	L529783-07		WG549500

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Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Tetrachloroethene	mg/l	0.0204	0.0183	81.5	13-157	10.6	24	L529783-07	WG549500
Toluene	mg/l	0.0217	0.0197	86.9	22-152	9.94	22	L529783-07	WG549500
trans-1,2-Dichloroethene	mg/l	0.0207	0.0187	82.8	11-160	10.1	23	L529783-07	WG549500
trans-1,3-Dichloropropene	mg/l	0.0246	0.0209	98.5	33-153	16.5	22	L529783-07	WG549500
Trichloroethene	mg/l	0.0216	0.0196	86.5	18-163	9.86	21	L529783-07	WG549500
Trichlorofluoromethane	mg/l	0.0208	0.0195	83.1	10-177	6.45	24	L529783-07	WG549500
Vinyl chloride	mg/l	0.0177	0.0162	70.8	0-179	8.66	26	L529783-07	WG549500
Xylenes, Total	mg/l	0.0692	0.0621	92.3	27-151	10.8	23	L529783-07	WG549500
4-Bromofluorobenzene				107.8	75-128				WG549500
Dibromofluoromethane				107.3	79-125				WG549500
Toluene-d8				105.7	87-114				WG549500
Trichloroethene	mg/l	0.0223	0.0231	89.0	18-163	3.73	21	L529206-01	WG549466
4-Bromofluorobenzene				104.8	75-128				WG549466
Dibromofluoromethane				105.2	79-125				WG549466
Toluene-d8				101.2	87-114				WG549466
Mercury, Dissolved	mg/l	0.00299	0.00315	99.7	70-130	5.21	20	L529127-11	WG548951
Diesel	mg/kg	27.0	25.8	89.8	50-150	4.27	20	L529577-07	WG549376
Motor Oil	mg/kg	27.9	27.6	92.8	50-150	0.752	25	L529577-07	WG549376
o-terphenyl				84.93	50-150				WG549376
1,2,4-Trichlorobenzene	mg/kg	0.288	0.290	86.5	27-118	0.655	23	L529771-01	WG549404
2,4,6-Trichlorophenol	mg/kg	0.311	0.322	93.3	18-140	3.52	26	L529771-01	WG549404
2,4-Dichlorophenol	mg/kg	0.317	0.328	95.3	30-134	3.24	23	L529771-01	WG549404
2,4-Dimethylphenol	mg/kg	0.296	0.304	88.9	13-147	2.55	27	L529771-01	WG549404
2,4-Dinitrophenol	mg/kg	0.163	0.166	49.1	10-110	1.67	40	L529771-01	WG549404
2,4-Dinitrotoluene	mg/kg	0.284	0.308	85.4	12-146	7.99	25	L529771-01	WG549404
2,6-Dinitrotoluene	mg/kg	0.287	0.312	86.3	10-150	8.09	23	L529771-01	WG549404
2-Chloronaphthalene	mg/kg	0.323	0.341	96.9	31-127	5.66	23	L529771-01	WG549404
2-Chlorophenol	mg/kg	0.305	0.305	91.7	26-120	0.203	21	L529771-01	WG549404
2-Nitrophenol	mg/kg	0.329	0.315	98.7	10-156	4.14	24	L529771-01	WG549404
3,3-Dichlorobenzidine	mg/kg	0.246	0.265	74.0	10-127	7.49	40	L529771-01	WG549404
4,6-Dinitro-2-methylphenol	mg/kg	0.254	0.267	76.2	10-124	5.29	40	L529771-01	WG549404
4-Bromophenyl-phenylether	mg/kg	0.318	0.319	95.4	27-150	0.424	20	L529771-01	WG549404
4-Chloro-3-methylphenol	mg/kg	0.307	0.302	92.2	24-140	1.79	22	L529771-01	WG549404
4-Chlorophenyl-phenylether	mg/kg	0.294	0.317	88.3	27-142	7.37	21	L529771-01	WG549404
4-Nitrophenol	mg/kg	0.255	0.229	76.5	10-166	10.6	35	L529771-01	WG549404
Acenaphthene	mg/kg	0.321	0.336	96.2	30-132	4.76	21	L529771-01	WG549404
Acenaphthylene	mg/kg	0.332	0.341	99.8	31-144	2.42	24	L529771-01	WG549404
Anthracene	mg/kg	0.302	0.318	90.7	27-140	5.26	20	L529771-01	WG549404
Benzidine	mg/kg	0.0428	0.0340	12.9	10-55	23.0	36	L529771-01	WG549404
Benzo(a)anthracene	mg/kg	0.302	0.320	90.6	22-139	5.95	22	L529771-01	WG549404
Benzo(a)pyrene	mg/kg	0.290	0.283	87.0	16-148	2.20	21	L529771-01	WG549404
Benzo(b)fluoranthene	mg/kg	0.302	0.313	90.6	13-152	3.82	24	L529771-01	WG549404
Benzo(g,h,i)perylene	mg/kg	0.183	0.192	54.8	10-137	5.20	32	L529771-01	WG549404
Benzo(k)fluoranthene	mg/kg	0.282	0.286	84.8	15-152	1.28	22	L529771-01	WG549404
Benzylbutyl phthalate	mg/kg	0.342	0.371	102.	20-168	8.27	23	L529771-01	WG549404
Bis(2-chlorethoxy)methane	mg/kg	0.343	0.334	103.	32-141	2.63	20	L529771-01	WG549404
Bis(2-chloroethyl)ether	mg/kg	0.339	0.339	102.	25-139	0.0812	26	L529771-01	WG549404
Bis(2-chloroisopropyl)ether	mg/kg	0.300	0.324	90.1	32-128	7.67	22	L529771-01	WG549404
Bis(2-ethylhexyl)phthalate	mg/kg	0.354	0.394	106.	20-163	10.7	24	L529771-01	WG549404
Chrysene	mg/kg	0.302	0.335	90.8	20-139	10.3	23	L529771-01	WG549404
Di-n-butyl phthalate	mg/kg	0.311	0.334	93.4	24-149	7.04	24	L529771-01	WG549404

