ENERGY AND ENVIRONMENT CABINET

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Governor

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Division of Waste Management
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Leonard K. Peters
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MEMORANDUM

TO: Jim McGuire, Removal Manager
Emergency Response and Removal Branch, EPA Region 4

FROM: Shawn Cecil, Manager SAC
Superfund Branch, Kentucky Division of Waste Management (KDWM)

DATE: July 25, 2011

SUBJECT: Request for Time Critical Removal Action
Black Leaf Chemical; KYD980559520
Louisville, Jefferson County, Kentucky

KDWM requests that EPA Region 4 take time-critical removal action at the Black Leaf Chemical site in Louisville, Kentucky. High levels of contaminants were identified in surface soils during an October 2010 sampling event conducted by an EPA START Team. The findings of the sample analysis indicate that concentrations present, the nature of the contamination and the surrounding property use require time-critical action that the Commonwealth of Kentucky is not well-positioned to take at this time.

The findings of the START Team assessment are that significant concentrations of pesticides are present, including surface interval soils; the most significant levels of pesticides were detected in surface samples containing alpha-BHC at levels 18,181 times the RSL, DDT at levels 217 times the RSL, and Dieldrin at levels 600 times the RSL. Pesticide concentrations were most elevated around a former manufacturing building but Dieldrin was elevated in a surface sample over 325 feet away from the manufacturing building along the northern edge of the property bordering the neighborhood. Dieldrin was also identified over 625 feet away from the manufacturing building, indicating that migration has occurred and is possible in the future. KDWM has additional concerns regarding the potential for presence of dioxins and recommends including this group of constituents in future soil and groundwater sampling and analysis. In addition, PAH constituents were detected above RSLs over the entire property in surface soils. PAHs were detected in subsurface soil samples in BLC-SB-15, which is located along the northern edge of the property adjacent to the neighborhood, and BLC-SB-23, which is located in an open field in the northeastern portion of the property. No off-site samples have been collected to date, leaving the presence of off-site contamination unknown at this time.

The site borders a residential neighborhood and is not secured. The existing fence and gate are in disrepair, allowing trespassers onto the property. There is a licensed daycare facility located within 200 feet of the site and the same distance from a sample location in which elevated hazardous substances including Dieldrin and PAHs have been found. The property is located adjacent to a neighborhood in which KDWM believes is an Environmental Justice area (95% of the residents are members of a minority group).

KDWM recommends that EPA conduct time-critical removal actions at the site and that off-site soil sampling at select locations in the residential neighborhood and on the daycare property be conducted to determine if contamination has migrated off-site. In addition, groundwater sampling is recommended due to elevated pesticides and PAHs in some subsurface samples. While few groundwater users were identified using various databases, groundwater sampling in conjunction with a door to door survey in the area may be warranted.

KDWM considers this a priority site and your consideration is appreciated.

Attachments

C: Shane Hitchcock
Art Smith
Tony Hatton
Tim Hubbard
Wesley Turner
Donna Seadler
Cheryl Brown Harris

Supplemental Information

Property Ownership

- Tobacco By-Products and Chemical Corporation from 1924 - 1953
- Sold in 1953 to Virginia-Carolina Chemical Corporation
- Sold in 1955 to Diamond Black Leaf Company
- Sold in 1957 due to a Plan of complete Liquidation to sole shareholder: Diamond Alkali Company
- Sold in 1959 to Schenley Distillers, Inc.
- Changed hands several times until purchased by current property owner, Louisville Industrial Park

It is notable in the ownership chain that, in particular, Diamond Alkali has a history as a pesticide manufacturer. A Diamond Alkali site in New Jersey (listed on the NPL) was found to have significant dioxin contamination as a result of the manufacture of DDT, a contaminant also present at the Kentucky site. KDWM recommends that dioxins be included as a chemical of potential concern (for both soil and groundwater) going forward as dioxin testing was not part of the October 2010 sampling event.

CERCLA History

A Preliminary Assessment (PA) was conducted in 1987. At that time, no further CERCLA action was recommended due to a low HRS score. Community drinking water supplies were not impacted by activities at the site and all site drainage was directed into the city sewer system. The site was recommended for a NFRAP review in 2009 to determine if conditions at the site had changed enough to warrant further action. During a 2009 site visit, numbers of drums containing hazardous wastes were observed including some that were leaking. KDWM removed the drums. At that time, KDWM learned of plans to develop the site into a residential complex. Given the potential future land use, preliminary HRS scoring exceeded 28.5 and a Site Inspection was initiated.

EPA's START Team conducted soil sampling in October 2010. Results from that event are attached. The SI was submitted to EPA's Site Evaluation Section in February 2011. KDWM has not received comments from EPA, however, we have recently asked for an expedited review of that report.

Site Location

The site is located in northwestern Jefferson County at 1391 Dixie Highway, Louisville, Kentucky. It is located on a portion of a 29-acre parcel of land currently owned by Louisville Industrial Park, LLC. GPS coordinates at the 17th Street entrance are Latitude 38.232967° North and Longitude 85.782500° West The site is situated in an inner city area known as the Park Hill neighborhood and is bordered by a minority neighborhood to the north, a large rail yard to the south, and industry/commercial areas to the east and west. At present, the site is abandoned, however, the fencing and gates at the site do not prevent vehicular or pedestrian access.

Pathways

The Soil Exposure Pathway is the pathway of concern. The Groundwater Migration Pathway was not identified as a concern due to insufficient targets. Only four (4) domestic drinking water wells were identified within a 4-mile radius. Those wells were not surveyed, so it is not know if they are in use. The Surface Water Pathway was not identified as a concern because surface water flows in the sewer system and is treated before being released into the Ohio River. The probably point of entry (PPE) is located over two (2) miles from the site,

therefore, this pathway is not to be considered under the HRS rule. The Air Migration Pathway was not evaluated due to the fact that there are no active industrial activities or known air emissions from activities at the site.

The site is currently abandoned. There are no workers on site, however, the site is not adequately secured and what appeared to be homeless people have been observed at the site. A chain link fence surrounding the site has large gaps and the 17th Street gate is no longer present (previous gate has been removed). The northern portion of the property is bordered by a low income, minority neighborhood. Approximately 25 single family homes are presently located within 200 feet of the site.

The property owner, Louisville Industrial Park, had previously proposed to construct a low-income residential housing developing on the site. Various proposals had been submitted, however, most proposals included construction of 76 single and multi-family residences on the site. Those potential future residents were included as targets to justify the soil sampling for the SI, however, the proposal to develop a neighborhood has since been denied by the City of Louisville. The property owner still believes the site has the possibility of being developed for residential use.

There are no known schools within 200 feet of the site. There is one (1) daycare licensed by the Kentucky Cabinet for Health and Family Services within 200 feet of the site. That daycare is located at 1612 Wilson Avenue and is an in-home daycare known as A Grandma's Place. The capacity of that daycare is six (6) children. The daycare has not been contacted. For purposes of the SI, it is assumed that six (6) children are present at the daycare at all times.

The 2000 Census indicates that there are 707 residents within ¼ mile of the site. Approximately 95% of that population is African American or other minority race. The population within a 1 mile radius is 14,902.

Conclusions

The site borders a residential neighborhood and is not well secured. A licensed daycare was identified within 200 feet of the site and within 200 feet of BLC-SS-18, which contained Dieldrin and several PAH constituents at levels equaling or exceeding RSLs.

Elevated pesticides and PAH constituents were detected primarily in surface samples in the area around the manufacturing building. Alpha-BHC was detected in a subsurface sample in the area around the manufacturing building as well. While most pesticides were detected primarily within 200 feet of the manufacturing building, Dieldrin was elevated in a surface sample over 325 feet away from the manufacturing building along the northern edge of the property bordering the neighborhood. Dieldrin was also identified over 625 feet away from the manufacturing building near the southeastern edge of the property.

