

**CON 12-15**  
**Doc #18954**

**SOIL CHARACTERIZATION SERVICES  
PROPOSED CASINO PARKING RAMP FACILITY  
HIGHWAY 20 EAST  
~~EAST DUBUQUE~~ ILLINOIS**

**Project No. 07077067  
January 17, 2008**

• 23,000 CY

*Prepared For:*

**CITY OF DUBUQUE  
Dubuque, Iowa**

*Prepared By:*

**Terracon**  
**Bettendorf, Iowa**

January 17, 2008

City of Dubuque  
Engineering Department  
50 West 13<sup>th</sup> Street  
Dubuque, IA 52001-4864

Attention: Mr. Steve Brown

Re: Soil Characterization Services  
Proposed Casino Parking Ramp Facility  
Highway 20 East  
East Dubuque, Illinois  
Project No. 07077067

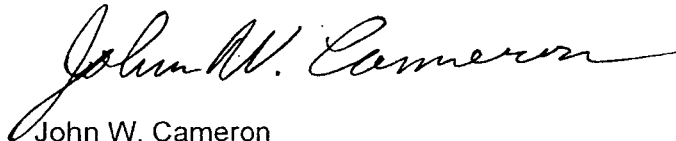
Dear Mr. Brown:

Terracon is pleased to submit our report of soil characterization services completed at the site referenced above. The report presents documentation from recent field activities that included the sampling of soil from known impacted stockpiles.

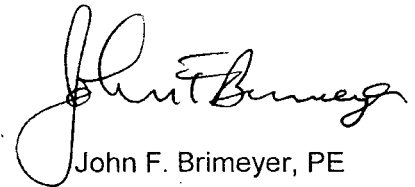
Terracon appreciates the opportunity to assist you with this project. Should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,

**Terracon**



John W. Cameron  
Environmental Scientist



John F. Brimeyer, PE  
Department Manager

JWC/JFB/jb2  
N:\Projects\2007\07077067\report\CharacterizationEastDubuqueJFB.doc

cc: Paul Kalb, Conlon Construction Inc.  
Jane McAlister, Ahlers Law Firm  
Wayne Stewart, Stewart Construction

TABLE OF CONTENTS

Terracon

**1.0 INTRODUCTION..... 1**  
1.1 Project History..... 1  
1.2 Project Objective ..... 2  
**2.0 CHARACTERIZATION ACTIVITIES..... 2**  
2.1 Health and Safety..... 2  
2.2 Sampling Activities ..... 2  
**3.0 ANALYTICAL RESULTS..... 3**  
**4.0 CONCLUSIONS AND RECOMMENDATIONS ..... 3**

APPENDICES

Appendix A – Figures

Figure 1 - Topographic Vicinity Map

Figure 2 - Site Detail Diagram

Appendix B – Calculations

ProUCL Data Set

General UCL Statistics for Data Sets with Non-Detects

Appendix C – Tables

Table 1 – Soil Analytical Results

Appendix D – Laboratory Analytical Report

SOIL CHARACTERIZATION SERVICES  
PROPOSED CASINO PARKING RAMP FACILITY  
HIGHWAY 20 EAST  
EAST DUBUQUE, ILLINOIS

Project No. 07077067

January 17, 2008

## 1.0 INTRODUCTION

Terracon has completed the soil characterization activities at the Highway 20 East, East Dubuque, site as described in our proposal dated December 12, 2007.

### 1.1 Project History

Terracon understands that a parking ramp for the proposed Diamond Jo Casino is currently under construction at the intersection of East 5<sup>th</sup> Street and Bell Street, Dubuque, Iowa. Previous site assessment activities identified the presence of uncontrolled fill, consisting of sand, clay, sawdust, and other miscellaneous material across the site. Laboratory analysis of soil samples identified reported concentrations of lead and polynuclear aromatic hydrocarbons (PAHs) in excess of Iowa Department of Natural Resources (IDNR) Statewide Standards. The results of previous assessment activities have been presented<sup>1,2</sup> to the IDNR and have resulted in the issuance of an IDNR "Comfort Letter" dated October 12, 2006.

The "Comfort Letter" references the Soil Management Plan (SMP) dated August 18, 2006 and prepared by Terracon (Project Number 07037005). The SMP provides an assessment of hazards associated with possible chemical impact, identifies health and safety precautions to reduce the risk of chemical exposure for on-site construction workers, and recommends procedures to handle excess soils in consideration of the observed chemical impact. At the direction of the City of Dubuque (the City), the SMP has been implemented for the site.

Prior to the implementation of the SMP, approximately 23,000 cubic yards of excess materials were removed from the Casino Parking Ramp construction site by Stewart Construction. These soils have been disposed of at a site located on Highway 20 near East Dubuque, Illinois. The site is located within the northwest quarter of section 33, Township 29 North, Range 2 West, Jo Daviess County, Illinois. The location of the site is depicted on the topographic Vicinity Map attached as Figure 1, Appendix A.

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<sup>1</sup> Phase II Environmental Site Assessment, East 5<sup>th</sup> and Bell Street, Dubuque, Iowa, Port of Dubuque Brownfields Redevelopment Project, Terracon Project No. 07037005, June 21, 2005

<sup>2</sup> Supplemental Phase II Environmental Site Assessment, East Fifth<sup>h</sup> and Bell Street, Port of Dubuque Brownfields Redevelopment Project, Dubuque, Iowa, Terracon Project No. 07037005, August 18, 2006

## 1.2 Project Objective

The intent of the characterization activities was to determine whether excess soils placed at the site are impacted at levels above the Illinois ~~Statewide Corrective Action Objectives (TACO)~~ ~~and~~ ~~Soil Remediation Objectives (SROs)~~ and if impacts were observed how soil should be handled.

## 2.0 CHARACTERIZATION ACTIVITIES

### 2.1 Health and Safety

Terracon performed field activities under Level D safety precautions. Level D safety attire for this project consisted of a washable work uniform including safety shoes, hardhat, rubber gloves, and appropriate eye protection. Terracon developed a health and safety plan before mobilization.

### 2.2 Sampling Activities

On December 20, 2007, Terracon mobilized a technician and equipment to the disposal site. Upon arrival, Terracon met with Russell Stewart, Stewart Construction, and discussed site activities. Terracon observed that the site was also being used as a sand pit. The western portion of the sand pit had been filled using soils from the Casino Parking Ramp. The limits of the deposited material were measured and a field site diagram was produced. Terracon divided the disposal area into ten sub-areas of approximately equivalent volume. A rubber tracked excavator was used to excavate test pits within each subarea. One soil sample was taken from each test pit at varying depths. The sample locations are identified on Figure 2, Appendix A. Soil samples were obtained directly from the excavator bucket. Five of the ten test pits were sampled using Method 5035, a sampling procedure for ~~volatile~~ organic compounds (VOCs).

Terracon transferred the soil samples to laboratory-prepared containers that were placed in an ice-packed cooler for transport to the laboratory. Terracon shipped the samples under standard Chain-of-Custody procedures via overnight carrier to Environmental Science Corporation (ESC). ESC analyzed the samples for Resource Conservation and Recovery Act (RCRA) metals by Methods 6010B/7471, pH by Method 9045D, polycyclic aromatic hydrocarbons (PAHs) by Method 8270C, pesticides by Method 8081A, and VOCs by Method 8260B.

The soil disposal area and sample locations were measured with respect to site features using a measuring wheel. Angles were estimated.

### 3.0 ANALYTICAL RESULTS

RCRA metals were detected in each of the soil samples at concentrations below the Illinois TACO Tier 1 SRO, with the exception of sample TP-2 taken 3 feet below ground surface. Arsenic was detected at a reported concentration of 19 milligrams per kilograms (mg/kg) which is above the background concentration of 11.3 mg/kg, which is also the most restrictive Tier 1 SRO. If the site were enrolled in the ~~Illinois Environmental Protection Agency (IEPA) Site Remediation Program (SRP)~~, TACO procedures allow for the use of concentration averaging. Accordingly, Terracon used ProUCL Version 4.0 to determine the 95% Upper Confidence Level (UCL) for arsenic at the site. This statistical analysis calculated a 95% UCL value of 8.1 mg/kg, which is below the allowable background concentration. The ProUCL data set and calculations are attached as Appendix B.

Excluding acetone, a common laboratory containment, VOCs were detected in only one of the five samples analyzed. Dichlorobenzene, ethylbenzene, 1,2,4-trimethylbenene, and xylenes were detected in sample TP-1 9' at reported concentrations below the most restrictive Tier 1 SRO.

PAH's were detected in eight of the ten samples. The reported concentration of benzo(a)pyrene in four of the eight samples was above the most restrictive Tier 1 SRO of 0.09 mg/kg. The maximum reported concentration of benzo(a)pyrene was 0.30 mg/kg in sample TP-8 6 FT. TACO procedures allow for the use of the Statewide Area Background Approach as an alternative to direct comparison to Tier 1 SROs. The allowable background concentration of benzo(a)pyrene within a non-Metropolitan Statistical Area is 0.98 mg/kg, which is above the maximum reported concentration at the site.

Pesticide compounds were not detected above laboratory limits. Laboratory limits were above the Tier 1 SRO for the following compounds: alpha BHC, gamma BHC, dieldrin, heptachlor, heptachlor epoxide, and toxaphene. Laboratory analytical results for the soil samples are summarized in Table 1, Appendix C. Copies of the laboratory analytical report are attached as Appendix D.

### 4.0 CONCLUSIONS AND RECOMMENDATIONS

Analytical results indicate that the deposited materials from Casino Parking Ramp ~~do not~~ exceed IEPA ~~Tier 1~~ SROs for arsenic and benzo(a)pyrene. Terracon has conducted a preliminary TACO evaluation of the reported arsenic concentrations using generally accepted averaging procedures and of the reported benzo(a)pyrene concentrations using the Statewide Area Background Approach. ~~Based~~ on our preliminary TACO evaluation, it appears that further action may not be necessary regarding the deposited material. However, site assessment activities completed by Terracon do not constitute a site investigation under the IEPA SRP. Further, evaluation of the site conditions is subject to the review and approval of an IEPA SRP project manager and is valid only if the site were to be enrolled in the SRP.

This evaluation is not a recommendation to utilize excess material from the Casino Parking Ramp as fill at this site. This evaluation does not provide an opinion on whether this site is an appropriate landfill under the laws and regulations of the State of Illinois. If a Phase 1 Environmental Site Assessment was completed for this site, an Environmental Professional may regard the deposited material from the Casino Parking Ramp that exceeds IEPA Tier 1 SROs as a Recognized Environmental Condition.

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 which 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, either 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.