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



YOUR LAB OF CHOICE

Terracon - Cedar Rapids
Kirk Johnson
2640 12th Street SW

Cedar Rapids, IA 52404

Quality Assurance Report
Level II

L529577

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

August 11, 2011

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref	Samp	Batch
			Ref	%Rec						
Di-n-octyl phthalate	mg/kg	0.336	0.375	101.	14-164	10.9	24	L529771-01		WG549404
Dibenz(a,h)anthracene	mg/kg	0.140	0.148	42.0	10-137	5.90	29	L529771-01		WG549404
Diethyl phthalate	mg/kg	0.310	0.331	93.2	28-142	6.38	23	L529771-01		WG549404
Dimethyl phthalate	mg/kg	0.312	0.330	93.6	31-142	5.74	22	L529771-01		WG549404
Fluoranthene	mg/kg	0.289	0.305	86.7	24-145	5.67	29	L529771-01		WG549404
Fluorene	mg/kg	0.307	0.323	92.3	30-138	4.98	22	L529771-01		WG549404
Hexachloro-1,3-butadiene	mg/kg	0.311	0.320	93.4	29-136	2.91	22	L529771-01		WG549404
Hexachlorobenzene	mg/kg	0.295	0.293	88.7	26-136	0.938	20	L529771-01		WG549404
Hexachlorocyclopentadiene	mg/kg	0.247	0.266	74.3	10-124	7.16	33	L529771-01		WG549404
Hexachloroethane	mg/kg	0.317	0.327	95.2	21-107	3.16	27	L529771-01		WG549404
Indeno(1,2,3-cd)pyrene	mg/kg	0.177	0.172	53.2	10-139	3.31	32	L529771-01		WG549404
Isophorone	mg/kg	0.270	0.271	81.1	26-134	0.253	20	L529771-01		WG549404
n-Nitrosodi-n-propylamine	mg/kg	0.350	0.365	105.	24-141	4.00	20	L529771-01		WG549404
n-Nitrosodimethylamine	mg/kg	0.408	0.394	122.	18-126	3.56	27	L529771-01		WG549404
n-Nitrosodiphenylamine	mg/kg	0.307	0.315	92.2	16-128	2.72	25	L529771-01		WG549404
Naphthalene	mg/kg	0.315	0.325	94.7	31-124	2.92	25	L529771-01		WG549404
Nitrobenzene	mg/kg	0.328	0.319	98.4	22-122	2.76	20	L529771-01		WG549404
Pentachlorophenol	mg/kg	0.243	0.281	73.1	10-124	14.3	34	L529771-01		WG549404
Phenanthrene	mg/kg	0.302	0.320	90.6	25-139	5.79	25	L529771-01		WG549404
Phenol	mg/kg	0.309	0.300	92.7	22-129	2.89	25	L529771-01		WG549404
Pyrene	mg/kg	0.346	0.362	104.	23-145	4.67	30	L529771-01		WG549404
2,4,6-Tribromophenol				95.99	16-136					WG549404
2-Fluorobiphenyl				96.20	37-119					WG549404
2-Fluorophenol				98.13	22-114					WG549404
Nitrobenzene-d5				99.56	20-114					WG549404
Phenol-d5				109.3	26-127					WG549404
p-Terphenyl-d14				97.94	15-174					WG549404
1,2,4-Trichlorobenzene	mg/kg	0.221	0.235	66.4	27-118	6.11	23	L529705-01		WG549703