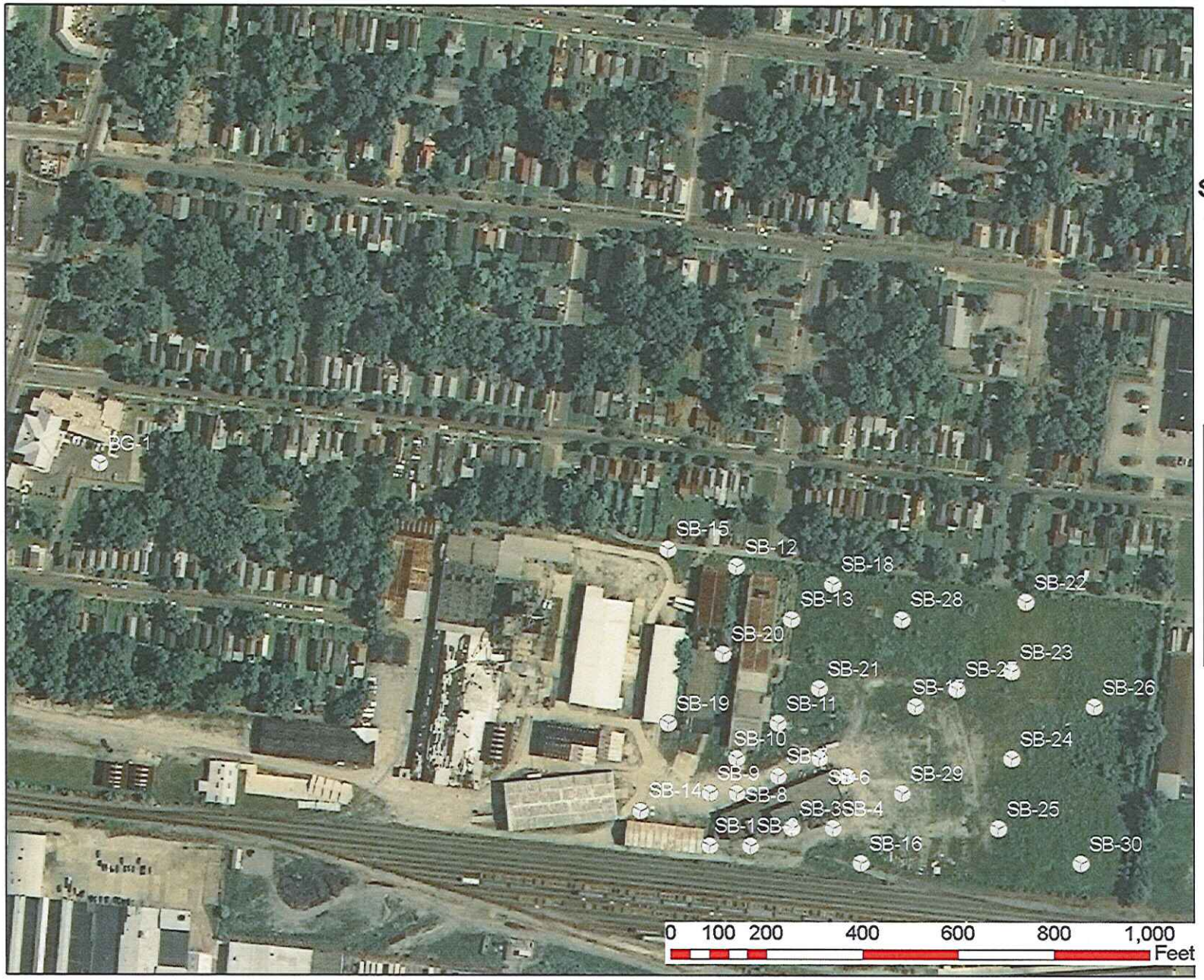
PAH constituents were detected above RSLs all over the property in surface soils. PAHs were detected in subsurface soil samples in BLC-SB-15, which is located along the northern edge of the property adjacent to the neighborhood, and BLC-SB-23, which is located in an open field in the northeastern portion of the property. Since no off-site sampling was conducted (other than the background sample), it is not known if any contaminants have migrated off site. Due to the fact that elevated levels of pesticides and PAHs were detected close to the property boundaries, it is possible that contamination has migrated off-site and could potentially be impacting residential properties to the north of the site. Also, some samples contained pesticides at levels that may be above EPA's emergency action levels.

KDWM recommends that EPA conduct a Time Critical Removal Action at the site and recommends that off-site soil sampling at select locations in the residential neighborhood and on the daycare property be conducted to determine if contamination has migrated off-site. In addition, groundwater sampling is recommended due to elevated pesticides and PAHs in some subsurface samples. While few groundwater users were identified using various databases, groundwater sampling in conjunction with a door to door survey in the area may be warranted.

KDWM considers this a priority site and your consideration is appreciated.

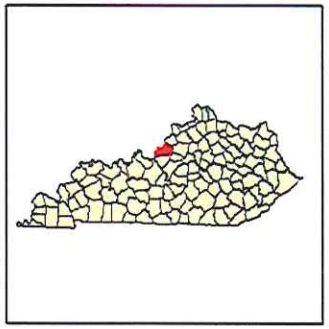
Figure 4

Former Black Leaf Chemical Company



Proposed Sampling Locations Map

Sample Locations



For: KDEP-EPA
Source:KGN-ESRI
Location: 1391 Dixie Hwy
City: Louisville, KY
County: Jefferson

Figure 5

Black Leaf Chemical--Pesticide Results Map
Manufacturing Building Area

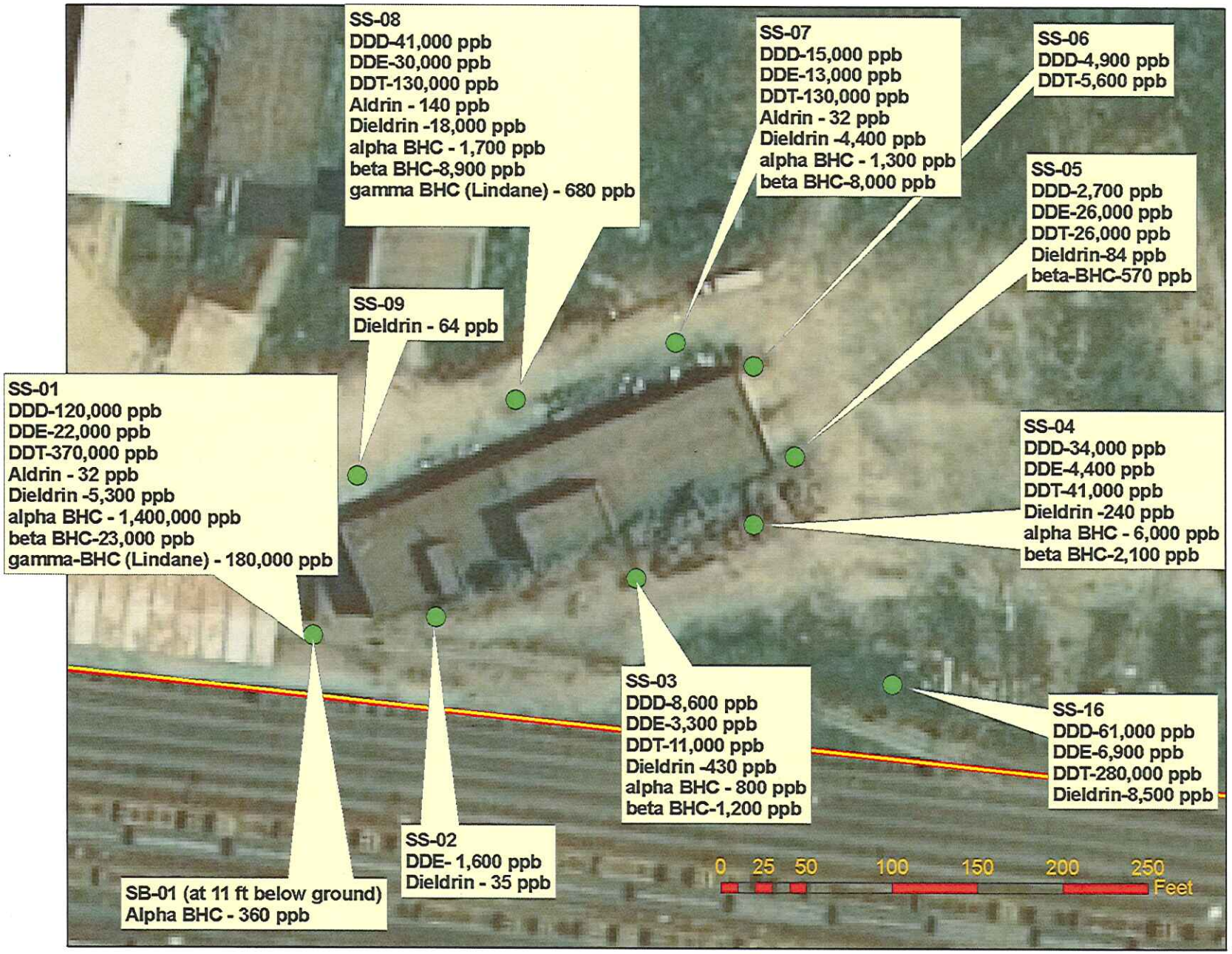


Figure 6

Black Leaf Chemical-Pesticide Results Map
Areas other than Manufacturing Building

All levels listed are at or above Regional Screening Levels for Residential Soils

Louisville Industrial Park

Black Leaf Target Area

For: KDEP-EPA
Source:KGN-ESRI
Location: 1391 Dixie Hw
City: Louisville, KY
County: Jefferson

BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Table 4: Black Leaf Chemical Soil Sampling Results (October 2010 Sampling Event)