# **APPENDIX A**



UNITED STATES - DEPARTMENT OF THE INTERIOR - GEOLOGICAL SURVEY



MAPS - OTHER OFFICES/SETTLEMENTS - 07077087-07077087 AND/AGRAMS/07077087-LSL.dwg



Map Source:  
 USGS TERRASERVER-USA.COM  
 Topographic Image  
 Dated 1978

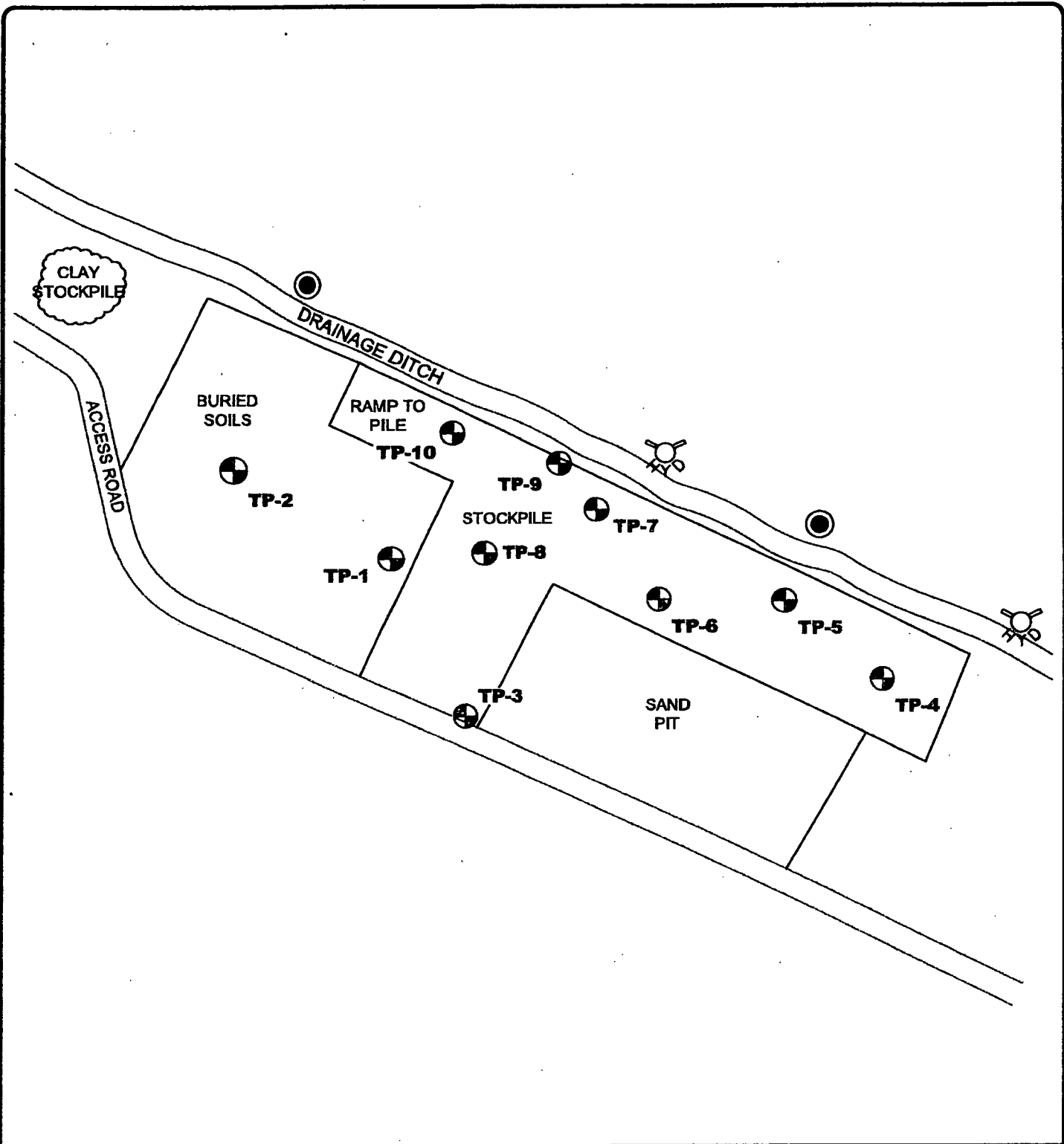
0 1000  
 APPROXIMATE SCALE: 1"=1000'



APPROXIMATE SITE LOCATION

TOPOGRAPHIC VICINITY MAP  
 LIMITED SITE INVESTIGATION  
 PARKING RAMP SOIL CHARACTERIZATION  
 HIGHWAY 20 SOUTH  
 EAST DUBUQUE, ILLINOIS

Project Mgr:	JWC	 870 40th Avenue Bettendorf, Iowa 52722 (563) 355-0702	Project #	07077087 A
Drawn By:	DAC		Scale:	AS SHOWN
Checked By:	JWC		Date:	December 26, 2007
Approved By:	JWC		Revised By:	-
File Name:	07077087-LSL.dwg		Figure #	1



MAPROJECTS - OTHER OFFICES/BETTENDORF - 07077067.dwg AND DIAGRAMS/07077067-LSI.dwg







-  Approximate Fire Hydrant Location
-  Approximate Manhole Location
-  Approximate Test Pit Location



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

SITE DETAIL DIAGRAM LIMITED SITE INVESTIGATION PARKING RAMP SOIL CHARACTERIZATION HIGHWAY 20 SOUTH EAST DUBUQUE, ILLINOIS		
Project Mngr:	JWC	Project #
Drawn By:	DAC	Scale:
Checked By:	JWC	Date:
Approved By:	JWC	Revised By:
File Name:	07077067-LSI.dwg	Figure #



870 40th Avenue  
Bettendorf, Iowa 52722  
(563) 355-0702

Project #	07077067 A
Scale:	AS SHOWN
Date:	January 15, 2008
Revised By:	-
Figure #	2

# **APPENDIX B**

	0	1	2
		Arsenic	d_Arsenic
1	TP-19 FT	3.7	1
2	TP-32 FT	3.3	1
3	TP-44 FT	5.8	0
4	TP-69 FT	1.1	0
5	TP-86 FT	1.2	0
6	TP-23 FT	19	1
7	TP-57 FT	2.4	1
8	TP-78 FT	5.8	0
9	TP-93.5 F	2.9	1
10	TP-10 10 F	8.1	1

General UCL Statistics for Data Sets with Non-Detects

User Selected Options

From File N:\Projects\2007\07077067\data\Arsenic.wst  
 Full Precision OFF  
 Confidence Coefficient 95%  
 Number of Bootstrap Operations 2000

Arsenic

General Statistics

Number of Valid Samples	10	Number of Detected Data	6
Number of Unique Samples	6	Number of Non-Detect Data	4
		Percent Non-Detects	40.00%

Raw Statistics

Minimum Detected	2.4
Maximum Detected	19
Mean of Detected	6.567
SD of Detected	6.429
Minimum Non-Detect	1.1
Maximum Non-Detect	5.8

Log-transformed Statistics

Minimum Detected	0.875
Maximum Detected	2.944
Mean of Detected	1.58
SD of Detected	0.788
Minimum Non-Detect	0.0953
Maximum Non-Detect	1.758

Note: Data have multiple DLs - Use of KM Method is recommended

For all methods (except KM, DL/2, and ROS Methods),  
 observations < Largest ND are treated as NDs

Number treated as Non-Detect 8

Number treated as Detected 2

Single DL Non-Detect Percentage 80.00%

UCL Statistics

Normal Distribution Test with Detected Values Only

Shapiro Wilk Test Statistic	0.717
5% Shapiro Wilk Critical Value	0.788

Data not Normal at 5% Significance Level

Lognormal Distribution Test with Detected Values Only

Shapiro Wilk Test Statistic	0.853
5% Shapiro Wilk Critical Value	0.788

Data appear Lognormal at 5% Significance Level

Assuming Normal Distribution

DL/2 Substitution Method	
Mean	4.635
SD	5.457
95% DL/2 (t) UCL	7.798

Maximum Likelihood Estimate(MLE) Method N/A  
 MLE method failed to converge properly

Assuming Lognormal Distribution

DL/2 Substitution Method	
Mean	1.05
SD	1.051
95% H-Stat (DL/2) UCL	12.14

Log ROS Method	
Mean in Log Scale	1.064
SD in Log Scale	0.956
Mean in Original Scale	4.564
SD in Original Scale	5.479
95% Percentile Bootstrap UCL	7.604
95% BCA Bootstrap UCL	8.579

Gamma Distribution Test with Detected Values Only

k star (bias corrected)	1.013
Theta Star	6.484
nu star	12.15

Data Distribution Test with Detected Values Only

Data Follow Appr. Gamma Distribution at 5% Significance Level

A-D Test Statistic	0.645	Nonparametric Statistics	
5% A-D Critical Value	0.706	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.706	Mean	4.99
5% K-S Critical Value	0.336	SD	4.946
Data follow Appr. Gamma Distribution at 5% Significance Level		SE of Mean	1.716
Assuming Gamma Distribution		95% KM (t) UCL	8.135
Gamma ROS Statistics using Extrapolated Data		95% KM (z) UCL	7.812
Minimum	0.756	95% KM (jackknife) UCL	7.936
Maximum	19	95% KM (bootstrap t) UCL	25.13
Mean	5.4	95% KM (BCA) UCL	8.26
Median	3.466	95% KM (Percentile Bootstrap) UCL	8.067
SD	5.553	95% KM (Chebyshev) UCL	12.47
k star	0.959	97.5% KM (Chebyshev) UCL	15.7
Theta star	5.631	99% KM (Chebyshev) UCL	22.06
Nu star	19.18	Potential UCLs to Use	
AppChi2	10.25	95% KM (t) UCL	8.135
95% Gamma Approximate UCL	10.11		
95% Adjusted Gamma UCL	11.34		
Note: DL/2 is not a recommended method.			