2,4,6-Trichlorophenol	mg/kg	0.248	0.271	74.6	18-140	8.80	26	L529705-01		WG549703
2,4-Dichlorophenol	mg/kg	0.254	0.277	76.1	30-134	8.79	23	L529705-01		WG549703
2,4-Dimethylphenol	mg/kg	0.246	0.262	74.0	13-147	6.04	27	L529705-01		WG549703
2,4-Dinitrophenol	mg/kg	0.117	0.146	35.3	10-110	21.8	40	L529705-01		WG549703
2,4-Dinitrotoluene	mg/kg	0.259	0.272	77.9	12-146	4.91	25	L529705-01		WG549703
2,6-Dinitrotoluene	mg/kg	0.242	0.275	72.6	10-150	12.8	23	L529705-01		WG549703
2-Chloronaphthalene	mg/kg	0.241	0.268	72.5	31-127	10.5	23	L529705-01		WG549703
2-Chlorophenol	mg/kg	0.228	0.234	68.3	26-120	2.88	21	L529705-01		WG549703
2-Nitrophenol	mg/kg	0.258	0.271	77.3	10-156	5.09	24	L529705-01		WG549703
3,3-Dichlorobenzidine	mg/kg	0.224	0.237	67.2	10-127	5.84	40	L529705-01		WG549703
4,6-Dinitro-2-methylphenol	mg/kg	0.178	0.205	53.3	10-124	14.6	40	L529705-01		WG549703
4-Bromophenyl-phenylether	mg/kg	0.240	0.259	72.2	27-150	7.58	20	L529705-01		WG549703
4-Chloro-3-methylphenol	mg/kg	0.277	0.270	83.2	24-140	2.40	22	L529705-01		WG549703
4-Chlorophenyl-phenylether	mg/kg	0.235	0.262	70.6	27-142	11.0	21	L529705-01		WG549703
4-Nitrophenol	mg/kg	0.231	0.250	69.4	10-166	7.93	35	L529705-01		WG549703
Acenaphthene	mg/kg	0.247	0.265	74.3	30-132	6.89	21	L529705-01		WG549703
Acenaphthylene	mg/kg	0.263	0.280	79.1	31-144	6.05	24	L529705-01		WG549703
Anthracene	mg/kg	0.263	0.276	78.8	27-140	4.85	20	L529705-01		WG549703
Benzidine	mg/kg	0.0555	0.0362	16.7	10-55	42.2*	36	L529705-01		WG549703
Benzo(a)anthracene	mg/kg	0.261	0.266	78.4	22-139	1.97	22	L529705-01		WG549703
Benzo(a)pyrene	mg/kg	0.260	0.284	78.0	16-148	8.83	21	L529705-01		WG549703
Benzo(b)fluoranthene	mg/kg	0.264	0.296	79.2	13-152	11.6	24	L529705-01		WG549703
Benzo(g,h,i)perylene	mg/kg	0.155	0.172	46.6	10-137	9.90	32	L529705-01		WG549703
Benzo(k)fluoranthene	mg/kg	0.256	0.279	76.7	15-152	8.95	22	L529705-01		WG549703
Benzylbutyl phthalate	mg/kg	0.246	0.266	73.8	20-168	7.82	23	L529705-01		WG549703
Bis(2-chlorethoxy)methane	mg/kg	0.256	0.277	77.0	32-141	7.67	20	L529705-01		WG549703
Bis(2-chloroethyl)ether	mg/kg	0.237	0.251	71.2	25-139	5.79	26	L529705-01		WG549703
Bis(2-chloroisopropyl)ether	mg/kg	0.240	0.247	72.2	32-128	2.76	22	L529705-01		WG549703
Bis(2-ethylhexyl)phthalate	mg/kg	0.254	0.259	76.2	20-163	2.11	24	L529705-01		WG549703