Sample ID	Residential Soil RSL	BLCBG-SS-01	BLCBG-SB-01	BLCBG-SB-02	BLCBG-SB-03	BLC-SS-01	BLC-SB-01	BLC-SS-02	BLC-SB-02	BLC-SS-03	BLC-SB-03
Location		BLCBG1	BLCBG1	BLCBG1	BLCBG1	BLC001	BLC001	BLC002	BLC002	BLC003	BLC003
Collection Date		10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010
Matrix		Surface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil
Sample Type		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Cyanide (mg/kg)											
Cyanide	1600	**0.35 J**	0.58 U	**0.44 J**	0.58 U	0.6 U	0.53 U	0.52 U	**0.077 J**	**0.14 J**	0.58 U
Total Metals (mg/kg)											
Mercury	5.6	**0.031 J**	**0.044 J**	**0.013 J**	**0.013 J**	**0.075 J**	0.092 U	**0.03 J**	0.091 U	**0.033 J**	**0.0087 J**
Arsenic	0.39	**9.3**	**12**	**11**	**12**	**7.4**	**8**	**11**	**8.2**	**5.6**	**12**
Barium	15000	**120**	**180**	**69**	**70**	**77**	**24**	**70**	**23**	**94**	**88**
Cadmium	70	**0.71**	**1**	**0.92**	**0.95**	0.49 U	0.48 U	0.46 U	0.5 U	0.54 U	0.39 U
Chromium	NL	**15**	**18**	**13**	**12**	**8.1**	**5**	**9.8**	**4.9**	**6.3**	**9.3**
Selenium	390	3.8 U	3.1 U	3.3 U	2.8 U	3.4 U	3.4 U	3.2 U	3.5 U	3.8 U	2.8 U
Silver	390	1.1 U	0.89 U	0.93 U	0.8 U	0.98 U	0.96 U	0.92 U	0.99 U	1.1 U	0.79 U
Pesticides (ug/kg)											
4,4'-DDD (p,p'-DDD)	2000	3.7 U	4 U	4 U	3.9 U	**120000**	**58**	**190**	3.5 U	**8600**	3.7 U
4,4'-DDE (p,p'-DDE)	1400	**0.43 J**	4 U	4 U	3.9 U	**22000 J**	**6.8**	**1600**	**9.2**	**3300**	**1.3 J**
4,4'-DDT (p,p'-DDT)	1700	3.7 U	4 U	4 U	3.9 U	**370000**	**490**	**760**	**13**	**11000**	5.4 U
Aldrin	29	1.9 U	2 U	2.1 U	2 U	22000 U	1.9 U	18 U	1.8 U	**12 J**	1.9 U
alpha-BHC	77	1.9 U	**0.98 J**	2.1 U	**0.46 J**	**1400000**	**360**	**47**	**7.6**	**800**	1.9 U
alpha-Chlordane	NL	1.9 U	2 U	2.1 U	2 U	22000 U	1.9 U	**2.3 NJ**	1.8 U	**51**	1.9 U
beta-BHC	270	1.9 U	2 U	2.1 U	2 U	**23000**	**73**	**22 NJ**	**3.6**	**1200**	1.9 U
delta-BHC	NL	1.9 U	2 U	2.1 U	2 U	**6500 J**	**9.4**	18 U	1.8 U	**19 J**	1.9 U
Dieldrin	30	3.7 U	4 U	4 U	3.9 U	**5300 J**	**5.8**	**35 J**	**0.48 J**	**430**	3.7 U
Endosulfan I (alpha)	NL	1.9 U	2 U	2.1 U	2 U	22000 U	1.9 U	18 U	1.8 U	40 U	1.9 U
Endosulfan II (beta)	NL	3.7 U	4 U	4 U	3.9 U	43000 U	3.6 U	35 U	3.5 U	78 U	3.7 U
Endosulfan Sulfate	NL	3.7 U	4 U	4 U	3.9 U	43000 U	3.6 U	35 U	3.5 U	78 U	3.7 U
Endrin	18000	3.7 U	4 U	4 U	3.9 U	43000 U	3.6 U	35 U	3.5 U	78 U	3.7 U
Endrin aldehyde	NL	3.7 U	4 U	4 U	3.9 U	43000 U	3.6 U	35 U	3.5 U	78 U	3.7 U
Endrin ketone	NL	3.7 U	4 U	4 U	3.9 U	43000 U	3.6 U	**4 J**	3.5 U	78 U	3.7 U
gamma-BHC (Lindane)	520	1.9 U	**0.3 J**	2.1 U	2 U	**180000**	**41**	**7.5 J**	**1.2 J**	**140**	1.9 U
gamma-Chlordane	NL	**0.22 NJ**	2 U	2.1 U	2 U	22000 U	1.9 U	18 U	1.8 U	56 U	1.9 U
Heptachlor	110	1.9 U	2 U	2.1 U	2 U	22000 U	1.9 U	18 U	1.8 U	40 U	1.9 U
Heptachlor epoxide	53	1.9 U	2 U	2.1 U	2 U	22000 U	1.9 U	18 U	1.8 U	40 U	1.9 U
Methoxychlor	310000	19 U	20 U	21 U	20 U	220000 U	19 U	180 U	18 U	400 U	19 U

BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Sample ID	Residential Soil RSL	BLCBG-SS-01	BLCBG-SB-01	BLCBG-SB-02	BLCBG-SB-03	BLC-SS-01	BLC-SB-01	BLC-SS-02	BLC-SB-02	BLC-SS-03	BLC-SB-03
Location		BLCBG1	BLCBG1	BLCBG1	BLCBG1	BLC001	BLC001	BLC002	BLC002	BLC003	BLC003
Collection Date		10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010
Matrix		Surface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil
Sample Type		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Polycyclic Aromatic Hydrocarbons (ug/kg)											
2-Methylnaphthalene	310000	0.54 J	3.9 U	3.9 U	3.9 U	170	3.6 U	88	3.5 U	260	3.7 U
Anthracene	17000000	0.8 J	3.9 U	3.9 U	3.9 U	330 J	3.6 U	630	0.6 J	46 J	3.7 U
Acenaphthene	3400000	5.2 U	3.9 U	3.9 U	3.9 U	93	3.6 U	140	3.5 U	11	3.7 U
Acenaphthylene	NL	5.2 U	3.9 U	3.9 U	3.9 U	14 J	3.6 U	45	3.5 U	4.9	3.7 U
Benzo(a)anthracene	150	11	3.9 U	3.9 U	3.9 U	1100 J	3.6 U	2200	1.2 J	230	0.87 J
Benzo(a)pyrene	15	19	4.1 U	4.7 U	4.2 U	990 J	3.6 U	2000	3.8 U	210	4.1 U
Benzo(b)fluoranthene	150	19	0.58 J	0.51 J	3.9 U	1100 J	3.6 U	2200	0.98 J	260	1.1 J
Benzo(g,h,i)perylene	NL	11 J	3.9 U	0.44 J	3.9 U	770 J	3.6 U	1900 J	3.5 U	220 J	3.7 U
Benzo(k)fluoranthene	1500	16	0.48 J	0.49 J	3.9 U	1100 J	3.6 U	1800	0.91 J	200 J	1.2 J
Chrysene	15000	16	0.39 J	3.9 U	3.9 U	1200 J	3.6 U	2200	1 J	270	0.97 J
Dibenzo(a,h)anthracene	15	4 J	3.9 U	3.9 U	3.9 U	400 J	3.6 U	480 J	3.5 U	75 J	3.7 U
Fluorene	2300000	5.2 U	3.9 U	3.9 U	3.9 U	98	3.6 U	170	3.5 U	10	3.7 U
Fluoranthene	2300000	28	3.9 U	3.9 U	3.9 U	2900 J	3.6 U	4300	3.2 J	440	1.4 J
Indeno (1,2,3-cd) pyrene	150	12	0.39 J	3.9 U	3.9 U	650 J	3.6 U	1700	3.5 U	190 J	3.7 U
Naphthalene	3600	5.2 U	3.9 U	3.9 U	3.9 U	130	3.6 U	55	3.5 U	140 J	3.7 U
Pyrene	1700000	27	3.9 U	3.9 U	3.9 U	2400 J	3.6 U	4100	3.5 U	460	3.7 U
Semivolatile organic compounds (ug/kg)											
1,1-Biphenyl	3900000	190 U	200 U	200 U	200 U	4500 U	190 U	520 U	180 U	200 U	190 U
1,2,4,5-Tetrachlorobenzene	18000	190 U	200 U	200 U	200 U	8900	190 U	520 U	180 U	42 J	190 U
2,4,5-Trichlorophenol	6100000	190 U	200 U	200 U	200 U	4500 U	190 U	520 U	180 U	24 J	190 U
Acetophenone	7800000	190 U	200 U	200 U	200 U	4500 U	190 U	520 U	180 U	39 J	190 U
Benzaldehyde	7800000	190 U	200 U	200 U	200 U	4500 U	190 U	520 U	180 U	200 U	190 U
Carbazole	NL	190 U	200 U	200 U	200 U	4500 U	190 U	190 J	180 U	30 J	190 U
Dibenzofuran	78000	190 U	200 U	200 U	200 U	4500 U	190 U	120 J	180 U	70 J	190 U
Pentachlorophenol	890	370 U	390 U	390 U	390 U	44 UJ	7.4 UJ	71 UJ	7.2 UJ	8.1 UJ	7.6 UJ
Phenanthrene	NL	8.6	3.9 U	3.9 U	3.9 U	1800 J	3.6 U	2400	2 J	340	0.86 J
Phenol	18000000	190 U	200 U	200 U	200 U	4500 U	190 U	520 U	180 U	200 U	190 U

BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Sample ID	Residential Soil RSL	BLCBG-SS-01	BLCBG-SB-01	BLCBG-SB-02	BLCBG-SB-03	BLC-SS-01	BLC-SB-01	BLC-SS-02	BLC-SB-02	BLC-SS-03	BLC-SB-03
Location		BLCBG1	BLCBG1	BLCBG1	BLCBG1	BLC001	BLC001	BLC002	BLC002	BLC003	BLC003
Collection Date		10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010
Matrix		Surface Soil	Subsurface Soil	Subsurface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil
Sample Type		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Volatile organic compounds (ug/kg)											
(m- and/or p-)Xylene	NL	5.2 U	3.6 U	4.1 U	4.7 U	5.3 UJ	3.8 U	4.8 U	340 UJ	4.7 UJ	3.6 U
1,2,3-Trichlorobenzene	49000	5.2 UJ	3.6 U	4.1 U	4.7 U	**1.3 J**	3.8 U	4.8 U	340 UJ	4.7 UJ	3.6 U
1,2,4-Trichlorobenzene	22000	5.2 UJ	3.6 U	4.1 U	4.7 U	5.3 UJ	3.8 U	4.8 U	340 UJ	4.7 UJ	3.6 U
1,2-Dichlorobenzene	1900000	5.2 UJ	3.6 U	4.1 U	4.7 U	5.3 UJ	3.8 U	4.8 U	340 UJ	4.7 UJ	3.6 U
1,3-Dichlorobenzene	NL	5.2 UJ	3.6 U	4.1 U	4.7 U	5.3 UJ	3.8 U	4.8 U	340 UJ	4.7 UJ	3.6 U
1,4-Dichlorobenzene	2400	5.2 UJ	3.6 U	4.1 U	4.7 U	5.3 UJ	3.8 U	4.8 U	340 UJ	4.7 UJ	3.6 U
Acetone	61000000	10 U	7.3 U	8.2 U	9.4 U	11 U	7.5 U	9.5 U	690 UR	**27**	7.2 U
Benzene	1100	5.2 U	3.6 U	4.1 U	4.7 U	5.3 UJ	3.8 U	4.8 U	340 UJ	**0.61 J**	3.6 U
Carbon disulfide	820000	5.2 U	3.6 U	4.1 U	4.7 U	**0.88 J**	3.8 U	4.8 U	340 UJ	**0.54 J**	3.6 U
Chlorobenzene	290000	5.2 U	3.6 U	4.1 U	4.7 U	5.3 UJ	3.8 U	4.8 U	340 UJ	4.7 UJ	3.6 U
Chloromethane	120000	5.2 U	3.6 U	4.1 U	4.7 U	5.3 U	3.8 U	4.8 U	340 UJ	4.7 U	3.6 U
Cyclohexane	7000000	5.2 UJ	3.6 UJ	4.1 UJ	4.7 UJ	5.3 UJ	3.8 U	4.8 U	340 UJ	4.7 UJ	3.6 U
Ethyl Benzene	5400	5.2 U	3.6 U	4.1 U	4.7 U	5.3 UJ	3.8 U	4.8 U	340 UJ	4.7 UJ	3.6 U
Isopropylbenzene	2100000	5.2 U	3.6 U	4.1 U	4.7 U	5.3 UJ	3.8 U	4.8 U	340 UJ	4.7 UJ	3.6 U
Methyl Acetate	78000000	5.2 U	3.6 U	4.1 U	4.7 U	5.3 U	3.8 U	4.8 UJ	340 UR	4.7 U	3.6 U
Methylcyclohexane	NL	5.2 U	3.6 U	4.1 U	4.7 U	5.3 UJ	3.8 U	4.8 U	340 UJ	**2.1 J**	3.6 U
o-Xylene	3800000	5.2 U	3.6 U	4.1 U	4.7 U	5.3 UJ	3.8 U	4.8 U	340 UJ	4.7 UJ	3.6 U
Tetrachloroethene (Tetrachloroeth	550	5.2 U	3.6 U	4.1 U	4.7 U	5.3 UJ	3.8 U	4.8 U	340 UJ	4.7 UJ	3.6 U
Toluene	5000000	5.2 U	3.8 U	4.1 U	4.7 U	5.3 UJ	3.8 U	4.8 U	340 UJ	4.7 UJ	3.6 U

Notes:

bold - Analyte was detected

bold and shaded - Analyte concentration exceeds the associated RSL for direct contact with residential soil

J - The identification of the analyte is acceptable; the reported value is an estimate.

mg/kg - Milligrams per kilogram

NL - No limit established

R - Rejected value

RSL - Regional Screening Level (Updated November 2010)

U - Analyte was analyzed for but not detected above the associated value

ug/kg - Micrograms per kilogram

BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Sample ID	Residential Soil RSL	BLC-SS-04	BLC-SB-04	BLC-SS-05	BLC-SB-05	BLC-SS-06	BLC-SS-31	BLC-SB-06	BLC-SS-07	BLC-SB-07	BLC-SS-08
Location		BLC004	BLC004	BLC005	BLC005	BLC006	BLC006	BLC006	BLC007	BLC007	BLC008
Collection Date		10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010
Matrix		Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil
Sample Type		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Cyanide (mg/kg)											
Cyanide	1600	0.53 U	0.55 U	0.54 U	0.088 J	0.52 U	0.54 U	0.52 U	0.21 J	0.34 J	0.18 J
Total Metals (mg/kg)											
Mercury	5.6	0.042 J	0.11 U	0.14	0.11 U	0.0078 J	0.16	0.1 U	0.82	0.11 U	0.17
Arsenic	0.39	9.5	7.8	8.7	9.3	6.3	15	8.2	24	8.1	22
Barium	15000	79	28	58	22	25	94	21	59	16 J	74
Cadmium	70	0.36 U	0.51 U	0.42 U	0.53 U	0.5 U	1	0.49 U	0.43 U	0.44 U	0.47 U
Chromium	NL	9.4	8.7	11	15	5.6	14	7.6	11	4.4	14
Selenium	390	1.3 J	3.6 U	2.9 U	3.7 U	3.5 U	3.7 U	3.5 U	3 U	3.1 U	1 J
Silver	390	0.72 U	1 U	0.84 U	1.1 U	1 U	1.1 U	0.99 U	0.86 U	0.87 U	0.49 J
Pesticides (ug/kg)											
4,4'-DDD (p,p'-DDD)	2000	34000	12	2700 J	4.2 U	4900	290	3.5 U	15000 J	3.6 U	41000
4,4'-DDE (p,p'-DDE)	1400	4400	1.5 J	26000	28	880	860	3.5 U	13000 J	4.9	30000
4,4'-DDT (p,p'-DDT)	1700	41000	30	26000	30	5600	330	3.5 U	130000	32	130000
Aldrin	29	180 U	1.9 U	180 U	1.8 U	36 U	9.5 U	1.8 U	32 J	1.8 U	140 J
alpha-BHC	77	6000	1.9 U	180 U	15	36 U	1.3 J	8.5	1300	1.8 U	1700
alpha-Chlordane	NL	41 J	1.9 U	250	1.8 U	3.6 J	3.9 J	1.8 U	190 J	1.8 U	620
beta-BHC	270	2100	1.9 U	570	5.5	36 U	9.5 U	14	8000 J	5.9	8900
delta-BHC	NL	190	1.9 U	180 U	0.33 J	36 U	9.5 U	1.8	760	1.8 U	280 J
Dieldrin	30	240 J	0.53 J	84 J	0.46 J	22 J	18 J	3.5 U	4400	2 J	18000
Endosulfan I (alpha)	NL	180 U	1.9 U	180 U	1.8 U	36 U	9.5 U	1.8 U	190 U	1.8 U	380 U
Endosulfan II (beta)	NL	350 U	3.7 U	350 U	3.5 U	70 U	18 U	3.5 U	58 NJ	3.5 U	740 U
Endosulfan Sulfate	NL	350 U	3.7 U	350 U	3.5 U	70 U	18 U	3.5 U	370 U	3.5 U	740 U
Endrin	18000	350 U	3.7 U	350 U	3.5 U	70 U	18 U	3.5 U	370 U	3.5 U	2700
Endrin aldehyde	NL	350 U	3.7 U	350 U	3.5 U	70 U	18 U	3.5 U	68 NJ	3.5 U	120 J
Endrin ketone	NL	350 U	3.7 U	350 U	3.5 U	70 U	18 U	3.5 U	130 J	3.5 U	2000
gamma-BHC (Lindane)	520	220	0.21 J	36 J	3.6	36 U	9.5 U	7.7	510	1.4 J	680
gamma-Chlordane	NL	180 U	1.9 U	270 U	1.8 U	33 NJ	9.5 U	1.8 U	190 U	1.8 U	670 U
Heptachlor	110	180 U	1.9 U	180 U	1.8 U	36 U	9.5 U	1.8 U	190 U	1.8 U	380 U
Heptachlor epoxide	53	180 U	1.9 U	180 U	1.8 U	36 U	9.5 U	1.8 U	190 U	1.8 U	380 U
Methoxychlor	310000	1800 U	19 U	1800 U	18 U	360 U	95 U	18 U	1900 U	18 U	3800 U

BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Sample ID	Residential Soil RSL	BLC-SS-04	BLC-SB-04	BLC-SS-05	BLC-SB-05	BLC-SS-06	BLC-SS-31	BLC-SB-06	BLC-SS-07	BLC-SB-07	BLC-SS-08
Location		BLC004	BLC004	BLC005	BLC005	BLC006	BLC006	BLC006	BLC007	BLC007	BLC008
Collection Date		10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010
Matrix		Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil
Sample Type		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Polycyclic Aromatic Hydrocarbons (ug/kg)											
2-Methylnaphthalene	310000	620	2.6 J	660	3.2 J	64 J	47 J	3.5 U	6100	0.35 J	2500
Anthracene	17000000	55 J	3.7 U	24	3.5 U	13	8.1	3.5 U	3800	3.5 U	490 J
Acenaphthene	3400000	11	3.7 U	4.9	3.5 U	2.5 J	2.3 J	3.5 U	3000	3.5 U	260
Acenaphthylene	NL	6.1	3.7 U	10	3.5 U	7.2	3.3 J	3.5 U	300	3.5 U	49
Benzo(a)anthracene	150	170 J	0.63 J	130 J	0.44 J	79 J	82 J	3.5 U	7800	3.5 U	5200
Benzo(a)pyrene	15	130 J	4 U	120 J	4 U	85 J	79 J	3.5 U	6400	3.5 U	5000
Benzo(b)fluoranthene	150	150 J	0.89 J	160 J	0.9 J	130 J	140 J	3.5 U	9500	0.45 J	6000
Benzo(g,h,i)perylene	NL	97 J	3.7 U	85 J	3.5 U	100 J	47 J	3.5 UJ	3700 J	3.5 UJ	2800 J
Benzo(k)fluoranthene	1500	140 J	0.92 J	120 J	0.98 J	96 J	85 J	3.5 U	9200	3.5 U	5100
Chrysene	15000	200	0.63 J	170 J	0.54 J	110 J	120 J	3.5 U	13000	3.5 U	7400
Dibenzo(a,h)anthracene	15	32 J	3.7 U	27 J	3.5 U	20 J	17	3.5 U	2200	3.5 U	1800
Fluorene	2300000	10	3.7 U	4.8	3.5 U	2.7 J	2 J	3.5 U	2900	3.5 U	200
Fluoranthene	2300000	300	0.79 J	190	0.58 J	130 J	160 J	3.5 U	9900	3.5 U	8100
Indeno (1,2,3-cd) pyrene	150	92 J	3.7 U	77 J	3.5 U	75 J	52 J	3.5 U	4300	3.5 U	3300
Naphthalene	3600	310	3.7 U	380	3.5 U	26	15	3.5 U	6900	3.5 U	1700
Pyrene	1700000	330	3.7 U	230	3.5 U	130 J	190	3.5 U	10000	3.5 U	6800
Semivolatile organic compounds (ug/kg)											
1,1-Biphenyl	3900000	70 J	190 U	47 J	180 U	180 U	190 U	180 U	1100 J	180 U	210 J
1,2,4,5-Tetrachlorobenzene	18000	22 J	190 U	180 U	180 U	180 U	190 U	180 U	1300 U	180 U	160 J
2,4,5-Trichlorophenol	6100000	180 U	190 U	180 U	180 U	180 U	190 U	180 U	1300 U	180 U	760 U
Acetophenone	7800000	180 U	190 U	180 U	180 U	180 U	190 U	180 U	1300 U	180 U	760 U
Benzaldehyde	7800000	180 U	190 U	180 U	180 U	180 U	190 U	180 U	1300 U	180 U	760 U
Carbazole	NL	180 U	190 U	20 J	180 U	180 U	190 U	180 U	420 J	180 U	540 J
Dibenzofuran	78000	180	190 U	150 J	180 U	180 U	190 U	180 U	2800	180 U	790
Pentachlorophenol	890	7.1 UJ	7.6 UJ	7.2 UJ	7.1 UJ	6.9 UJ	370 U	7.1 UJ	190 UJ	7.1 UJ	75 UJ
Phenanthrene	NL	500	1.2 J	380	1.5 J	86 J	93 J	3.5 U	12000	0.49 J	5100
Phenol	18000000	180 U	190 U	180 U	180 U	180 U	190 U	180 U	1300 U	180 U	760 U

BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Sample ID	Residential Soil RSL	BLC-SS-04	BLC-SB-04	BLC-SS-05	BLC-SB-05	BLC-SS-06	BLC-SS-31	BLC-SB-06	BLC-SS-07	BLC-SB-07	BLC-SS-08
Location		BLC004	BLC004	BLC005	BLC005	BLC006	BLC006	BLC006	BLC007	BLC007	BLC008
Collection Date		10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010
Matrix		Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil
Sample Type		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Volatile organic compounds (ug/kg)											
(m- and/or p-)Xylene	NL	**260 J**	4.2 U	**360 J**	4.7 U	4.2 UJ	5.8 U	5 U	7.8 U	230 UJ	**4800 J**
1,2,3-Trichlorobenzene	49000	290 UJ	4.2 U	280 UJ	4.7 U	4.2 UJ	5.8 UJ	5 UJ	**1.6 J**	230 UJ	320 UJ
1,2,4-Trichlorobenzene	22000	290 UJ	4.2 U	280 UJ	4.7 U	4.2 UJ	5.8 UJ	5 UJ	7.8 UJ	230 UJ	**1700 J**
1,2-Dichlorobenzene	1900000	290 UJ	4.2 U	280 UJ	4.7 U	4.2 UJ	5.8 UJ	5 UJ	7.8 UJ	230 UJ	**250 J**
1,3-Dichlorobenzene	NL	290 UJ	4.2 U	280 UJ	4.7 U	4.2 UJ	5.8 UJ	5 UJ	7.8 UJ	230 UJ	**150 J**
1,4-Dichlorobenzene	2400	290 UJ	4.2 U	280 UJ	4.7 U	4.2 UJ	5.8 UJ	5 UJ	7.8 UJ	230 UJ	**680 J**
Acetone	61000000	590 UR	8.3 U	560 UR	9.5 U	8.5 U	12 U	10 U	16 U	450 UR	640 UR
Benzene	1100	290 UJ	4.2 U	280 UJ	4.7 U	4.2 UJ	5.8 U	5 U	7.8 U	230 UJ	320 UJ
Carbon disulfide	820000	290 UJ	4.2 U	280 UJ	4.7 U	4.2 U	5.8 U	5 U	**2.7 J**	230 UJ	320 UJ
Chlorobenzene	290000	290 UJ	4.2 U	280 UJ	4.7 U	4.2 UJ	5.8 U	5 U	7.8 U	230 UJ	**390 J**
Chloromethane	120000	290 UJ	4.2 U	280 UJ	4.7 U	4.2 U	5.8 U	5 U	7.8 U	230 UJ	**48 J**
Cyclohexane	7000000	200 UJ	4.2 U	280 UJ	4.7 U	4.2 UJ	5.8 UJ	5 U	7.8 U	230 UJ	320 UJ
Ethyl Benzene	5400	**88 J**	4.2 U	**60 J**	4.7 U	4.2 UJ	5.8 U	5 U	7.8 U	230 UJ	**790 J**
Isopropylbenzene	2100000	**65 J**	4.2 U	**45 J**	4.7 U	4.2 UJ	5.8 U	5 U	7.8 U	230 UJ	**390 J**
Methyl Acetate	78000000	290 UR	4.2 U	**160 J**	4.7 U	4.2 U	5.8 U	5 U	7.8 U	230 UR	**1100 J**
Methylcyclohexane	NL	290 UJ	4.2 U	280 UJ	4.7 U	**2.3 J**	5.8 U	5 U	7.8 U	230 UJ	**10000 J**
o-Xylene	3800000	**250 J**	4.2 U	**320 J**	4.7 U	4.2 UJ	5.8 U	5 U	7.8 U	230 UJ	**3700 J**
Tetrachloroethene (Tetrachloroeth	550	290 UJ	4.2 U	280 UJ	4.7 U	4.2 UJ	5.8 U	5 U	7.8 U	230 UJ	320 UJ
Toluene	5000000	**110 J**	4.2 U	**150 J**	4.7 U	4.2 UJ	5.8 U	5 U	7.8 U	230 UJ	**3700 J**