# **APPENDIX C**

Table 1: Soil Analytical Results  
Highway 20 East  
East Dubuque, Illinois

Lab Sample ID		L325425-01	L325425-02	L325425-03	L325425-04	L325425-05	L325425-06	L325425-07	L325425-08	L325425-09	L325425-10					
Client Sample ID		TP-1 9 FT	TP-3 2 FT	TP-4 4 FT	TP-6 9 FT	TP-8 6 FT	TP-2 3 FT	TP-5 7 FT	TP-7 8 FT	TP-9 3.5 FT	TP-10 10 FT	Frequency of Detection	Maximum Detected Concentration	Most Restrictive Tier 1 Objective or Background	Maximum Exceeds?	
Date Sampled		12/20/07	12/20/07	12/20/07	12/20/07	12/20/07	12/20/07	12/20/07	12/20/07	12/20/07	12/20/07					
CAS No	Parameter	Units														
<b>Inorganic Compounds</b>																
7440-38-2	Arsenic	mg/kg	3.7	3.3	<5.8	<1.1	<1.2	19	2.4	<5.8	2.9	8.1	6 of 10 (60%)	19	11.3	YES
7440-39-3	Barium	mg/kg	33	73	74	47	72	91	91	51	93	74	10 of 10 (100%)	93	5500	NO
7440-43-9	Cadmium	mg/kg	0.36	0.93	0.31	0.34	0.52	0.78	0.3	0.31	0.53	0.69	10 of 10 (100%)	0.93	78	NO
7440-47-3	Chromium	mg/kg	8.7	18	14	7.8	11	18	14	10	11	27	10 of 10 (100%)	27	230	NO
7439-92-1	Lead	mg/kg	12	30	21	25	49	89	16	57	57	55	10 of 10 (100%)	89	400	NO
7439-97-6	Mercury	mg/kg	<0.022	0.078	0.072	0.051	0.12	0.14	0.044	0.13	0.13	0.098	9 of 10 (90%)	0.14	10	NO
7782-49-2	Selenium	mg/kg	5.1	9.4	<5.8	2.9	2.2	10	4.4	<5.8	4.2	4.3	8 of 10 (80%)	10	390	NO
7440-22-4	Silver	mg/kg	<0.56	<0.75	<0.58	<0.55	<0.61	<0.60	<0.58	<0.58	<0.57	<0.57	0 of 10 (0%)	Not Detected	390	Not Detected
<b>Volatile Organic Compounds</b>																
67-64-1	Acetone	mg/kg	<0.056	0.13	<0.058	<0.055	0.064						2 of 5 (40%)	0.13	25	NO
107-13-1	Acrylonitrile	mg/kg	<0.011	<0.015	<0.012	<0.011	<0.012						0 of 5 (0%)	Not Detected	Not Established	No Standard
71-43-2	Benzene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	0.03	Not Detected
108-86-1	Bromobenzene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	Not Established	No Standard
75-27-4	Bromodichloromethane	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	0.6	Not Detected
75-25-2	Bromoform	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	0.8	Not Detected
74-83-9	Bromomethane	mg/kg	<0.0056	<0.0075	<0.0058	<0.0055	<0.0061						0 of 5 (0%)	Not Detected	0.2	Not Detected
104-51-8	n-Butylbenzene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	Not Established	No Standard
135-98-8	sec-Butylbenzene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	Not Established	No Standard
98-06-6	tert-Butylbenzene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	Not Established	No Standard
56-23-5	Carbon tetrachloride	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	0.07	Not Detected
108-90-7	Chlorobenzene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	1	Not Detected
124-48-1	Chlorodibromomethane	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	0.4	Not Detected
75-00-3	Chloroethane	mg/kg	<0.0056	<0.0075	<0.0058	<0.0055	<0.0061						0 of 5 (0%)	Not Detected	15	Not Detected
110-75-8	2-Chloroethyl vinyl ether	mg/kg	<0.056	<0.075	<0.058	<0.055	<0.061						0 of 5 (0%)	Not Detected	Not Established	No Standard
67-66-3	Chloroform	mg/kg	<0.0056	<0.0075	<0.0058	<0.0055	<0.0061						0 of 5 (0%)	Not Detected	0.3	Not Detected
74-87-3	Chloromethane	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	0.14	Not Detected
95-49-8	2-Chlorotoluene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	Not Established	No Standard
106-43-4	4-Chlorotoluene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	Not Established	No Standard
96-12-8	1,2-Dibromo-3-Chloropropane	mg/kg	<0.0056	<0.0075	<0.0058	<0.0055	<0.0061						0 of 5 (0%)	Not Detected	Not Established	No Standard
106-93-4	1,2-Dibromoethane	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	Not Established	No Standard
74-95-3	Dibromomethane	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	Not Established	No Standard
95-50-1	1,2-Dichlorobenzene	mg/kg	0.0041	<0.0015	<0.0012	<0.0011	<0.0012						1 of 5 (20%)	0.0041	17	NO
541-73-1	1,3-Dichlorobenzene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	0.2	Not Detected
106-46-7	1,4-Dichlorobenzene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	2	Not Detected
75-71-8	Dichlorodifluoromethane	mg/kg	<0.0056	<0.0075	<0.0058	<0.0055	<0.0061						0 of 5 (0%)	Not Detected	Not Established	No Standard
75-34-3	1,1-Dichloroethane	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	23	Not Detected
107-06-2	1,2-Dichloroethane	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	0.02	Not Detected
75-35-4	1,1-Dichloroethene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	0.06	Not Detected
156-59-2	cis-1,2-Dichloroethene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	0.4	Not Detected
156-60-5	trans-1,2-Dichloroethene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	0.7	Not Detected
78-87-5	1,2-Dichloropropane	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	0.03	Not Detected
563-58-6	1,1-Dichloropropene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	Not Established	No Standard
142-28-9	1,3-Dichloropropane	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012						0 of 5 (0%)	Not Detected	Not Established	No Standard



Table 1: Soil Analytical Results  
 Highway 20 East  
 East Dubuque, Illinois

Lab Sample ID		L325425-01	L325425-02	L325425-03	L325425-04	L325425-05	L325425-06	L325425-07	L325425-08	L325425-09	L325425-10	Frequency of Detection	Maximum Detected Concentration	Most Restrictive Tier 1 Objective or Background	Maximum Exceeds?	
Client Sample ID		TP-1 9 FT	TP-3 2 FT	TP-4 4 FT	TP-6 9 FT	TP-8 6 FT	TP-2 3 FT	TP-5 7 FT	TP-7 8 FT	TP-9 3.5 FT	TP-10 10 FT					
Date Sampled		12/20/07	12/20/07	12/20/07	12/20/07	12/20/07	12/20/07	12/20/07	12/20/07	12/20/07	12/20/07					
CAS No	Parameter	Units														
10061-01-5	cis-1,3-Dichloropropene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	Not Established	No Standard	
10061-02-6	trans-1,3-Dichloropropene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	Not Established	No Standard	
594-20-7	2,2-Dichloropropane	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	Not Established	No Standard	
108-20-3	Di-isopropyl ether	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	Not Established	No Standard	
100-41-4	Ethylbenzene	mg/kg	0.0014	<0.0015	<0.0012	<0.0011	<0.0012					1 of 5 (20%)	0.0014	13	NO	
87-68-3	Hexachlorobutadiene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	2.9	Not Detected	
98-82-8	Isopropylbenzene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	Not Established	No Standard	
99-87-6	p-Isopropyltoluene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	Not Established	No Standard	
78-93-3	2-Butanone (MEK)	mg/kg	<0.011	<0.015	<0.012	<0.011	<0.012					0 of 5 (0%)	Not Detected	17	Not Detected	
75-09-2	Methylene Chloride	mg/kg	<0.0056	<0.0075	<0.0058	<0.0055	<0.0061					0 of 5 (0%)	Not Detected	0.02	Not Detected	
108-10-1	4-Methyl-2-pentanone (MIBK)	mg/kg	<0.011	<0.015	<0.012	<0.011	<0.012					0 of 5 (0%)	Not Detected	340	Not Detected	
1634-04-4	Methyl tert-butyl ether	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	0.32	Not Detected	
91-20-3	Naphthalene	mg/kg	<0.0056	<0.0075	<0.0058	<0.0055	<0.0061					0 of 5 (0%)	Not Detected	0.17	Not Detected	
103-65-1	n-Propylbenzene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	Not Established	No Standard	
100-42-5	Styrene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	4	Not Detected	
630-20-6	1,1,1,2-Tetrachloroethane	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	Not Established	No Standard	
79-34-5	1,1,2,2-Tetrachloroethane	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	3.3	Not Detected	
127-18-4	Tetrachloroethene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	0.06	Not Detected	
108-88-3	Toluene	mg/kg	<0.0056	<0.0075	<0.0058	<0.0055	<0.0061					0 of 5 (0%)	Not Detected	12	Not Detected	
87-61-6	1,2,3-Trichlorobenzene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	Not Established	No Standard	
120-82-1	1,2,4-Trichlorobenzene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	5	Not Detected	
71-55-6	1,1,1-Trichloroethane	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	2	Not Detected	
79-00-5	1,1,2-Trichloroethane	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	0.02	Not Detected	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	Not Established	No Standard	
79-01-6	Trichloroethene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	0.06	Not Detected	
75-69-4	Trichlorofluoromethane	mg/kg	<0.0056	<0.0075	<0.0058	<0.0055	<0.0061					0 of 5 (0%)	Not Detected	Not Established	No Standard	
96-18-4	1,2,3-Trichloropropane	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	Not Established	No Standard	
95-63-6	1,2,4-Trimethylbenzene	mg/kg	0.0029	<0.0015	<0.0012	<0.0011	<0.0012					1 of 5 (20%)	0.0029	Not Established	No Standard	
108-67-8	1,3,5-Trimethylbenzene	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	Not Established	No Standard	
75-01-4	Vinyl chloride	mg/kg	<0.0011	<0.0015	<0.0012	<0.0011	<0.0012					0 of 5 (0%)	Not Detected	0.01	Not Detected	
1330-20-7	Xylenes, Total	mg/kg	0.0039	<0.0045	<0.0035	<0.0033	<0.0037					1 of 5 (20%)	0.0039	5.6	NO	
<b>Polynuclear Aromatic Hydrocarbons</b>																
120-12-7	Anthracene	mg/kg	<0.037	<0.049	<0.038	<0.036	0.056	0.11	<0.038	<0.038	0.051	0.051	4 of 10 (40%)	0.11	23000	NO
83-32-9	Acenaphthene	mg/kg	<0.037	<0.049	<0.038	<0.036	0.1	0.042	<0.038	<0.038	<0.038	<0.038	2 of 10 (20%)	0.1	4700	NO
208-96-8	Acenaphthylene	mg/kg	<0.037	<0.049	<0.038	<0.036	<0.040	0.084	<0.038	<0.038	0.042	<0.038	2 of 10 (20%)	0.084	2300	NO
56-55-3	Benzo(a)anthracene	mg/kg	<0.037	0.066	0.094	0.11	0.27	0.46	<0.038	0.082	0.23	0.15	8 of 10 (80%)	0.46	0.9	NO
50-32-8	Benzo(a)pyrene	mg/kg	<0.037	<0.049	0.091	0.079	0.3	<0.039	<0.038	0.054	0.22	0.17	6 of 10 (60%)	0.3	0.98	NO
205-99-2	Benzo(b)fluoranthene	mg/kg	<0.037	<0.049	0.046	0.093	0.24	0.24	<0.038	<0.038	0.28	0.21	6 of 10 (60%)	0.28	0.9	NO
191-24-2	Benzo(g,h,i)perylene	mg/kg	<0.037	<0.049	0.04	0.059	0.18	<0.039	<0.038	<0.038	0.12	0.085	5 of 10 (50%)	0.18	2300	NO
207-08-9	Benzo(k)fluoranthene	mg/kg	<0.037	<0.049	0.13	0.049	0.056	0.63	<0.038	<0.038	0.13	0.057	6 of 10 (60%)	0.63	9	NO
218-01-9	Chrysene	mg/kg	<0.037	<0.049	0.067	0.087	0.27	0.45	<0.038	0.055	0.24	0.11	7 of 10 (70%)	0.45	88	NO
53-70-3	Dibenzo(a,h)anthracene	mg/kg	<0.037	<0.049	<0.038	<0.036	<0.040	<0.039	<0.038	<0.038	<0.038	<0.038	0 of 10 (0%)	Not Detected	0.15	Not Detected
206-44-0	Fluoranthene	mg/kg	<0.037	0.053	0.18	0.15	0.25	0.74	<0.038	0.081	0.48	0.24	8 of 10 (80%)	0.74	3100	NO
86-73-7	Fluorene	mg/kg	<0.037	<0.049	<0.038	<0.036	0.046	<0.039	<0.038	<0.038	0.042	<0.038	2 of 10 (20%)	0.046	3100	NO