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Tax I.D. 62-0814289

Est. 1970

August 11, 2011

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Chrysene	mg/kg	0.257	0.276	77.3	20-139	6.98	23	L529705-01	WG549703
Di-n-butyl phthalate	mg/kg	0.264	0.282	79.3	24-149	6.47	24	L529705-01	WG549703
Di-n-octyl phthalate	mg/kg	0.231	0.249	69.5	14-164	7.27	24	L529705-01	WG549703
Dibenz(a,h)anthracene	mg/kg	0.172	0.192	51.5	10-137	11.3	29	L529705-01	WG549703
Diethyl phthalate	mg/kg	0.260	0.287	78.2	28-142	9.73	23	L529705-01	WG549703
Dimethyl phthalate	mg/kg	0.258	0.280	77.6	31-142	7.88	22	L529705-01	WG549703
Fluoranthene	mg/kg	0.256	0.280	76.9	24-145	8.73	29	L529705-01	WG549703
Fluorene	mg/kg	0.252	0.260	75.8	30-138	3.18	22	L529705-01	WG549703
Hexachloro-1,3-butadiene	mg/kg	0.235	0.244	70.5	29-136	3.81	22	L529705-01	WG549703
Hexachlorobenzene	mg/kg	0.224	0.249	67.2	26-136	10.6	20	L529705-01	WG549703
Hexachlorocyclopentadiene	mg/kg	0.165	0.169	49.4	10-124	2.80	33	L529705-01	WG549703
Hexachloroethane	mg/kg	0.233	0.265	70.0	21-107	13.0	27	L529705-01	WG549703
Indeno(1,2,3-cd)pyrene	mg/kg	0.172	0.196	51.6	10-139	13.2	32	L529705-01	WG549703
Isophorone	mg/kg	0.204	0.223	61.3	26-134	8.62	20	L529705-01	WG549703
n-Nitrosodi-n-propylamine	mg/kg	0.276	0.288	82.9	24-141	4.38	20	L529705-01	WG549703
n-Nitrosodimethylamine	mg/kg	0.168	0.194	50.3	18-126	14.7	27	L529705-01	WG549703
n-Nitrosodiphenylamine	mg/kg	0.256	0.272	76.9	16-128	5.80	25	L529705-01	WG549703
Naphthalene	mg/kg	0.237	0.258	71.1	31-124	8.57	25	L529705-01	WG549703
Nitrobenzene	mg/kg	0.242	0.268	72.8	22-122	10.1	20	L529705-01	WG549703
Pentachlorophenol	mg/kg	0.244	0.256	73.3	10-124	4.70	34	L529705-01	WG549703
Phenanthrene	mg/kg	0.251	0.272	75.3	25-139	8.18	25	L529705-01	WG549703
Phenol	mg/kg	0.243	0.260	73.1	22-129	6.45	25	L529705-01	WG549703
Pyrene	mg/kg	0.242	0.251	72.6	23-145	3.77	30	L529705-01	WG549703
2,4,6-Tribromophenol				75.72	16-136				WG549703
2-Fluorobiphenyl				71.01	37-119				WG549703
2-Fluorophenol				52.59	22-114				WG549703
Nitrobenzene-d5				80.37	20-114				WG549703
Phenol-d5				89.02	26-127				WG549703
p-Terphenyl-d14				69.91	15-174				WG549703

Batch number /Run number / Sample number cross reference

WG549312: R1806058: L529577-21
WG549212: R1806253: L529577-10 13 14 15 16 17 18 20
WG549210: R1806311: L529577-10 13 14 15 16 17 18 20
WG549323: R1806370: L529577-10 13 14 15 16 17 18 20
WG549127: R1806411: L529577-10
WG549308: R1806412: L529577-13 14 15 16 17 18 20
WG549236: R1806430: L529577-01 02 03 04 05 06 07 08 09 11 12 21
WG549226: R1806452: L529577-01 02 03 04 05 06 07 08 09 11 12 21
WG549217: R1806512: L529577-01 02 03 04 05 06 07 08 09 11 12 21
WG549404: R1806712: L529577-02 04 06 09 12 21
WG549310: R1807014: L529577-01 02 03 04 05 06 07 08 09 11 12 21
WG549500: R1807351: L529577-19
WG549466: R1807370: L529577-10 13 14 15 16 17 18 20
WG548951: R1807510: L529577-10 13 14 15 16 17 18 20
WG549376: R1807531: L529577-01 02 03 04 05 06 07 08 09 11 12
WG549303: R1808257: L529577-10 13 14 15 16 17 18 20
WG549777: R1809494: L529577-20
WG549703: R1810111: L529577-01 03 05 07 08 11

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

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Kirk Johnson
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Cedar Rapids, IA 52404