Table 1: Soil Analytical Results  
Highway 20 East  
East Dubuque, Illinois

Lab Sample ID		L325425-01	L325425-02	L325425-03	L325425-04	L325425-05	L325425-06	L325425-07	L325425-08	L325425-09	L325425-10	Frequency of Detection	Maximum Detected Concentration	Most Restrictive Tier 1 Objective or Background	Maximum Exceeds?	
Client Sample ID		TP-1 9 FT	TP-3 2 FT	TP-4 4 FT	TP-6 9 FT	TP-8 6 FT	TP-2 3 FT	TP-5 7 FT	TP-7 8 FT	TP-9 3.5 FT	TP-10 10 FT					
Date Sampled		12/20/07	12/20/07	12/20/07	12/20/07	12/20/07	12/20/07	12/20/07	12/20/07	12/20/07	12/20/07					
CAS No	Parameter	Units														
193-39-5	Indeno(1,2,3-cd)pyrene	mg/kg	<0.037	<0.049	<0.038	<0.036	<0.040	<0.039	<0.038	<0.038	0.1	<0.038	1 of 10 (10%)	0.1	0.9	NO
91-20-3	Naphthalene	mg/kg	<0.037	0.1	0.041	<0.036	0.051	0.045	<0.038	<0.038	0.039	<0.038	5 of 10 (50%)	0.1	1.8	NO
85-01-8	Phenanthrene	mg/kg	<0.037	0.067	0.1	0.1	0.25	0.37	<0.038	0.12	0.33	0.19	8 of 10 (80%)	0.37	2300	NO
129-00-0	Pyrene	mg/kg	<0.037	0.072	0.16	0.18	0.36	0.63	<0.038	0.16	0.48	0.23	8 of 10 (80%)	0.63	2300	NO
<b>Pesticides</b>																
319-84-6	Alpha BHC	mg/kg	<0.022	<0.15	<0.023	<0.11	<0.12	<0.12	<0.12	<0.12	<0.11	<0.11	0 of 10 (0%)	Not Detected	0.0005	Not Detected
319-85-7	Beta BHC	mg/kg	<0.022	<0.15	<0.023	<0.11	<0.12	<0.12	<0.12	<0.12	<0.11	<0.11	0 of 10 (0%)	Not Detected	Not Established	No Standard
319-86-8	Delta BHC	mg/kg	<0.022	<0.15	<0.023	<0.11	<0.12	<0.12	<0.12	<0.12	<0.11	<0.11	0 of 10 (0%)	Not Detected	Not Established	No Standard
58-89-9	Gamma BHC	mg/kg	<0.022	<0.15	<0.023	<0.11	<0.12	<0.12	<0.12	<0.12	<0.11	<0.11	0 of 10 (0%)	Not Detected	0.009	Not Detected
57-74-9	Chlordane	mg/kg	<0.22	<1.5	<0.23	<1.1	<1.2	<1.2	<1.2	<1.2	<1.1	<1.1	0 of 10 (0%)	Not Detected	Not Established	No Standard
72-54-8	4,4-DDD	mg/kg	<0.022	<0.15	<0.023	<0.11	<0.12	<0.12	<0.12	<0.12	<0.11	<0.11	0 of 10 (0%)	Not Detected	3	Not Detected
72-55-9	4,4-DDE	mg/kg	<0.022	<0.15	<0.023	<0.11	<0.12	<0.12	<0.12	<0.12	<0.11	<0.11	0 of 10 (0%)	Not Detected	2	Not Detected
50-29-3	4,4-DDT	mg/kg	<0.022	<0.15	<0.023	<0.11	<0.12	<0.12	<0.12	<0.12	<0.11	<0.11	0 of 10 (0%)	Not Detected	2	Not Detected
60-57-1	Dieldrin	mg/kg	<0.022	<0.15	<0.023	<0.11	<0.12	<0.12	<0.12	<0.12	<0.11	<0.11	0 of 10 (0%)	Not Detected	0.004	Not Detected
959-98-8	Endosulfan I	mg/kg	<0.022	<0.15	<0.023	<0.11	<0.12	<0.12	<0.12	<0.12	<0.11	<0.11	0 of 10 (0%)	Not Detected	18	Not Detected
33213-65-9	Endosulfan II	mg/kg	<0.022	<0.15	<0.023	<0.11	<0.12	<0.12	<0.12	<0.12	<0.11	<0.11	0 of 10 (0%)	Not Detected	18	Not Detected
1031-07-8	Endosulfan sulfate	mg/kg	<0.022	<0.15	<0.023	<0.11	<0.12	<0.12	<0.12	<0.12	<0.11	<0.11	0 of 10 (0%)	Not Detected	1	Not Detected
72-20-8	Endrin	mg/kg	<0.022	<0.15	<0.023	<0.11	<0.12	<0.12	<0.12	<0.12	<0.11	<0.11	0 of 10 (0%)	Not Detected	1	Not Detected
7421-93-4	Endrin aldehyde	mg/kg	<0.022	<0.15	<0.023	<0.11	<0.12	<0.12	<0.12	<0.12	<0.11	<0.11	0 of 10 (0%)	Not Detected	1	Not Detected
53494-70-5	Endrin ketone	mg/kg	<0.022	<0.15	<0.023	<0.11	<0.12	<0.12	<0.12	<0.12	<0.11	<0.11	0 of 10 (0%)	Not Detected	0.4	Not Detected
118-74-1	Hexachlorobenzene	mg/kg	<0.022	<0.15	<0.023	<0.11	<0.12	<0.12	<0.12	<0.12	<0.11	<0.11	0 of 10 (0%)	Not Detected	0.1	Not Detected
76-44-8	Heptachlor	mg/kg	<0.022	<0.15	<0.023	<0.11	<0.12	<0.12	<0.12	<0.12	<0.11	<0.11	0 of 10 (0%)	Not Detected	0.07	Not Detected
1024-57-3	Heptachlor epoxide	mg/kg	<0.022	<0.15	<0.023	<0.11	<0.12	<0.12	<0.12	<0.12	<0.11	<0.11	0 of 10 (0%)	Not Detected	160	Not Detected
72-43-5	Methoxychlor	mg/kg	<0.022	<0.15	<0.023	<0.11	<0.12	<0.12	<0.12	<0.12	<0.11	<0.11	0 of 10 (0%)	Not Detected	0.6	Not Detected
8001-35-2	Toxaphene	mg/kg	<0.44	<3.0	<0.46	<2.2	<2.4	<2.4	<2.3	<2.3	<2.3	<2.3	0 of 10 (0%)	Not Detected	0.6	Not Detected

# **APPENDIX D**



ENVIRONMENTAL  
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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

John Cameron  
Terracon - Bettendorf  
870 40th Avenue

Bettendorf, IA 52722

### Report Summary

Friday January 04, 2008

Report Number: L325425

Samples Received: 12/22/07

Client Project: 07077067

Description: Dubuque Casino Soil Sampling

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 - 09227, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487  
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140  
NJ - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233  
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

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10 Samples Reported: 01/04/08 12:41 Printed: 01/04/08 15:45

Page 1 of 31



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Est. 1970

**REPORT OF ANALYSIS**

January 04, 2008

John Cameron  
Terracon - Bettendorf  
870 40th Avenue  
Bettendorf, IA 52722

ESC Sample # : L325425-01

Date Received : December 22, 2007  
Description : Dubuque Casino Soil Sampling

Site ID :

Sample ID : TP-1 9 FT

Project # : 07077067

Collected By : John Cameron  
Collection Date : 12/20/07 10:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
pH	7.6	7.6@19.8c	su	9045D	12/26/07	1
Total Solids	89.8		%	2540G	12/31/07	1
Mercury	BDL	0.022	mg/kg	7471	12/27/07	1
Arsenic	3.7	1.1	mg/kg	6010B	12/24/07	1
Barium	33.	0.28	mg/kg	6010B	12/24/07	1
Cadmium	0.36	0.28	mg/kg	6010B	12/24/07	1
Chromium	8.7	0.56	mg/kg	6010B	12/24/07	1
Lead	12.	0.28	mg/kg	6010B	12/24/07	1
Selenium	5.1	1.1	mg/kg	6010B	12/24/07	1
Silver	BDL	0.56	mg/kg	6010B	12/24/07	1
<b>Volatile Organics</b>						
Acetone	BDL	0.056	mg/kg	8260B	01/01/08	1
Acrylonitrile	BDL	0.011	mg/kg	8260B	01/01/08	1
Benzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Bromobenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Bromodichloromethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
Bromoform	BDL	0.0011	mg/kg	8260B	01/01/08	1
Bromomethane	BDL	0.0056	mg/kg	8260B	01/01/08	1
n-Butylbenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
sec-Butylbenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
tert-Butylbenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Carbon tetrachloride	BDL	0.0011	mg/kg	8260B	01/01/08	1
Chlorobenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Chlorodibromomethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
Chloroethane	BDL	0.0056	mg/kg	8260B	01/01/08	1
2-Chloroethyl vinyl ether	BDL	0.056	mg/kg	8260B	01/01/08	1
Chloroform	BDL	0.0056	mg/kg	8260B	01/01/08	1
Chloromethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
2-Chlorotoluene	BDL	0.0011	mg/kg	8260B	01/01/08	1
4-Chlorotoluene	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,2-Dibromo-3-Chloropropane	BDL	0.0056	mg/kg	8260B	01/01/08	1
1,2-Dibromoethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
Dibromomethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,2-Dichlorobenzene	0.0041	0.0011	mg/kg	8260B	01/01/08	1
1,3-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,4-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Dichlorodifluoromethane	BDL	0.0056	mg/kg	8260B	01/01/08	1
1,1-Dichloroethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,2-Dichloroethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,1-Dichloroethene	BDL	0.0011	mg/kg	8260B	01/01/08	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

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The reported analytical results relate only to the sample submitted



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Est. 1970

**REPORT OF ANALYSIS**

January 04, 2008

John Cameron  
Terracon - Bettendorf  
870 40th Avenue  
Bettendorf, IA 52722

Date Received : December 22, 2007  
Description : Dubuque Casino Soil Sampling  
Sample ID : TP-1 9 FT  
Collected By : John Cameron  
Collection Date : 12/20/07 10:00

ESC Sample # : L325425-01

Site ID :

Project # : 07077067

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
cis-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	01/01/08	1
trans-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,1-Dichloropropene	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,3-Dichloropropane	BDL	0.0011	mg/kg	8260B	01/01/08	1
cis-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	01/01/08	1
trans-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	01/01/08	1
2,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	01/01/08	1
Di-isopropyl ether	BDL	0.0011	mg/kg	8260B	01/01/08	1
Ethylbenzene	0.0014	0.0011	mg/kg	8260B	01/01/08	1
Hexachlorobutadiene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Isopropylbenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
p-Isopropyltoluene	BDL	0.0011	mg/kg	8260B	01/01/08	1
2-Butanone (MEK)	BDL	0.011	mg/kg	8260B	01/01/08	1
Methylene Chloride	BDL	0.0056	mg/kg	8260B	01/01/08	1
4-Methyl-2-pentanone (MIBK)	BDL	0.011	mg/kg	8260B	01/01/08	1
Methyl tert-butyl ether	BDL	0.0011	mg/kg	8260B	01/01/08	1
Naphthalene	BDL	0.0056	mg/kg	8260B	01/01/08	1
n-Propylbenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Styrene	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,1,1,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,1,2,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
Tetrachloroethene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Toluene	BDL	0.0056	mg/kg	8260B	01/01/08	1
1,2,3-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,2,4-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,1,1-Trichloroethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,1,2-Trichloroethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0011	mg/kg	8260B	01/01/08	1
Trichloroethene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Trichlorofluoromethane	BDL	0.0056	mg/kg	8260B	01/01/08	1
1,2,3-Trichloropropane	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,2,4-Trimethylbenzene	0.0029	0.0011	mg/kg	8260B	01/01/08	1
1,3,5-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Vinyl chloride	BDL	0.0011	mg/kg	8260B	01/01/08	1
Xylenes, Total	0.0039	0.0033	mg/kg	8260B	01/01/08	1
Surrogate Recovery						
Toluene-d8	101.		% Rec.	8260B	01/01/08	1
Dibromofluoromethane	108.		% Rec.	8260B	01/01/08	1
4-Bromofluorobenzene	87.5		% Rec.	8260B	01/01/08	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.037	mg/kg	8270C	12/28/07	1
Acenaphthene	BDL	0.037	mg/kg	8270C	12/28/07	1