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Level II

L529577

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Tax I.D. 62-0814289

Est. 1970

August 11, 2011

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

Company Name/Address: Terracon - Cedar Rapids 2640 12th Street SW Cedar Rapids, IA 52404			Billing Information: Accounts Payable 2640 12th Street SW Cedar Rapids, IA 52404			Analysis/Container/Preservative VOCs 82003 SVOCs 8270C PCBs 8082 OA-2 10WA RCRA Metals 60104/6020 Field Filter			Chain of Custody Page <u>1</u> of <u> </u> F153 L.A.B. S.C.I.E.N.C.E.S. 12065 Lebanon Road Mt. Juliet, TN 37122 Phone: (800) 767-5859 Phone: (615) 758-5858 Fax: (615) 758-5859		
Report to: Kirk Johnson			Email to: KRJOHNSON@terracon								
Project Description: South CRANDIC			City/State Collected: Coralville IA								
Phone: (319) 366-8321		Client Project #: 06097004 L		ESC Key:							
FAX: (319) 366-0032											
Collected by: (print) HM		Site/Facility ID#:		P.O.#:							
Collected by (signature):		☒ Rush? (Lab MUST Be Notified) Same Day.....200% Next Day.....100% ☒ Two Day.....50% Three Day.....25%		Date Results Needed: 8-8-11 Email? ☒ No ☒ Yes FAX? ☒ No ☒ Yes		No. of Cntrs					
								Immediately Packed on Ice N ☐ Y ☒			
Sample ID		Comp/Grab	Matrix*	Depth	Date	Time					
B-1 0-2'			SS	0-2'	8/3/11	1000	3	X X X X X			
B-1 10-12			SS	10-12	↓	1105	3	X X X X X			
B-2 0-2'			SS	0-2		1140	3	X X X X X			
B-2 5-7'			SS	5-7'		1345	3	X X X X X			
B-3 0-3'			SS	0-3'		1445	3	X X X X X			
B-3 14-16'			SS	14-16'		1530	3	X X X X X			
B-3 7-10'			SS	7-10'		1530	3	X X X X X			
B-5 0-2			SS	0-2'		1550	3	X X X X X			
B-5 9-12'			SS	9-12'	1620	3	X X X X X				

* B-5 9-12 DOP Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____ pH _____ Temp _____ -21

Remarks: ADDED PER NCF		4875 5514 8136		Flow _____ Other _____	
Relinquished by: (Signature)	Date: 8/4/11	Time: 1600	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____	Condition: (lab use only)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.1	Bottles Received: 86
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) Alex	Date: 8/5/11	Time: 0900
				CoC Seals Intact ☐ Y ☐ N ☐ NA	pH Checked: L2
				NCF: ☒	

Company Name/Address: Terracon - Cedar Rapids 2640 12th Street SW Cedar Rapids, IA 52404			Billing Information: Accounts Payable 2640 12th Street SW Cedar Rapids, IA 52404			Analysis/Container/Preservative VOCs 8260B SVOCs 8270C PCBs 8082 OA-2 Iowa ROA metals 6010A/6020C Field Filtered			Chain of Custody Page <u>2</u> of <u> </u> ESC L.A.B. S.C.I.E.N.C.E.S. 12065 Lebanon Road Mt. Juliet, TN 37122 Phone: (800) 767-5859 Phone: (615) 758-5858 Fax: (615) 758-5859		
Report to: Kirk Johnson			Email to: KRJohnson2@terracon.com								
Project Description: South CRANDK			City/State Collected: Coralville, IA								
Phone: (319) 366-8321		Client Project #: 06097004L		ESC Key:							
FAX: (319) 366-0032											
Collected by: (print) HM		Site/Facility ID#:		P.O.#:							
Collected by (signature):		☒ Rush? (Lab MUST Be Notified) Same Day..... 200% Next Day..... 100% ☒ Two Day..... 50% Three Day..... 25%		Date Results Needed: 8-8-11 Email? ☒ No ☒ Yes FAX? ☒ No ☒ Yes		No. of Cntrs					
Immediately Packed on Ice N ☐ Y ☒											

CoCode TERRACRI (lab use only)	
Template/Prelogin	
Shipped Via:	
Remarks/Contaminant	Sample # (lab only)
Decon 1	1529577 -10
B-4 0-2	-11
B-4 15-17	-12
B-1 1mmW	-13
B-2 1mmW	-14
B-3 1mmW	-15
B-5 1mmW	-16
B-4 1mmW	-17
Drip-1	-18

*Matrix: **SS** - Soil/Solid **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other _____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature)	Date: 8/4/11	Time: 1600	Received by: (Signature)	Samples returned via: ☐ UPS ☒ FedEx ☐ Courier ☐ Other		Condition: (lab use only)	
						CoC Seals Intact ☐ Y ☐ N ☐ NA	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.1	Bottles Received: 86	pH Checked: CL	
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 8/5/11	Time: 0900	NCF: ☒	

Company Name/Address: Terracon - Cedar Rapids 2640 12th Street SW Cedar Rapids, IA 52404				Alternate billing information:				Analysis/Container/Preservative				Chain of Custody Page <u>3</u> of <u> </u>	
Report to: <u>Kirk Johnson</u>				Email to: <u>kjohnson@terracon.com</u>				8260 8270 RCRA metals 6010/6020 0A-2				Prepared by:	
Project Description: <u>South CRANDIC</u>				City/State Collected: <u>Cedar Rapids</u>								ENVIRONMENTAL SCIENCE CORP. 12065 Lebanon Road Mt. Juliet, TN 37122	
Phone: (319) 366-8321 FAX: (319) 366-0032		Client Project #: <u>06097004L</u>		ESC Key:		Phone (615) 758-5858 Phone (800) 767-5859 FAX (615) 758-5859							
Collected by: <u>Sara Ziehr</u>		Site/Facility ID#:		P.O.#:		CoCode TERRACRI (lab use only) Template/Prelogin Shipped Via:							
Collected by (signature): 		Rush? (Lab MUST Be Notified) Same Day.....200% ☒ Next Day.....100% ☒ Two Day.....50% Three Day.....25%		Date Results Needed: <u>8-10-11</u> Email? ☒ No ☒ Yes FAX? ☒ No ☐ Yes								Remarks/Contaminant	
Immediately Packed on Ice N ☐ Y ☒		No. of Cntrs		Sample # (lab only)									
Sample ID		Comp/Grab		Matrix*		Depth		Date		Time		8 3 5 X X X X	
<u>Trip Blank</u>								<u>8-4-11</u>		<u>800</u>			
<u>Lump Blank</u>								<u>8-4-11</u>		<u>800</u>			
<u>Decon 2</u>				<u>W</u>				<u>8/4/11</u>		<u>1500</u>			

*Matrix: **SS** - Soil/Solid **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other _____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature) 		Date: <u>8/4/11</u> Time: <u>1600</u>		Received by: (Signature) 		Samples returned via: ☐ UPS ☒ FedEx ☐ Courier		Condition: (lab use only)	
Relinquished by: (Signature)		Date: Time:		Received by: (Signature)		Temp: <u>3.1</u> Bottles Received: <u>86 88</u>		CoC Seals Intact ☐ Y ☐ N ☐ NA	
Relinquished by: (Signature)		Date: Time:		Received for lab by: (Signature) 		Date: <u>8/5/11</u> Time: <u>0900</u>		pH Checked: <u>L</u> NCF: <u>X</u>	

Appendix E
Completed Form C-12

QUALITY CONTROL FIELD AUDIT CORRECTIVE ACTION REPORT

EPA 7 Brownfields Assessment

Terracon Project No. 06097004

Terracon

Property ID: South CRANDIC 06097004L

Property Name: South CRANDIC

Coralville, Johnson County, Iowa

Auditor Name: Holly Moriarty

Title: Field Scientist

Signature: Holly Moriarty

Date/Time: _____

Activity Audited (Give specific QAPP, Checklist or TSOP reference): _____

Position/Name With Immediate Responsibility For Compliance: Sara Ziehr

Check and Initial As Appropriate:

☐ Field Activity

☐ Management Activity

☐ File/Record Activity

☒ Found Compliant

☐ Found Non-Compliant

☐ Corrected, Copy To QA

Describe Briefly: _____

No deviations.

Corrective Action Response (Describe in detail the remedy, including response consistent with Terracon Management Plan for reporting. Use Back If Needed):

None needed.

Reported To: Kirk Johnson

Date/Time: 08/04/11

Project Title: Phase II Assessment Coordinator

Response ID: _____

Check and Initial As Appropriate:

☐ Critical Measurement

☐ Qualitative Measurement

☐ Data Loss or Can't Be Repeated

☐ Entered To Field Logbook

Appendix F
Cumulative Risk Calculator Output



Cumulative Risk Results
Cumulative Risk Calculator

Calculator Statewide Standards Chemical Specific Info. Related Links Help Print

For: HM, Terracon
South CRANDIC
Coralville IA SB-3 0-3'

Date: 8/15/2011

Cancer Risk Output

Chemical Name	CASRN	Resident Soil	Site Worker Soil
Benzo[a]anthracene	000056-55-3	0.01	0
Benzo[b]fluoranthene	000205-99-2	0.01	0
Benzo[a]pyrene	000050-32-8	0.07	0.02
Benzo[k]fluoranthene	000207-08-9	0	0
Chrysene	000218-01-9	0	0
Dibenz[a,h]anthracene	000053-70-3	0.01	0
Indeno[1,2,3-cd]pyrene	000193-39-5	0	0
Naphthalene	000091-20-3	NQ	NQ
Lead and Compounds	007439-92-1	NQ	NQ
TOTALS:		0.1	0.02