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

REPORT OF ANALYSIS

January 04, 2008

John Cameron  
Terracon - Bettendorf  
870 40th Avenue  
Bettendorf, IA 52722

ESC Sample # : L325425-01

Date Received : December 22, 2007  
Description : Dubuque Casino Soil Sampling

Site ID :

Sample ID : TP-1 9 FT

Project # : 07077067

Collected By : John Cameron  
Collection Date : 12/20/07 10:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Acenaphthylene	BDL	0.037	mg/kg	8270C	12/28/07	1
Benzo(a)anthracene	BDL	0.037	mg/kg	8270C	12/28/07	1
Benzo(a)pyrene	BDL	0.037	mg/kg	8270C	12/28/07	1
Benzo(b)fluoranthene	BDL	0.037	mg/kg	8270C	12/28/07	1
Benzo(g,h,i)perylene	BDL	0.037	mg/kg	8270C	12/28/07	1
Benzo(k)fluoranthene	BDL	0.037	mg/kg	8270C	12/28/07	1
Chrysene	BDL	0.037	mg/kg	8270C	12/28/07	1
Dibenz(a,h)anthracene	BDL	0.037	mg/kg	8270C	12/28/07	1
Fluoranthene	BDL	0.037	mg/kg	8270C	12/28/07	1
Fluorene	BDL	0.037	mg/kg	8270C	12/28/07	1
Indeno(1,2,3-cd)pyrene	BDL	0.037	mg/kg	8270C	12/28/07	1
Naphthalene	BDL	0.037	mg/kg	8270C	12/28/07	1
Phenanthrene	BDL	0.037	mg/kg	8270C	12/28/07	1
Pyrene	BDL	0.037	mg/kg	8270C	12/28/07	1
Surrogate Recovery						
Nitrobenzene-d5	98.0		% Rec.	8270C	12/28/07	1
2-Fluorobiphenyl	81.2		% Rec.	8270C	12/28/07	1
p-Terphenyl-d14	100.		% Rec.	8270C	12/28/07	1
Pesticides						
Aldrin	BDL	0.022	mg/kg	8081A	01/03/08	1
Alpha BHC	BDL	0.022	mg/kg	8081A	01/03/08	1
Beta BHC	BDL	0.022	mg/kg	8081A	01/03/08	1
Delta BHC	BDL	0.022	mg/kg	8081A	01/03/08	1
Gamma BHC	BDL	0.022	mg/kg	8081A	01/03/08	1
Chlordane	BDL	0.22	mg/kg	8081A	01/03/08	1
4,4-DDD	BDL	0.022	mg/kg	8081A	01/03/08	1
4,4-DDE	BDL	0.022	mg/kg	8081A	01/03/08	1
4,4-DDT	BDL	0.022	mg/kg	8081A	01/03/08	1
Dieldrin	BDL	0.022	mg/kg	8081A	01/03/08	1
Endosulfan I	BDL	0.022	mg/kg	8081A	01/03/08	1
Endosulfan II	BDL	0.022	mg/kg	8081A	01/03/08	1
Endosulfan sulfate	BDL	0.022	mg/kg	8081A	01/03/08	1
Endrin	BDL	0.022	mg/kg	8081A	01/03/08	1
Endrin aldehyde	BDL	0.022	mg/kg	8081A	01/03/08	1
Endrin ketone	BDL	0.022	mg/kg	8081A	01/03/08	1
Hexachlorobenzene	BDL	0.022	mg/kg	8081A	01/03/08	1
Heptachlor	BDL	0.022	mg/kg	8081A	01/03/08	1
Heptachlor epoxide	BDL	0.022	mg/kg	8081A	01/03/08	1
Methoxychlor	BDL	0.022	mg/kg	8081A	01/03/08	1
Toxaphene	BDL	0.44	mg/kg	8081A	01/03/08	1
Pesticide Surrogates						
Decachlorobiphenyl	74.8		% Rec.	8081A	01/03/08	1
Tetrachloro-m-xylene	92.8		% Rec.	8081A	01/03/08	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

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REPORT OF ANALYSIS

January 04, 2008

John Cameron  
Terracon - Bettendorf  
870 40th Avenue  
Bettendorf, IA 52722

Date Received : December 22, 2007  
Description : Dubuque Casino Soil Sampling  
Sample ID : TP-3 2 FT  
Collected By : John Cameron  
Collection Date : 12/20/07 10:50

ESC Sample # : L325425-02

Site ID :

Project # : 07077067

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
pH	8.6	8.6@19.8c	su	9045D	12/26/07	1
Total Solids	66.8		%	2540G	12/31/07	1
Mercury	0.078	0.030	mg/kg	7471	12/27/07	1
Arsenic	3.3	1.5	mg/kg	6010B	12/24/07	1
Barium	73.	0.37	mg/kg	6010B	12/24/07	1
Cadmium	0.93	0.37	mg/kg	6010B	12/24/07	1
Chromium	18.	0.75	mg/kg	6010B	12/24/07	1
Lead	30.	0.37	mg/kg	6010B	12/24/07	1
Selenium	9.4	1.5	mg/kg	6010B	12/24/07	1
Silver	BDL	0.75	mg/kg	6010B	12/24/07	1
Volatile Organics						
Acetone	0.13	0.075	mg/kg	8260B	01/01/08	1
Acrylonitrile	BDL	0.015	mg/kg	8260B	01/01/08	1
Benzene	BDL	0.0015	mg/kg	8260B	01/01/08	1
Bromobenzene	BDL	0.0015	mg/kg	8260B	01/01/08	1
Bromodichloromethane	BDL	0.0015	mg/kg	8260B	01/01/08	1
Bromoform	BDL	0.0015	mg/kg	8260B	01/01/08	1
Bromomethane	BDL	0.0075	mg/kg	8260B	01/01/08	1
n-Butylbenzene	BDL	0.0015	mg/kg	8260B	01/01/08	1
sec-Butylbenzene	BDL	0.0015	mg/kg	8260B	01/01/08	1
tert-Butylbenzene	BDL	0.0015	mg/kg	8260B	01/01/08	1
Carbon tetrachloride	BDL	0.0015	mg/kg	8260B	01/01/08	1
Chlorobenzene	BDL	0.0015	mg/kg	8260B	01/01/08	1
Chlorodibromomethane	BDL	0.0015	mg/kg	8260B	01/01/08	1
Chloroethane	BDL	0.0075	mg/kg	8260B	01/01/08	1
2-Chloroethyl vinyl ether	BDL	0.075	mg/kg	8260B	01/01/08	1
Chloroform	BDL	0.0075	mg/kg	8260B	01/01/08	1
Chloromethane	BDL	0.0015	mg/kg	8260B	01/01/08	1
2-Chlorotoluene	BDL	0.0015	mg/kg	8260B	01/01/08	1
4-Chlorotoluene	BDL	0.0015	mg/kg	8260B	01/01/08	1
1,2-Dibromo-3-Chloropropane	BDL	0.0075	mg/kg	8260B	01/01/08	1
1,2-Dibromoethane	BDL	0.0015	mg/kg	8260B	01/01/08	1
Dibromomethane	BDL	0.0015	mg/kg	8260B	01/01/08	1
1,2-Dichlorobenzene	BDL	0.0015	mg/kg	8260B	01/01/08	1
1,3-Dichlorobenzene	BDL	0.0015	mg/kg	8260B	01/01/08	1
1,4-Dichlorobenzene	BDL	0.0015	mg/kg	8260B	01/01/08	1
Dichlorodifluoromethane	BDL	0.0075	mg/kg	8260B	01/01/08	1
1,1-Dichloroethane	BDL	0.0015	mg/kg	8260B	01/01/08	1
1,2-Dichloroethane	BDL	0.0015	mg/kg	8260B	01/01/08	1
1,1-Dichloroethane	BDL	0.0015	mg/kg	8260B	01/01/08	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

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**REPORT OF ANALYSIS**

January 04, 2008

John Cameron  
Terracon - Bettendorf  
870 40th Avenue  
Bettendorf, IA 52722

Date Received : December 22, 2007  
Description : Dubuque Casino Soil Sampling  
Sample ID : TP-3 2 FT  
Collected By : John Cameron  
Collection Date : 12/20/07 10:50

ESC Sample # : L325425-02

Site ID :

Project # : 07077067

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
cis-1,2-Dichloroethene	BDL	0.0015	mg/kg	8260B	01/01/08	1
trans-1,2-Dichloroethene	BDL	0.0015	mg/kg	8260B	01/01/08	1
1,2-Dichloropropane	BDL	0.0015	mg/kg	8260B	01/01/08	1
1,1-Dichloropropene	BDL	0.0015	mg/kg	8260B	01/01/08	1
1,3-Dichloropropane	BDL	0.0015	mg/kg	8260B	01/01/08	1
cis-1,3-Dichloropropene	BDL	0.0015	mg/kg	8260B	01/01/08	1
trans-1,3-Dichloropropene	BDL	0.0015	mg/kg	8260B	01/01/08	1
2,2-Dichloropropane	BDL	0.0015	mg/kg	8260B	01/01/08	1
Di-isopropyl ether	BDL	0.0015	mg/kg	8260B	01/01/08	1
Ethylbenzene	BDL	0.0015	mg/kg	8260B	01/01/08	1
Hexachlorobutadiene	BDL	0.0015	mg/kg	8260B	01/01/08	1
Isopropylbenzene	BDL	0.0015	mg/kg	8260B	01/01/08	1
p-Isopropyltoluene	BDL	0.0015	mg/kg	8260B	01/01/08	1
2-Butanone (MEK)	BDL	0.015	mg/kg	8260B	01/01/08	1
Methylene Chloride	BDL	0.0075	mg/kg	8260B	01/01/08	1
4-Methyl-2-pentanone (MIBK)	BDL	0.015	mg/kg	8260B	01/01/08	1
Methyl tert-butyl ether	BDL	0.0015	mg/kg	8260B	01/01/08	1
Naphthalene	BDL	0.0075	mg/kg	8260B	01/01/08	1
n-Propylbenzene	BDL	0.0015	mg/kg	8260B	01/01/08	1
Styrene	BDL	0.0015	mg/kg	8260B	01/01/08	1
1,1,1,2-Tetrachloroethane	BDL	0.0015	mg/kg	8260B	01/01/08	1
1,1,2,2-Tetrachloroethane	BDL	0.0015	mg/kg	8260B	01/01/08	1
Tetrachloroethene	BDL	0.0015	mg/kg	8260B	01/01/08	1
Toluene	BDL	0.0075	mg/kg	8260B	01/01/08	1
1,2,3-Trichlorobenzene	BDL	0.0015	mg/kg	8260B	01/01/08	1
1,2,4-Trichlorobenzene	BDL	0.0015	mg/kg	8260B	01/01/08	1
1,1,1-Trichloroethane	BDL	0.0015	mg/kg	8260B	01/01/08	1
1,1,2-Trichloroethane	BDL	0.0015	mg/kg	8260B	01/01/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0015	mg/kg	8260B	01/01/08	1
Trichloroethene	BDL	0.0015	mg/kg	8260B	01/01/08	1
Trichlorofluoromethane	BDL	0.0075	mg/kg	8260B	01/01/08	1
1,2,3-Trichloropropane	BDL	0.0015	mg/kg	8260B	01/01/08	1
1,2,4-Trimethylbenzene	BDL	0.0015	mg/kg	8260B	01/01/08	1
1,3,5-Trimethylbenzene	BDL	0.0015	mg/kg	8260B	01/01/08	1
Vinyl chloride	BDL	0.0015	mg/kg	8260B	01/01/08	1
Xylenes, Total	BDL	0.0045	mg/kg	8260B	01/01/08	1
<b>Surrogate Recovery</b>						
Toluene-d8	103.		% Rec.	8260B	01/01/08	1
Dibromofluoromethane	108.		% Rec.	8260B	01/01/08	1
4-Bromofluorobenzene	73.4		% Rec.	8260B	01/01/08	1
<b>Polynuclear Aromatic Hydrocarbons</b>						
Anthracene	BDL	0.049	mg/kg	8270C	12/28/07	1
Acenaphthene	BDL	0.049	mg/kg	8270C	12/28/07	1

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

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**REPORT OF ANALYSIS**

January 04, 2008

John Cameron  
Terracon - Bettendorf  
870 40th Avenue  
Bettendorf, IA 52722

Date Received : December 22, 2007  
Description : Dubuque Casino Soil Sampling  
Sample ID : TP-3 2 FT  
Collected By : John Cameron  
Collection Date : 12/20/07 10:50

ESC Sample # : L325425-02

Site ID :

Project # : 07077067

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Acenaphthylene	BDL	0.049	mg/kg	8270C	12/28/07	1
Benzo(a)anthracene	0.066	0.049	mg/kg	8270C	12/28/07	1
Benzo(a)pyrene	BDL	0.049	mg/kg	8270C	12/28/07	1
Benzo(b)fluoranthene	BDL	0.049	mg/kg	8270C	12/28/07	1
Benzo(g,h,i)perylene	BDL	0.049	mg/kg	8270C	12/28/07	1
Benzo(k)fluoranthene	BDL	0.049	mg/kg	8270C	12/28/07	1
Chrysene	BDL	0.049	mg/kg	8270C	12/28/07	1
Dibenz(a,h)anthracene	BDL	0.049	mg/kg	8270C	12/28/07	1
Fluoranthene	0.053	0.049	mg/kg	8270C	12/28/07	1
Fluorene	BDL	0.049	mg/kg	8270C	12/28/07	1
Indeno(1,2,3-cd)pyrene	BDL	0.049	mg/kg	8270C	12/28/07	1
Naphthalene	0.10	0.049	mg/kg	8270C	12/28/07	1
Phenanthrene	0.067	0.049	mg/kg	8270C	12/28/07	1
Pyrene	0.072	0.049	mg/kg	8270C	12/28/07	1
Surrogate Recovery						
Nitrobenzene-d5	89.9		% Rec.	8270C	12/28/07	1
2-Fluorobiphenyl	57.8		% Rec.	8270C	12/28/07	1
p-Terphenyl-d14	32.5		% Rec.	8270C	12/28/07	1
Pesticides						
Aldrin	BDL	0.15	mg/kg	8081A	01/03/08	5
Alpha BHC	BDL	0.15	mg/kg	8081A	01/03/08	5
Beta BHC	BDL	0.15	mg/kg	8081A	01/03/08	5
Delta BHC	BDL	0.15	mg/kg	8081A	01/03/08	5
Gamma BHC	BDL	0.15	mg/kg	8081A	01/03/08	5
Chlordane	BDL	1.5	mg/kg	8081A	01/03/08	5
4,4-DDD	BDL	0.15	mg/kg	8081A	01/03/08	5
4,4-DDE	BDL	0.15	mg/kg	8081A	01/03/08	5
4,4-DDT	BDL	0.15	mg/kg	8081A	01/03/08	5
Dieldrin	BDL	0.15	mg/kg	8081A	01/03/08	5
Endosulfan I	BDL	0.15	mg/kg	8081A	01/03/08	5
Endosulfan II	BDL	0.15	mg/kg	8081A	01/03/08	5
Endosulfan sulfate	BDL	0.15	mg/kg	8081A	01/03/08	5
Endrin	BDL	0.15	mg/kg	8081A	01/03/08	5
Endrin aldehyde	BDL	0.15	mg/kg	8081A	01/03/08	5
Endrin ketone	BDL	0.15	mg/kg	8081A	01/03/08	5
Hexachlorobenzene	BDL	0.15	mg/kg	8081A	01/03/08	5
Heptachlor	BDL	0.15	mg/kg	8081A	01/03/08	5
Heptachlor epoxide	BDL	0.15	mg/kg	8081A	01/03/08	5
Methoxychlor	BDL	0.15	mg/kg	8081A	01/03/08	5
Toxaphene	BDL	3.0	mg/kg	8081A	01/03/08	5
Pesticide Surrogates						
Decachlorobiphenyl	57.1		% Rec.	8081A	01/03/08	5
Tetrachloro-m-xylene	39.2		% Rec.	8081A	01/03/08	5

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

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REPORT OF ANALYSIS

January 04, 2008

John Cameron  
Terracon - Bettendorf  
870 40th Avenue  
Bettendorf, IA 52722

Date Received : December 22, 2007  
Description : Dubuque Casino Soil Sampling  
Sample ID : TP-4 4 FT  
Collected By : John Cameron  
Collection Date : 12/20/07 11:20

ESC Sample # : L325425-03

Site ID :

Project # : 07077067

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
pH	8.9	8.9@19.8c	su	9045D	12/26/07	1
Total Solids	86.2		%	2540G	12/31/07	1
Mercury	0.072	0.023	mg/kg	7471	12/26/07	1
Arsenic	BDL	5.8	mg/kg	6010B	12/24/07	5
Barium	74.	0.29	mg/kg	6010B	12/24/07	1
Cadmium	0.31	0.29	mg/kg	6010B	12/24/07	1
Chromium	14.	0.58	mg/kg	6010B	12/24/07	1
Lead	21.	1.4	mg/kg	6010B	12/24/07	5
Selenium	BDL	5.8	mg/kg	6010B	12/24/07	5
Silver	BDL	0.58	mg/kg	6010B	12/24/07	1
<b>Volatile Organics</b>						
Acetone	BDL	0.058	mg/kg	8260B	01/01/08	1
Acrylonitrile	BDL	0.012	mg/kg	8260B	01/01/08	1
Benzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Bromobenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Bromodichloromethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
Bromoform	BDL	0.0012	mg/kg	8260B	01/01/08	1
Bromomethane	BDL	0.0058	mg/kg	8260B	01/01/08	1
n-Butylbenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
sec-Butylbenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
tert-Butylbenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Carbon tetrachloride	BDL	0.0012	mg/kg	8260B	01/01/08	1
Chlorobenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Chlorodibromomethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
Chloroethane	BDL	0.0058	mg/kg	8260B	01/01/08	1
2-Chloroethyl vinyl ether	BDL	0.058	mg/kg	8260B	01/01/08	1
Chloroform	BDL	0.0058	mg/kg	8260B	01/01/08	1
Chloromethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
2-Chlorotoluene	BDL	0.0012	mg/kg	8260B	01/01/08	1
4-Chlorotoluene	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,2-Dibromo-3-Chloropropane	BDL	0.0058	mg/kg	8260B	01/01/08	1
1,2-Dibromoethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
Dibromomethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,2-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,3-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,4-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Dichlorodifluoromethane	BDL	0.0058	mg/kg	8260B	01/01/08	1
1,1-Dichloroethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,2-Dichloroethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,1-Dichloroethene	BDL	0.0012	mg/kg	8260B	01/01/08	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

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Tax I.D. 62-0814289

Est. 1970

**REPORT OF ANALYSIS**

January 04, 2008

John Cameron  
Terracon - Bettendorf  
870 40th Avenue  
Bettendorf, IA 52722

Date Received : December 22, 2007  
Description : Dubuque Casino Soil Sampling  
Sample ID : TP-4 4 FT  
Collected By : John Cameron  
Collection Date : 12/20/07 11:20

ESC Sample # : L325425-03

Site ID :

Project # : 07077067

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
cis-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	01/01/08	1
trans-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,1-Dichloropropene	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,3-Dichloropropane	BDL	0.0012	mg/kg	8260B	01/01/08	1
cis-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	01/01/08	1
trans-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	01/01/08	1
2,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	01/01/08	1
Di-isopropyl ether	BDL	0.0012	mg/kg	8260B	01/01/08	1
Ethylbenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Hexachlorobutadiene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Isopropylbenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
p-Isopropyltoluene	BDL	0.0012	mg/kg	8260B	01/01/08	1
2-Butanone (MEK)	BDL	0.012	mg/kg	8260B	01/01/08	1
Methylene Chloride	BDL	0.0058	mg/kg	8260B	01/01/08	1
4-Methyl-2-pentanone (MIBK)	BDL	0.0012	mg/kg	8260B	01/01/08	1
Methyl tert-butyl ether	BDL	0.0012	mg/kg	8260B	01/01/08	1
Naphthalene	BDL	0.0058	mg/kg	8260B	01/01/08	1
n-Propylbenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Styrene	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,1,1,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,1,2,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
Tetrachloroethene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Toluene	BDL	0.0058	mg/kg	8260B	01/01/08	1
1,2,3-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,2,4-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,1,1-Trichloroethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,1,2-Trichloroethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0012	mg/kg	8260B	01/01/08	1
Trichloroethene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Trichlorofluoromethane	BDL	0.0058	mg/kg	8260B	01/01/08	1
1,2,3-Trichloropropane	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,2,4-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,3,5-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Vinyl chloride	BDL	0.0012	mg/kg	8260B	01/01/08	1
Xylenes, Total	BDL	0.0035	mg/kg	8260B	01/01/08	1
Surrogate Recovery						
Toluene-d8	104.		% Rec.	8260B	01/01/08	1
Dibromofluoromethane	105.		% Rec.	8260B	01/01/08	1
4-Bromofluorobenzene	97.1		% Rec.	8260B	01/01/08	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.038	mg/kg	8270C	12/28/07	1
Acenaphthene	BDL	0.038	mg/kg	8270C	12/28/07	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

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Est. 1970

REPORT OF ANALYSIS

January 04, 2008

John Cameron  
Terracon - Bettendorf  
870 40th Avenue  
Bettendorf, IA 52722

ESC Sample # : L325425-03

Date Received : December 22, 2007  
Description : Dubuque Casino Soil Sampling

Site ID :