Cummulative Cancer Risk Site Resident: 0.1 (All cancer risk values are x 10⁻⁴)
Cummulative Cancer Risk Site Worker: 0.02

Site Resident-Non Cancer Risk Output by target organ

Chemical Name	CASRN	Media	Heart	Liver	Blood	Kidney	Skin	Endoc	Eye	Immu	Nerve	GenUr	Respi	Other	Devel	Gastro
Acenaphthene	000083-32-9	Soil	0	0												
Anthracene	000120-12-7	Soil		0												
Benzo[a]anthracene	000056-55-3	Soil								0						
Benzo[b]fluoranthene	000205-99-2	Soil														
Benzo[a]pyrene	000050-32-8	Soil			0					0					0	
Benzo[g,h,i]perylene	191-24-2	Soil				0										
Benzo[k]fluoranthene	000207-08-9	Soil					0									
Chrysene	000218-01-9	Soil														
Dibenz[a,h]anthracene	000053-70-3	Soil	0	0			0			0						
Fluoranthene	000206-44-0	Soil		0	0	0										
Fluorene	000086-73-7	Soil		0	0	0				0					0	
Indeno[1,2,3-cd]pyrene	000193-39-5	Soil														
Naphthalene	000091-20-3	Soil			0						0				0	
Phenanthrene	85-01-8	Soil				0										
Pyrene	000129-00-0	Soil					0									
Mercury	007439-97-6	Soil														
Barium	007440-39-3	Soil								0					0	
Cadmium (soil)	007440-43-9	Soil	0.01			0.01										
Chromium III (soil)	016065-83-1	Soil					0									
Lead and Compounds	007439-92-1	Soil	0.01		0.01	0.01				0.01	0.01					

		Sum:	0.02	0	0.01	0.02	0	0	0	0	0.01	0.01	0	0	0	0
Site Worker-Non Cancer Risk Output by target organ																
Chemical Name	CASRN	Media	Heart	Liver	Blood	Kidney	Skin	Endoc	Eye	Immu	Nerve	GenUr	Respi	Other	Devel	Gastro
Acenaphthene	000083-32-9	Soil	0	0												
Anthracene	000120-12-7	Soil		0												
Benzo[a]anthracene	000056-55-3	Soil								0						
Benzo[b]fluoranthene	000205-99-2	Soil														
Benzo[a]pyrene	000050-32-8	Soil			0						0					0
Benzo[g,h,i]perylene	191-24-2	Soil				0										
Benzo[k]fluoranthene	000207-08-9	Soil														
Chrysene	000218-01-9	Soil														
Dibenz[a,h]anthracene	000053-70-3	Soil	0	0		0				0						
Fluoranthene	000206-44-0	Soil		0	0	0										
Fluorene	000086-73-7	Soil		0	0	0				0						0
Indeno[1,2,3-cd]pyrene	000193-39-5	Soil														
Naphthalene	000091-20-3	Soil			0						0				0	
Phenanthrene	85-01-8	Soil				0										
Pyrene	000129-00-0	Soil				0										
Mercury	007439-97-6	Soil				0					0				0	
Barium	007440-39-3	Soil	0			0										
Cadmium (soil)	007440-43-9	Soil				0										
Chromium III (soil)	016065-83-1	Soil					0									
Lead and Compounds	007439-92-1	Soil	0		0	0					0	0				
Sum:			0	0	0	0	0	0	0	0	0	0	0	0	0	0

Interpretation of Results Summary?

Values associated with "Cumulative Cancer Risk" and non-cancer "Sum" that are less than or equal to 1.00 are within acceptable cumulative risk levels.
NQ means not quantifiable due to lack of a cancer slope factor.



Calculator

Statewide Standards

Chemical Specific Info.

Related Links

Help

Print

For: HM, Terracon
South CRANDIC
Coralville IA SB-3 0-3'

Date: 8/26/2011

Cancer Risk Output

Chemical Name	CASRN	Construction Worker Soil
Benzo[a]anthracene	000056-55-3	0
Benzo[a]pyrene	000050-32-8	0
Benzo[b]fluoranthene	000205-99-2	0
Benzo[k]fluoranthene	000207-08-9	0
Chrysene	000218-01-9	0
Dibenz[a,h]anthracene	000053-70-3	0
Indeno[1,2,3-cd]pyrene	000193-39-5	0
Naphthalene	000091-20-3	NQ
Lead and Compounds	007439-92-1	NQ
TOTALS:		0
Cumulative Cancer Risk Construction Worker: 0 (All cancer risk values are x 10 ⁻⁴)		