Sample ID : TP-4 4 FT

Project # : 07077067

Collected By : John Cameron  
Collection Date : 12/20/07 11:20

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Acenaphthylene	BDL	0.038	mg/kg	8270C	12/28/07	1
Benzo(a)anthracene	0.094	0.038	mg/kg	8270C	12/28/07	1
Benzo(a)pyrene	0.091	0.038	mg/kg	8270C	12/28/07	1
Benzo(b)fluoranthene	0.046	0.038	mg/kg	8270C	12/28/07	1
Benzo(g,h,i)perylene	0.040	0.038	mg/kg	8270C	12/28/07	1
Benzo(k)fluoranthene	0.13	0.038	mg/kg	8270C	12/28/07	1
Chrysene	0.067	0.038	mg/kg	8270C	12/28/07	1
Dibenz(a,h)anthracene	BDL	0.038	mg/kg	8270C	12/28/07	1
Fluoranthene	0.18	0.038	mg/kg	8270C	12/28/07	1
Fluorene	BDL	0.038	mg/kg	8270C	12/28/07	1
Indeno(1,2,3-cd)pyrene	BDL	0.038	mg/kg	8270C	12/28/07	1
Naphthalene	0.041	0.038	mg/kg	8270C	12/28/07	1
Phenanthrene	0.10	0.038	mg/kg	8270C	12/28/07	1
Pyrene	0.16	0.038	mg/kg	8270C	12/28/07	1
Surrogate Recovery						
Nitrobenzene-d5	92.4		% Rec.	8270C	12/28/07	1
2-Fluorobiphenyl	76.6		% Rec.	8270C	12/28/07	1
p-Terphenyl-d14	90.8		% Rec.	8270C	12/28/07	1
Pesticides						
Aldrin	BDL	0.023	mg/kg	8081A	01/02/08	1
Alpha BHC	BDL	0.023	mg/kg	8081A	01/02/08	1
Beta BHC	BDL	0.023	mg/kg	8081A	01/02/08	1
Delta BHC	BDL	0.023	mg/kg	8081A	01/02/08	1
Gamma BHC	BDL	0.023	mg/kg	8081A	01/02/08	1
Chlordane	BDL	0.23	mg/kg	8081A	01/02/08	1
4,4-DDD	BDL	0.023	mg/kg	8081A	01/02/08	1
4,4-DDE	BDL	0.023	mg/kg	8081A	01/02/08	1
4,4-DDT	BDL	0.023	mg/kg	8081A	01/02/08	1
Dieldrin	BDL	0.023	mg/kg	8081A	01/02/08	1
Endosulfan I	BDL	0.023	mg/kg	8081A	01/02/08	1
Endosulfan II	BDL	0.023	mg/kg	8081A	01/02/08	1
Endosulfan sulfate	BDL	0.023	mg/kg	8081A	01/02/08	1
Endrin	BDL	0.023	mg/kg	8081A	01/02/08	1
Endrin aldehyde	BDL	0.023	mg/kg	8081A	01/02/08	1
Endrin ketone	BDL	0.023	mg/kg	8081A	01/02/08	1
Hexachlorobenzene	BDL	0.023	mg/kg	8081A	01/02/08	1
Heptachlor	BDL	0.023	mg/kg	8081A	01/02/08	1
Heptachlor epoxide	BDL	0.023	mg/kg	8081A	01/02/08	1
Methoxychlor	BDL	0.023	mg/kg	8081A	01/02/08	1
Toxaphene	BDL	0.46	mg/kg	8081A	01/02/08	1
Pesticide Surrogates						
Decachlorobiphenyl	39.1		% Rec.	8081A	01/02/08	1
Tetrachloro-m-xylene	84.7		% Rec.	8081A	01/02/08	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

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Reported: 01/04/08 12:41 Printed: 01/04/08 15:47



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**REPORT OF ANALYSIS**

January 04, 2008

John Cameron  
Terracon - Bettendorf  
870 40th Avenue  
Bettendorf, IA 52722

Date Received : December 22, 2007  
Description : Dubuque Casino Soil Sampling

Sample ID : TP-6 9 FT

Collected By : John Cameron  
Collection Date : 12/20/07 12:00

ESC Sample # : L325425-04

Site ID :

Project # : 07077057

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
pH	8.4	8.4@19.7c	su	9045D	12/26/07	1
Total Solids	90.8		%	2540G	12/31/07	1
Mercury	0.051	0.022	mg/kg	7471	12/27/07	1
Arsenic	BDL	1.1	mg/kg	6010B	12/24/07	1
Barium	47.	0.28	mg/kg	6010B	12/24/07	1
Cadmium	0.34	0.28	mg/kg	6010B	12/24/07	1
Chromium	7.8	0.55	mg/kg	6010B	12/24/07	1
Lead	25.	0.28	mg/kg	6010B	12/24/07	1
Selenium	2.9	1.1	mg/kg	6010B	12/24/07	1
Silver	BDL	0.55	mg/kg	6010B	12/24/07	1
<b>Volatile Organics</b>						
Acetone	BDL	0.055	mg/kg	8260B	01/01/08	1
Acrylonitrile	BDL	0.011	mg/kg	8260B	01/01/08	1
Benzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Bromobenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Bromodichloromethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
Bromoform	BDL	0.0011	mg/kg	8260B	01/01/08	1
Bromomethane	BDL	0.0055	mg/kg	8260B	01/01/08	1
n-Butylbenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
sec-Butylbenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
tert-Butylbenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Carbon tetrachloride	BDL	0.0011	mg/kg	8260B	01/01/08	1
Chlorobenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Chlorodibromomethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
Chloroethane	BDL	0.0055	mg/kg	8260B	01/01/08	1
2-Chloroethyl vinyl ether	BDL	0.055	mg/kg	8260B	01/01/08	1
Chloroform	BDL	0.0055	mg/kg	8260B	01/01/08	1
Chloromethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
2-Chlorotoluene	BDL	0.0011	mg/kg	8260B	01/01/08	1
4-Chlorotoluene	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,2-Dibromo-3-Chloropropane	BDL	0.0055	mg/kg	8260B	01/01/08	1
1,2-Dibromoethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
Dibromomethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,2-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,3-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,4-Dichlorobenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Dichlorodifluoromethane	BDL	0.0055	mg/kg	8260B	01/01/08	1
1,1-Dichloroethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,2-Dichloroethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,1-Dichloroethene	BDL	0.0011	mg/kg	8260B	01/01/08	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

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L325425-04 (SV8081) - Non-target compounds too high to run at a lower dilution.



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Est. 1970

REPORT OF ANALYSIS

January 04, 2008

John Cameron  
Terracon - Bettendorf  
870 40th Avenue  
Bettendorf, IA 52722

ESC Sample # : L325425-04

Date Received : December 22, 2007  
Description : Dubuque Casino Soil Sampling

Site ID :

Sample ID : TP-6 9 FT

Project # : 07077067

Collected By : John Cameron  
Collection Date : 12/20/07 12:00

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
cis-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	01/01/08	1
trans-1,2-Dichloroethene	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,1-Dichloropropane	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,3-Dichloropropane	BDL	0.0011	mg/kg	8260B	01/01/08	1
cis-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	01/01/08	1
trans-1,3-Dichloropropene	BDL	0.0011	mg/kg	8260B	01/01/08	1
2,2-Dichloropropane	BDL	0.0011	mg/kg	8260B	01/01/08	1
Di-isopropyl ether	BDL	0.0011	mg/kg	8260B	01/01/08	1
Ethylbenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Hexachlorobutadiene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Isopropylbenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
p-Isopropyltoluene	BDL	0.0011	mg/kg	8260B	01/01/08	1
2-Butanone (MEK)	BDL	0.011	mg/kg	8260B	01/01/08	1
Methylene Chloride	BDL	0.0055	mg/kg	8260B	01/01/08	1
4-Methyl-2-pentanone (MIBK)	BDL	0.011	mg/kg	8260B	01/01/08	1
Methyl tert-butyl ether	BDL	0.0011	mg/kg	8260B	01/01/08	1
Naphthalene	BDL	0.0055	mg/kg	8260B	01/01/08	1
n-Propylbenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Styrene	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,1,1,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,1,2,2-Tetrachloroethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
Tetrachloroethene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Toluene	BDL	0.0055	mg/kg	8260B	01/01/08	1
1,2,3-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,2,4-Trichlorobenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,1,1-Trichloroethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,1,2-Trichloroethane	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0011	mg/kg	8260B	01/01/08	1
Trichloroethene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Trichlorofluoromethane	BDL	0.0055	mg/kg	8260B	01/01/08	1
1,2,3-Trichloropropane	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,2,4-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
1,3,5-Trimethylbenzene	BDL	0.0011	mg/kg	8260B	01/01/08	1
Vinyl chloride	BDL	0.0011	mg/kg	8260B	01/01/08	1
Xylenes, Total	BDL	0.0033	mg/kg	8260B	01/01/08	1
Surrogate Recovery						
Toluene-d8	103.		% Rec.	8260B	01/01/08	1
Dibromofluoromethane	110.		% Rec.	8260B	01/01/08	1
4-Bromofluorobenzene	82.0		% Rec.	8260B	01/01/08	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	BDL	0.036	mg/kg	8270C	12/28/07	1
Acenaphthene	BDL	0.036	mg/kg	8270C	12/28/07	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

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L325425-04 (SV8081) - Non-target compounds too high to run at a lower dilution.



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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

January 04, 2008

John Cameron  
Terracon - Bettendorf  
870 40th Avenue  
Bettendorf, IA 52722

Date Received : December 22, 2007  
Description : Dubuque Casino Soil Sampling  
Sample ID : TP-6 9 FT  
Collected By : John Cameron  
Collection Date : 12/20/07 12:00

ESC Sample # : L325425-04

Site ID :

Project # : 07077067

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Acenaphthylene	BDL	0.036	mg/kg	8270C	12/28/07	1
Benzo(a)anthracene	0.11	0.036	mg/kg	8270C	12/28/07	1
Benzo(a)pyrene	0.079	0.036	mg/kg	8270C	12/28/07	1
Benzo(b)fluoranthene	0.093	0.036	mg/kg	8270C	12/28/07	1
Benzo(g,h,i)perylene	0.059	0.036	mg/kg	8270C	12/28/07	1
Benzo(k)fluoranthene	0.049	0.036	mg/kg	8270C	12/28/07	1
Chrysene	0.087	0.036	mg/kg	8270C	12/28/07	1
Dibenz(a,h)anthracene	BDL	0.036	mg/kg	8270C	12/28/07	1
Fluoranthene	0.15	0.036	mg/kg	8270C	12/28/07	1
Fluorene	BDL	0.036	mg/kg	8270C	12/28/07	1
Indeno(1,2,3-cd)pyrene	BDL	0.036	mg/kg	8270C	12/28/07	1
Naphthalene	BDL	0.036	mg/kg	8270C	12/28/07	1
Phenanthrene	0.10	0.036	mg/kg	8270C	12/28/07	1
Pyrene	0.18	0.036	mg/kg	8270C	12/28/07	1
Surrogate Recovery						
Nitrobenzene-d5	90.5		% Rec.	8270C	12/28/07	1
2-Fluorobiphenyl	89.3		% Rec.	8270C	12/28/07	1
p-Terphenyl-d14	89.6		% Rec.	8270C	12/28/07	1
Pesticides						
Aldrin	BDL	0.11	mg/kg	8081A	01/02/08	5
Alpha BHC	BDL	0.11	mg/kg	8081A	01/02/08	5
Beta BHC	BDL	0.11	mg/kg	8081A	01/02/08	5
Delta BHC	BDL	0.11	mg/kg	8081A	01/02/08	5
Gamma BHC	BDL	0.11	mg/kg	8081A	01/02/08	5
Chlordane	BDL	1.1	mg/kg	8081A	01/02/08	5
4,4-DDD	BDL	0.11	mg/kg	8081A	01/02/08	5
4,4-DDE	BDL	0.11	mg/kg	8081A	01/02/08	5
4,4-DDT	BDL	0.11	mg/kg	8081A	01/02/08	5
Dieldrin	BDL	0.11	mg/kg	8081A	01/02/08	5
Endosulfan I	BDL	0.11	mg/kg	8081A	01/02/08	5
Endosulfan II	BDL	0.11	mg/kg	8081A	01/02/08	5
Endosulfan sulfate	BDL	0.11	mg/kg	8081A	01/02/08	5
Endrin	BDL	0.11	mg/kg	8081A	01/02/08	5
Endrin aldehyde	BDL	0.11	mg/kg	8081A	01/02/08	5
Endrin ketone	BDL	0.11	mg/kg	8081A	01/02/08	5
Hexachlorobenzene	BDL	0.11	mg/kg	8081A	01/02/08	5
Heptachlor	BDL	0.11	mg/kg	8081A	01/02/08	5
Heptachlor epoxide	BDL	0.11	mg/kg	8081A	01/02/08	5
Methoxychlor	BDL	0.11	mg/kg	8081A	01/02/08	5
Toxaphene	BDL	2.2	mg/kg	8081A	01/02/08	5
Pesticide Surrogates						
Decachlorobiphenyl	46.5		% Rec.	8081A	01/02/08	5
Tetrachloro-m-xylene	83.8		% Rec.	8081A	01/02/08	5

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

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Reported: 01/04/08 12:41 Printed: 01/04/08 15:47

L325425-04 (SV8081) - Non-target compounds too high to run at a lower dilution.





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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

January 04, 2008

John Cameron  
Terracon - Bettendorf  
870 40th Avenue  
Bettendorf, IA 52722

ESC Sample # : L325425-05

Date Received : December 22, 2007  
Description : Dubuque Casino Soil Sampling

Site ID :

Sample ID : TP-8 6 FT

Project # : 07077067

Collected By : John Cameron  
Collection Date : 12/20/07 12:40

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
pH	7.0	7.0@19.7c	su	9045D	12/26/07	1
Total Solids	81.8		%	2540G	12/31/07	1
Mercury	0.12	0.024	mg/kg	7471	12/27/07	1
Arsenic	BDL	1.2	mg/kg	6010B	12/24/07	1
Barium	72.	0.30	mg/kg	6010B	12/24/07	1
Cadmium	0.52	0.30	mg/kg	6010B	12/24/07	1
Chromium	11.	0.61	mg/kg	6010B	12/24/07	1
Lead	49.	0.30	mg/kg	6010B	12/24/07	1
Selenium	2.2	1.2	mg/kg	6010B	12/24/07	1
Silver	BDL	0.61	mg/kg	6010B	12/24/07	1
<b>Volatile Organics</b>						
Acetone	0.064	0.061	mg/kg	8260B	01/01/08	1
Acrylonitrile	BDL	0.012	mg/kg	8260B	01/01/08	1
Benzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Bromobenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Bromodichloromethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
Bromoform	BDL	0.0012	mg/kg	8260B	01/01/08	1
Bromomethane	BDL	0.0061	mg/kg	8260B	01/01/08	1
n-Butylbenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
sec-Butylbenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
tert-Butylbenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Carbon tetrachloride	BDL	0.0012	mg/kg	8260B	01/01/08	1
Chlorobenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Chlorodibromomethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
Chloroethane	BDL	0.0061	mg/kg	8260B	01/01/08	1
2-Chloroethyl vinyl ether	BDL	0.061	mg/kg	8260B	01/01/08	1
Chloroform	BDL	0.0061	mg/kg	8260B	01/01/08	1
Chloromethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
2-Chlorotoluene	BDL	0.0012	mg/kg	8260B	01/01/08	1
4-Chlorotoluene	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,2-Dibromo-3-Chloropropane	BDL	0.0061	mg/kg	8260B	01/01/08	1
1,2-Dibromoethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
Dibromomethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,2-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,3-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,4-Dichlorobenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Dichlorodifluoromethane	BDL	0.0061	mg/kg	8260B	01/01/08	1
1,1-Dichloroethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,2-Dichloroethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,1-Dichloroethene	BDL	0.0012	mg/kg	8260B	01/01/08	1

Results listed are dry weight basis.

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

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L325425-05 (SV8081) - Non-target compounds too high to run at a lower dilution.



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Tax I.D. 62-0814289

Est. 1970

**REPORT OF ANALYSIS**

John Cameron  
Terracon - Bettendorf  
870 40th Avenue  
Bettendorf, IA 52722

January 04, 2008

Date Received : December 22, 2007  
Description : Dubuque Casino Soil Sampling  
Sample ID : TP-8 6 FT  
Collected By : John Cameron  
Collection Date : 12/20/07 12:40

ESC Sample # : L325425-05

Site ID :

Project # : 07077067

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
cis-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	01/01/08	1
trans-1,2-Dichloroethene	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,1-Dichloropropene	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,3-Dichloropropane	BDL	0.0012	mg/kg	8260B	01/01/08	1
cis-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	01/01/08	1
trans-1,3-Dichloropropene	BDL	0.0012	mg/kg	8260B	01/01/08	1
2,2-Dichloropropane	BDL	0.0012	mg/kg	8260B	01/01/08	1
Di-isopropyl ether	BDL	0.0012	mg/kg	8260B	01/01/08	1
Ethylbenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Hexachlorobutadiene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Isopropylbenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
p-Isopropyltoluene	BDL	0.0012	mg/kg	8260B	01/01/08	1
2-Butanone (MEK)	BDL	0.012	mg/kg	8260B	01/01/08	1
Methylene Chloride	BDL	0.0061	mg/kg	8260B	01/01/08	1
4-Methyl-2-pentanone (MIBK)	BDL	0.012	mg/kg	8260B	01/01/08	1
Methyl tert-butyl ether	BDL	0.0012	mg/kg	8260B	01/01/08	1
Naphthalene	BDL	0.0061	mg/kg	8260B	01/01/08	1
n-Propylbenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Styrene	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,1,1,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,1,2,2-Tetrachloroethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
Tetrachloroethene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Toluene	BDL	0.0061	mg/kg	8260B	01/01/08	1
1,2,3-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,2,4-Trichlorobenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,1,1-Trichloroethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,1,2-Trichloroethane	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,1,2-Trichloro-1,2,2-trifluoro	BDL	0.0012	mg/kg	8260B	01/01/08	1
Trichloroethene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Trichlorofluoromethane	BDL	0.0061	mg/kg	8260B	01/01/08	1
1,2,3-Trichloropropane	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,2,4-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
1,3,5-Trimethylbenzene	BDL	0.0012	mg/kg	8260B	01/01/08	1
Vinyl chloride	BDL	0.0012	mg/kg	8260B	01/01/08	1
Xylenes, Total	BDL	0.0037	mg/kg	8260B	01/01/08	1
Surrogate Recovery						
Toluene-d8	102.		% Rec.	8260B	01/01/08	1
Dibromofluoromethane	108.		% Rec.	8260B	01/01/08	1
4-Bromofluorobenzene	82.4		% Rec.	8260B	01/01/08	1
Polynuclear Aromatic Hydrocarbons						
Anthracene	0.056	0.040	mg/kg	8270C	12/28/07	1
Acenaphthene	0.10	0.040	mg/kg	8270C	12/28/07	1

Results listed are dry weight basis.

BDL - Below Detection Limit

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L325425-05 (SV8081) - Non-target compounds too high to run at a lower dilution.



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**REPORT OF ANALYSIS**

January 04, 2008

John Cameron  
Terracon - Bettendorf  
870 40th Avenue  
Bettendorf, IA 52722

Date Received : December 22, 2007  
Description : Dubuque Casino Soil Sampling  
Sample ID : TP-8 6 FT  
Collected By : John Cameron  
Collection Date : 12/20/07 12:40

ESC Sample # : L325425-05

Site ID :

Project # : 07077067

Parameter	Dry Result	Det. Limit	Units	Method	Date	Dil.
Acenaphthylene	BDL	0.040	mg/kg	8270C	12/28/07	1
Benzo(a)anthracene	0.27	0.040	mg/kg	8270C	12/28/07	1
Benzo(a)pyrene	0.30	0.040	mg/kg	8270C	12/28/07	1
Benzo(b)fluoranthene	0.24	0.040	mg/kg	8270C	12/28/07	1
Benzo(g,h,i)perylene	0.18	0.040	mg/kg	8270C	12/28/07	1
Benzo(k)fluoranthene	0.056	0.040	mg/kg	8270C	12/28/07	1
Chrysene	0.27	0.040	mg/kg	8270C	12/28/07	1
Dibenz(a,h)anthracene	BDL	0.040	mg/kg	8270C	12/28/07	1
Fluoranthene	0.25	0.040	mg/kg	8270C	12/28/07	1
Fluorene	0.046	0.040	mg/kg	8270C	12/28/07	1
Indeno(1,2,3-cd)pyrene	BDL	0.040	mg/kg	8270C	12/28/07	1
Naphthalene	0.051	0.040	mg/kg	8270C	12/28/07	1
Phenanthrene	0.25	0.040	mg/kg	8270C	12/28/07	1
Pyrene	0.36	0.040	mg/kg	8270C	12/28/07	1
Surrogate Recovery						
Nitrobenzene-d5	102.		% Rec.	8270C	12/28/07	1
2-Fluorobiphenyl	100.		% Rec.	8270C	12/28/07	1
p-Terphenyl-d14	107.		% Rec.	8270C	12/28/07	1
Pesticides						
Aldrin	BDL	0.12	mg/kg	8081A	01/02/08	5
Alpha BHC	BDL	0.12	mg/kg	8081A	01/02/08	5
Beta BHC	BDL	0.12	mg/kg	8081A	01/02/08	5
Delta BHC	BDL	0.12	mg/kg	8081A	01/02/08	5
Gamma BHC	BDL	0.12	mg/kg	8081A	01/02/08	5
Chlordane	BDL	1.2	mg/kg	8081A	01/02/08	5
4,4-DDD	BDL	0.12	mg/kg	8081A	01/02/08	5
4,4-DDE	BDL	0.12	mg/kg	8081A	01/02/08	5
4,4-DDT	BDL	0.12	mg/kg	8081A	01/02/08	5
Dieldrin	BDL	0.12	mg/kg	8081A	01/02/08	5
Endosulfan I	BDL	0.12	mg/kg	8081A	01/02/08	5
Endosulfan II	BDL	0.12	mg/kg	8081A	01/02/08	5
Endosulfan sulfate	BDL	0.12	mg/kg	8081A	01/02/08	5
Endrin	BDL	0.12	mg/kg	8081A	01/02/08	5
Endrin aldehyde	BDL	0.12	mg/kg	8081A	01/02/08	5
Endrin ketone	BDL	0.12	mg/kg	8081A	01/02/08	5
Hexachlorobenzene	BDL	0.12	mg/kg	8081A	01/02/08	5
Heptachlor	BDL	0.12	mg/kg	8081A	01/02/08	5
Heptachlor epoxide	BDL	0.12	mg/kg	8081A	01/02/08	5
Methoxychlor	BDL	0.12	mg/kg	8081A	01/02/08	5
Toxaphene	BDL	2.4	mg/kg	8081A	01/02/08	5
Pesticide Surrogates						
Decachlorobiphenyl	40.7		% Rec.	8081A	01/02/08	5
Tetrachloro-m-xylene	77.7		% Rec.	8081A	01/02/08	5

Results listed are dry weight basis.

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L325425-05 (SV8081) - Non-target compounds too high to run at a lower dilution.