Construction Worker-Non Cancer Risk Output by target organ

Chemical Name	CASRN	Media	Heart	Liver	Blood	Kidney	Skin	Endoc	Eye	Immu	Nerve	GenUr	Respi	Other	Devel	Gastro
Acenaphthene	000083-32-9	Soil	0	0												
Anthracene	000120-12-7	Soil		0												
Benzo[a]anthracene	000056-55-3	Soil								0						
Benzo[a]pyrene	000050-32-8	Soil			0					0					0	
Benzo[b]fluoranthene	000205-99-2	Soil														
Benzo[g,h,i]perylene	191-24-2	Soil					0									
Benzo[k]fluoranthene	000207-08-9	Soil					0									
Chrysene	000218-01-9	Soil														
Dibenz[a,h]anthracene	000053-70-3	Soil	0	0		0				0						
Fluoranthene	000206-44-0	Soil		0	0	0										
Fluorene	000086-73-7	Soil		0	0	0										
Indeno[1,2,3-cd]pyrene	000193-39-5	Soil								0					0	
Naphthalene	000091-20-3	Soil			0						0				0	
Phenanthrene	85-01-8	Soil					0									
Pyrene	000129-00-0	Soil					0									
Mercury	007439-97-6	Soil					0				0				0	
Barium	007440-39-3	Soil														
Cadmium (soil)	007440-43-9	Soil	0			0										
Chromium III (soil)	016065-83-1	Soil														

Lead and Compounds 007439-92-1														
Soil	0		0	0					0	0				
Sum:	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Interpretation of Results Summary?

Values associated with "Cumulative Cancer Risk" and non-cancer "Sum" that are less than or equal to 1.00 are within acceptable cumulative risk levels.
 NQ means not quantifiable due to lack of a cancer slope factor.



Cumulative Risk Results
Cumulative Risk Calculator

Calculator Statewide Standards Chemical Specific Info. Related Links Help Print

For: HM, Terracon
South CRANDIC
Coralville IA Groundwater

Date: 8/17/2011

Cancer Risk Output

Chemical Name	CASRN	Resident Groundwater	Site Worker Groundwater
Benzene	000071-43-2	0.01	0
Naphthalene	000091-20-3	NQ	NQ
Bis(2-chloroethyl)ether	000111-44-4	0.08	0.02
Pentachlorophenol	000087-86-5	0.33	0.07
Arsenic, Inorganic	007440-38-2	3.5	1.65
Lead and Compounds	007439-92-1	NQ	NQ
TOTALS:		3.92	1.74
Cumulative Cancer Risk Site Resident: 3.92 (All cancer risk values are x 10 ⁻⁴)			
Cumulative Cancer Risk Site Worker: 1.74			

Site Resident-Non Cancer Risk Output by target organ

Chemical Name	CASRN	Media	Heart	Liver	Blood	Kidney	Skin	Endoc	Eye	Immu	Nerve	GenUr	Respi	Other	Devel	Gastro
Acetone	000067-64-1	Groundwater		0.02	0.02	0.02										
Benzene	000071-43-2	Groundwater			0.03				0.03							
Chlorobenzene	000108-90-7	Groundwater		0		0										
Dichlorobenzene, 1,3-	000541-73-1	Groundwater		0				0								
Ethylbenzene	000100-41-4	Groundwater		0		0										
Methyl Ethyl Ketone	000078-93-3	Groundwater													0	
Methyl Isobutyl Ketone	000108-10-1	Groundwater		0		0					0					
Naphthalene	000091-20-3	Groundwater			0.03						0.03			0.03		
Propylbenzene, N-	103-65-1	Groundwater									0					
Toluene	000108-88-3	Groundwater		0		0			0	0	0				0	
Trimethylbenzene, 1,2,4-	000095-63-6	Groundwater													0	
Trimethylbenzene, 1,3,5-	000108-67-8	Groundwater													0	
Xylene, Mixture	001330-20-7	Groundwater									0				0	
Acenaphthene	000083-32-9	Groundwater	0	0												
Bis(2-chloroethyl)ether	000111-44-4	Groundwater														
Phenanthrene	85-01-8	Groundwater				0										
Pentachlorophenol	000087-86-5	Groundwater		0.04		0.04		0.04			0.04				0.04	
Phenol	000108-95-2	Groundwater													0.01	0.01
Mercury	007439-97-6	Groundwater				0.06					0.06				0.06	
Arsenic, Inorganic	007440-38-2	Groundwater	3.5		3.5		3.5									3.5
Barium	007440-39-3	Groundwater	0.15			0.15										
Chromium (total) (water)	007440-47-3															