Notes:
bold - Analyte was detected
bold and shaded - Analyte concentration exceeds the a
J - The identification of the analyte is acceptable; the re
mg/kg - Milligrams per kilogram
NL - No limit established
R - Rejected value
RSL - Regional Screening Level (Updated November 2
U - Analyte was analyzed for but not detected above th
ug/kg - Micrograms per kilogram

BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Sample ID	Residential Soil RSL	BLC-SB-08	BLC-SS-09	BLC-SB-09	BLC-SS-10	BLC-SB-10	BLC-SS-11	BLC-SB-11	BLC-SS-13	BLC-SB-13	BLC-SS-14
Location		BLC008	BLC009	BLC009	BLC010	BLC010	BLC011	BLC011	BLC013	BLC013	BLC014
Collection Date		10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/27/2010	10/27/2010	10/27/2010
Matrix		Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil
Sample Type		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Cyanide (mg/kg)											
Cyanide	1600	0.44 J	0.51 U	0.54 U	0.19 J	0.28 J	0.53 U	0.54 U	0.54 U	0.6 U	0.58 U
Total Metals (mg/kg)											
Mercury	5.6	0.1 U	0.0082 J	0.0083 J	0.025 J	0.11 U	0.12	0.11 U	0.06 J	0.0098 J	0.025 J
Arsenic	0.39	9.2	5.1	12	9	12	14	8.1	15	12	15
Barium	15000	21 J	16	39	100	32	88	24	68	28	72
Cadmium	70	0.52 U	0.39 U	0.5 U	0.46 U	0.71	3.6	0.51 U	0.46 U	0.42 U	0.43 U
Chromium	NL	7.4	6.2	5.6	13	6.8	14	5.1	12	6.2	15
Selenium	390	3.6 U	2.7 U	3.5 U	3.2 U	3.2 U	3.4 U	3.6 U	3.2 U	2.9 U	3 U
Silver	390	1 U	0.77 U	1 U	0.91 U	0.91 U	0.98 U	1 U	0.92 U	0.83 U	0.87 U
Pesticides (ug/kg)											
4,4'-DDD (p,p'-DDD)	2000	3.5 U	82	19	9.9	3.8 U	270	3.5 U	3.7 U	3.5 U	1500
4,4'-DDE (p,p'-DDE)	1400	1 J	580	39	36	3.8 U	1700	3.5 U	3.5 J	3.5 U	2400
4,4'-DDT (p,p'-DDT)	1700	6.8	590	100	31 J	3.8 U	2100	3.5 U	3.7 U	3.5 U	23000
Aldrin	29	1.8 U	8.7 U	1.8 U	1.8 U	2 U	18 U	1.8 U	1.9 U	1.8 U	27 J
alpha-BHC	77	28	8.7 U	13	1.8 U	2 U	9.1 J	1.8 U	1.9 U	0.89 J	87 U
alpha-Chlordane	NL	1.8 U	1.9 J	0.43 J	0.26 NJ	2 U	7.1 NJ	1.8 U	1.9 U	1.8 U	14 J
beta-BHC	270	97	12	18	1.8 U	2 U	44	1.8 U	1.9 U	25	170
delta-BHC	NL	24	8.7 U	1.2 J	1.8 U	2 U	2.9 J	1.8 U	1.9 U	0.26 J	87 U
Dieldrin	30	5.4	64	9.2	7.6 J	3.8 U	190	3.5 U	3.7 U	3.5 U	3500
Endosulfan I (alpha)	NL	1.8 U	8.7 U	1.8 U	1.8 U	2 U	18 U	1.8 U	1.9 U	1.8 U	87 U
Endosulfan II (beta)	NL	3.5 U	17 U	3.5 U	3.5 U	3.8 U	34 U	3.5 U	3.7 U	3.5 U	170 U
Endosulfan Sulfate	NL	3.5 U	17 U	3.5 U	3.5 U	3.8 U	34 U	3.5 U	3.7 U	3.5 U	170 U
Endrin	18000	3.5 U	17 U	0.38 NJ	3.5 U	3.8 U	34 U	3.5 U	3.7 U	3.5 U	38 J
Endrin aldehyde	NL	3.5 U	17 U	3.5 U	1.1 NJ	3.8 U	17 NJ	3.5 U	3.7 U	3.5 U	170 U
Endrin ketone	NL	2.1 J	1.8 J	3.5 U	3.5 U	3.8 U	15 NJ	3.5 U	3.7 U	3.5 U	22 J
gamma-BHC (Lindane)	520	44	8.7 U	5	1.8 U	2 U	18	1.8 U	1.9 U	1.8 U	87 U
gamma-Chlordane	NL	1.8 U	8.7 U	1.8 U	1.8 U	2 U	18 U	1.8 U	1.9 U	1.8 U	78 J
Heptachlor	110	1.8 U	8.7 U	1.8 U	1.8 U	2 U	18 U	1.8 U	1.9 U	1.8 U	87 U
Heptachlor epoxide	53	1.8 U	8.7 U	1.8 U	1.8 U	2 U	18 U	1.8 U	1.9 U	1.8 U	87 U
Methoxychlor	310000	18 U	87 U	18 U	18 U	20 U	180 U	18 U	19 U	18 U	870 U

BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Sample ID	Residential Soil RSL	BLC-SB-08	BLC-SS-09	BLC-SB-09	BLC-SS-10	BLC-SB-10	BLC-SS-11	BLC-SB-11	BLC-SS-13	BLC-SB-13	BLC-SS-14
Location		BLC008	BLC009	BLC009	BLC010	BLC010	BLC011	BLC011	BLC013	BLC013	BLC014
Collection Date		10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/27/2010	10/27/2010	10/27/2010
Matrix		Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil
Sample Type		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Polycyclic Aromatic Hydrocarbons (ug/kg)											
2-Methylnaphthalene	310000	0.47 J	100 J	0.74 J	63 J	3.8 U	43 J	3.6 U	1.9 J	3.5 U	160 J
Anthracene	17000000	3.5 U	24	1.5 J	18	3.8 U	51 J	3.6 U	0.53 J	3.5 U	26
Acenaphthene	3400000	3.5 U	9.9	3.5 U	9.5	3.8 U	18	3.6 U	3.7 U	3.5 U	7.4
Acenaphthylene	NL	3.5 U	1.7 J	3.5 U	3.1 J	3.8 U	13	3.6 U	3.7 U	3.5 U	4.4
Benzo(a)anthracene	150	3.5 U	130 J	6	150 J	3.8 U	350	3.6 U	5.3	3.5 U	230
Benzo(a)pyrene	15	3.5 U	140 J	10 U	160 J	3.8 U	370	4.3 U	9.8 U	3.5 U	220
Benzo(b)fluoranthene	150	0.61 J	140 J	8.8	250	3.8 U	540 J	0.45 J	7.2	3.5 U	320 J
Benzo(g,h,i)perylene	NL	3.5 UJ	120 J	4.8 J	150 J	3.8 U	230	0.45 J	5.3 J	3.5 U	130 J
Benzo(k)fluoranthene	1500	3.5 U	150 J	6.9	160 J	3.8 U	470	0.38 J	6.2	3.5 U	260
Chrysene	15000	0.56 J	180	7	210	3.8 U	550	3.6 U	6.1	3.5 U	300
Dibenzo(a,h)anthracene	15	3.5 U	20	3.5 U	25 J	3.8 U	91 J	3.6 U	1.5 J	3.5 U	31
Fluorene	2300000	3.5 U	8.5	0.36 J	7.7	3.8 U	25	3.6 U	3.7 U	3.5 U	7.8
Fluoranthene	2300000	3.5 U	300	13	350	3.8 U	940	3.6 U	10	3.5 U	530
Indeno (1,2,3-cd) pyrene	150	3.5 U	120 J	5.4	140 J	3.8 U	210	0.43 J	4.9	3.5 U	120 J
Naphthalene	3600	3.5 U	34	3.5 U	25	3.8 U	24	3.6 U	3.7 U	3.5 U	82 J
Pyrene	1700000	3.5 U	290	9.3	310	3.8 U	1100	3.6 U	10	3.5 U	580
Semivolatile organic compounds (ug/kg)											
1,1-Biphenyl	3900000	180 U	170 U	180 U	180 U	190 U	180 U	180 U	190 U	180 U	23 J
1,2,4,5-Tetrachlorobenzene	18000	180 U	170 U	180 U	180 U	190 U	180 U	180 U	190 U	180 U	180 U
2,4,5-Trichlorophenol	6100000	180 U	170 U	180 U	180 U	190 U	180 U	180 U	190 U	180 U	180 U
Acetophenone	7800000	180 U	170 U	180 U	180 U	190 U	180 U	180 U	190 U	180 U	180 U
Benzaldehyde	7800000	180 U	170 U	180 U	180 U	190 U	180 U	180 U	190 U	180 U	180 U
Carbazole	NL	180 U	28 J	180 U	24 J	190 U	54 J	180 U	190 U	180 U	31 J
Dibenzofuran	78000	180 U	21 J	180 U	22 J	190 U	24 J	180 U	190 U	180 U	56 J
Pentachlorophenol	890	7.1 UJ	6.8 UJ	7.1 UJ	7.2 UJ	380 U	340 U	360 U	370 U	350 U	340 U
Phenanthrene	NL	0.63 J	230	5.7	190	3.8 U	590	3.6 U	4.4	3.5 U	300
Phenol	18000000	180 U	170 U	180 U	180 U	190 U	180 U	180 U	190 U	180 U	180 U

BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Sample ID	Residential Soil RSL	BLC-SB-08	BLC-SS-09	BLC-SB-09	BLC-SS-10	BLC-SB-10	BLC-SS-11	BLC-SB-11	BLC-SS-13	BLC-SB-13	BLC-SS-14
Location		BLC008	BLC009	BLC009	BLC010	BLC010	BLC011	BLC011	BLC013	BLC013	BLC014
Collection Date		10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/25/2010	10/27/2010	10/27/2010	10/27/2010
Matrix		Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil
Sample Type		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Volatile organic compounds (ug/kg)											
(m- and/or p-)Xylene	NL	4.8 U	5.6 UJ	5.2 U	4.8 UJ	5.1 UJ	5.3 UJ	4.1 U	4 U	4.4 U	7.8 UJ
1,2,3-Trichlorobenzene	49000	4.8 U	5.6 UJ	5.2 U	4.8 UR	5.1 UJ	5.3 UJ	4.1 U	4 U	4.4 U	7.8 UR
1,2,4-Trichlorobenzene	22000	4.8 U	5.6 UJ	5.2 U	4.8 UR	5.1 UJ	5.3 UJ	4.1 U	4 U	4.4 U	7.8 UR
1,2-Dichlorobenzene	1900000	4.8 U	5.6 UJ	5.2 U	4.8 UR	5.1 UJ	5.3 UJ	4.1 U	4 U	4.4 U	7.8 UR
1,3-Dichlorobenzene	NL	4.8 U	5.6 UJ	5.2 U	4.8 UR	5.1 UJ	5.3 UJ	4.1 U	4 U	4.4 U	7.8 UR
1,4-Dichlorobenzene	2400	4.8 U	5.6 UJ	5.2 U	4.8 UR	5.1 UJ	5.3 UJ	4.1 U	4 U	4.4 U	7.8 UR
Acetone	61000000	9.6 U	11 U	10 U	9.6 UJ	10 UJ	11 U	8.3 U	7.9 U	8.9 U	16 UJ
Benzene	1100	4.8 U	5.6 UJ	5.2 U	4.8 UJ	5.1 UJ	5.3 UJ	4.1 U	4 U	4.4 U	7.8 UJ
Carbon disulfide	820000	4.8 U	5.6 U	5.2 U	4.8 UJ	5.1 UJ	5.3 U	4.1 U	4 U	4.4 U	**2.6 J**
Chlorobenzene	290000	4.8 U	5.6 UJ	5.2 U	4.8 UJ	5.1 UJ	5.3 UJ	4.1 U	4 U	4.4 U	7.8 UJ
Chloromethane	120000	4.8 U	5.6 U	5.2 U	4.8 UJ	5.1 UJ	5.3 U	4.1 U	4 U	4.4 U	7.8 UJ
Cyclohexane	7000000	4.8 U	5.6 UJ	5.2 U	4.8 UJ	5.1 UJ	5.3 UJ	4.1 UJ	4 U	4.4 U	7.8 UJ
Ethyl Benzene	5400	4.8 U	5.6 UJ	5.2 U	4.8 UJ	5.1 UJ	5.3 UJ	4.1 U	4 U	4.4 U	7.8 UJ
Isopropylbenzene	2100000	4.8 U	5.6 UJ	5.2 U	4.8 UJ	5.1 UJ	5.3 UJ	4.1 U	4 U	4.4 U	7.8 UJ
Methyl Acetate	78000000	4.8 U	5.6 U	5.2 U	4.8 UJ	5.1 UJ	5.3 U	4.1 U	4 U	4.4 U	7.8 UJ
Methylcyclohexane	NL	4.8 U	**4.3 J**	5.2 U	4.8 UJ	5.1 UJ	5.3 UJ	4.1 U	4 U	4.4 U	**5.9 J**
o-Xylene	3800000	4.8 U	5.6 UJ	5.2 U	4.8 UJ	5.1 UJ	5.3 UJ	4.1 U	4 U	4.4 U	7.8 UJ
Tetrachloroethene (Tetrachloroeth	550	4.8 U	5.6 UJ	5.2 U	4.8 UJ	5.1 UJ	5.3 UJ	4.1 U	4 U	4.4 U	7.8 UJ
Toluene	5000000	4.8 U	**0.85 J**	5.2 U	4.8 UJ	5.1 UJ	5.3 UJ	4.1 U	4 U	4.4 U	7.8 UJ

Notes:
bold - Analyte was detected
bold and shaded - Analyte concentration exceeds the a
J - The identification of the analyte is acceptable; the re
mg/kg - Milligrams per kilogram
NL - No limit established
R - Rejected value
RSL - Regional Screening Level (Updated November 2
U - Analyte was analyzed for but not detected above th
ug/kg - Micrograms per kilogram

BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Sample ID	Residential Soil RSL	BLC-SS-36	BLC-SB-14	BLC-SS-15	BLC-SB-15	BLC-SS-16	BLC-SB-16	BLC-SS-17	BLC-SB-17	BLC-SS-18	BLC-SS-35
Location		BLC014	BLC014	BLC015	BLC015	BLC016	BLC016	BLC017	BLC017	BLC018	BLC018
Collection Date		10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010
Matrix		Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Surface Soil
Sample Type		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
Cyanide (mg/kg)											
Cyanide	1600	0.58 U	0.53 U	0.57 U	0.51 U	0.54 U	0.52 U	0.51 U	0.53 U	0.56 U	0.56 U
Total Metals (mg/kg)											
Mercury	5.6	**0.012 J**	0.1 U	**0.03 J**	0.09 U	**0.04 J**	0.1 U	**0.0073 J**	0.098 U	**0.037 J**	**0.055 J**
Arsenic	0.39	**14**	**12**	**14**	**7.6**	**24**	**9.6**	**15**	**7.5**	**18**	**17**
Barium	15000	**77**	**24**	**490**	**10 J**	**140**	**23**	**23**	**17 J**	**60**	**69**
Cadmium	70	**0.95**	0.5 U	**0.94**	0.38 U	**1.8**	**0.55**	**0.87**	0.45 U	**1.1**	**1.1**
Chromium	NL	**14**	**6.3**	**21**	**3.4**	**15**	**5.5**	**13**	**3.7**	**14**	**13**
Selenium	390	3.6 U	3.5 U	3.9 U	2.7 U	3.6 U	3.7 U	3.2 U	3.2 U	3.5 U	3.8 U
Silver	390	1 U	0.99 U	1.1 U	0.76 U	1 U	1.1 U	0.91 U	0.91 U	1 U	1.1 U
Pesticides (ug/kg)											
4,4'-DDD (p,p'-DDD)	2000	**1300**	3.7 U	3.5 U	**5.8**	**61000**	**35**	**54 J**	3.4 U	**90**	**65**
4,4'-DDE (p,p'-DDE)	1400	**2900**	3.7 U	3.5 U	**48**	**6900**	**4.6**	**640**	3.4 U	**480**	**260**
4,4'-DDT (p,p'-DDT)	1700	**14000**	3.7 U	3.5 U	**20**	**280000**	**140**	**85**	3.6 U	**230**	**190**
Aldrin	29	170 U	1.9 U	1.8 U	1.9 U	1900 U	1.8 U	3.8 U	1.7 U	3.5 U	1.9 U
alpha-BHC	77	170 U	1.9 U	1.8 U	**1.1 NJ**	1900 U	**0.45 NJ**	3.8 U	1.7 U	**1.2 NJ**	**1.3 J**
alpha-Chlordane	NL	170 U	1.9 U	1.8 U	**0.88 J**	**460 J**	**0.5 J**	**0.51 NJ**	1.7 U	**7.4**	**4.2**
beta-BHC	270	**390**	1.9 U	1.8 U	1.9 U	1900 U	**22**	**4.6**	1.7 U	**3.9**	**2.6**
delta-BHC	NL	170 U	1.9 U	1.8 U	1.9 U	1900 U	**1.2 J**	3.8 U	1.7 U	3.5 U	1.9 U
Dieldrin	30	**1800**	3.7 U	3.5 U	**5.6**	**8500**	**13**	**14**	3.4 U	**30**	**15**
Endosulfan I (alpha)	NL	170 U	1.9 U	1.8 U	**0.22 NJ**	1900 U	1.8 U	3.8 U	1.7 U	3.5 U	1.9 U
Endosulfan II (beta)	NL	340 U	3.7 U	3.5 U	3.8 U	3700 U	3.6 U	7.3 U	3.4 U	6.9 U	3.7 U
Endosulfan Sulfate	NL	340 U	3.7 U	3.5 U	3.8 U	3700 U	3.6 U	7.3 U	3.4 U	6.9 U	3.7 U
Endrin	18000	340 U	3.7 U	3.5 U	3.8 U	3700 U	3.6 U	7.3 U	3.4 U	**0.71 NJ**	**0.64 NJ**
Endrin aldehyde	NL	340 U	3.7 U	3.5 U	3.8 U	3700 U	3.6 U	7.3 U	3.4 U	**1.9 NJ**	3.7 U
Endrin ketone	NL	340 U	3.7 U	3.5 U	3.8 U	3700 U	**0.49 J**	7.3 U	3.4 U	6.9 U	**1.3 NJ**
gamma-BHC (Lindane)	520	170 U	1.9 U	1.8 U	**0.34 J**	1900 U	**0.43 J**	3.8 U	1.7 U	**0.51 J**	**0.3 J**
gamma-Chlordane	NL	170 U	1.9 U	1.8 U	**0.8 NJ**	1900 U	**0.8 J**	3.8 U	1.7 U	7.7 U	**4.2**
Heptachlor	110	170 U	1.9 U	1.8 U	1.9 U	1900 U	1.8 U	3.8 U	1.7 U	3.5 U	1.9 U
Heptachlor epoxide	53	170 U	1.9 U	1.8 U	1.9 U	1900 U	1.8 U	3.8 U	1.7 U	3.5 U	1.9 U
Methoxychlor	310000	1700 U	19 U	18 U	19 U	19000 U	18 U	38 U	17 U	35 U	19 U

BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Sample ID	Residential Soil RSL	BLC-SS-36	BLC-SB-14	BLC-SS-15	BLC-SB-15	BLC-SS-16	BLC-SB-16	BLC-SS-17	BLC-SB-17	BLC-SS-18	BLC-SS-35
Location		BLC014	BLC014	BLC015	BLC015	BLC016	BLC016	BLC017	BLC017	BLC018	BLC018
Collection Date		10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010
Matrix		Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Surface Soil
Sample Type		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
Polycyclic Aromatic Hydrocarbons (ug/kg)											
2-Methylnaphthalene	310000	83	3.6 U	3.4 U	32	200	0.42 J	4.3	3.5 U	240	26
Anthracene	17000000	4.7 J	3.6 U	3.4 U	3.7 J	95 J	3.5 U	3.6 U	3.5 U	370	23
Acenaphthene	3400000	8.5 U	3.6 U	3.4 U	0.57 J	30 J	3.5 U	3.6 U	3.5 U	100	5.6
Acenaphthylene	NL	1.7 J	3.6 U	3.4 U	0.81 J	180 U	3.5 U	3.6 U	3.5 U	18	6.4
Benzo(a)anthracene	150	33	3.6 U	3.4 U	22	490	3.5 U	0.8 J	3.5 U	1000	170 J
Benzo(a)pyrene	15	38	3.6 U	3.4 U	25	450	3.5 U	4.2 U	3.5 U	770	190
Benzo(b)fluoranthene	150	66	3.6 U	3.4 U	25	590	3.5 U	2.1 J	3.5 U	1200	220
Benzo(g,h,i)perylene	NL	43	3.6 U	3.4 U	15	390	3.5 U	0.87 J	3.5 U	470	190
Benzo(k)fluoranthene	1500	51	3.6 U	3.4 U	24	500	3.5 U	1.5 J	3.5 U	800	200
Chrysene	15000	44	3.6 U	3.4 U	26	550	3.5 U	1.2 J	3.5 U	950	200
Dibenzo(a,h)anthracene	15	15	3.6 U	3.4 U	5	130 J	3.5 U	3.6 U	3.5 U	120 J	33
Fluorene	2300000	1.1 J	3.6 U	3.4 U	0.86 J	27 J	3.5 U	3.6 U	3.5 U	97	4.9
Fluoranthene	2300000	61	3.6 U	3.4 U	33	990	3.5 U	1 J	3.5 U	1400	310
Indeno (1,2,3-cd) pyrene	150	40	3.6 U	3.4 U	14	350	3.5 U	0.86 J	3.5 U	450	170 J
Naphthalene	3600	52	3.6 U	3.4 U	18	120 J	3.5 U	3.6 U	3.5 U	270	17
Pyrene	1700000	63	3.6 U	3.4 U	33	900	3.5 U	3.6 U	3.5 U	1900	300
Semivolatile organic compounds (ug/kg)											
1,1-Biphenyl	3900000	180 U	180 U	170 U	190 U	3800 U	180 U	190 U	180 U	39 J	190 U
1,2,4,5-Tetrachlorobenzene	18000	180 U	180 U	170 U	190 U	3800 U	180 U	190 U	180 U	180 U	190 U
2,4,5-Trichlorophenol	6100000	180 U	180 U	170 U	190 U	3800 U	180 U	190 U	180 U	180 U	190 U
Acetophenone	7800000	180 U	180 U	170 U	190 U	3800 U	180 U	190 U	180 U	61 J	190 U
Benzaldehyde	7800000	180 U	180 U	170 U	190 U	3800 U	180 U	190 U	180 U	180 U	190 U
Carbazole	NL	180 U	180 U	170 U	190 U	3800 U	180 U	190 U	180 U	210	19 J
Dibenzofuran	78000	19 J	180 U	170 U	190 U	3800 U	180 U	190 U	180 U	250	190 U
Pentachlorophenol	890	340 UJ	360 U	340 U	370 U	7300 U	350 U	360 U	350 U	350 U	360 UJ
Phenanthrene	NL	54	3.6 U	3.4 U	37	570	3.5 U	3.6 U	3.5 U	1500	180 J
Phenol	18000000	180 U	180 U	170 U	190 U	3800 U	180 U	190 U	180 U	180 U	190 U

BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Sample ID	Residential Soil RSL	BLC-SS-36	BLC-SB-14	BLC-SS-15	BLC-SB-15	BLC-SS-16	BLC-SB-16	BLC-SS-17	BLC-SB-17	BLC-SS-18	BLC-SS-35
Location		BLC014	BLC014	BLC015	BLC015	BLC016	BLC016	BLC017	BLC017	BLC018	BLC018
Collection Date		10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010
Matrix		Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Surface Soil
Sample Type		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
Volatile organic compounds (ug/kg)											
(m- and/or p-)Xylene	NL	**1.6 J**	4.6 U	8 UJ	4.8 U	6.1 UR	4.4 U	**2.2 J**	3.4 U	4.3 UJ	4.3 U
1,2,3-Trichlorobenzene	49000	6.5 UR	4.6 U	8 UJ	4.8 U	6.1 UR	4.4 U	6.1 UR	3.4 U	4.3 UJ	4.3 UJ
1,2,4-Trichlorobenzene	22000	6.5 UR	4.6 U	8 UJ	4.8 U	6.1 UR	4.4 U	6.1 UR	3.4 U	4.3 UJ	4.3 UJ
1,2-Dichlorobenzene	1900000	6.5 UR	4.6 U	8 UJ	4.8 U	6.1 UR	4.4 U	6.1 UR	3.4 U	4.3 UJ	4.3 UJ
1,3-Dichlorobenzene	NL	6.5 UR	4.6 U	8 UJ	4.8 U	6.1 UR	4.4 U	6.1 UR	3.4 U	4.3 UJ	4.3 UJ
1,4-Dichlorobenzene	2400	6.5 UR	4.6 U	8 UJ	4.8 U	6.1 UR	4.4 U	6.1 UR	3.4 U	4.3 UJ	4.3 UJ
Acetone	61000000	13 UJ	9.2 U	16 U	9.5 U	12 UJ	8.7 U	12 UJ	6.8 U	8.6 UJ	8.6 UJ
Benzene	1100	6.5 UJ	4.6 U	8 UJ	4.8 U	6.1 UR	4.4 U	6.1 UJ	3.4 U	4.3 UJ	4.3 U
Carbon disulfide	820000	**7.4 J**	4.6 U	8 U	4.8 U	**6.8 J**	4.4 U	**4.1 J**	3.4 U	4.3 UJ	4.3 U
Chlorobenzene	290000	6.5 UJ	4.6 U	8 UJ	4.8 U	6.1 UR	4.4 U	6.1 UJ	3.4 U	4.3 UJ	4.3 U
Chloromethane	120000	6.5 UJ	4.6 U	8 U	4.8 U	6.1 UJ	4.4 U	6.1 UJ	3.4 U	4.3 UJ	4.3 U
Cyclohexane	7000000	**14 J**	4.6 U	**2.8 J**	4.8 U	**8.2 J**	4.4 U	**14 J**	3.4 U	4.3 UJ	4.3 U
Ethyl Benzene	5400	6.5 UJ	4.6 U	8 UJ	4.8 U	6.1 UR	4.4 U	**0.93 J**	3.4 U	4.3 UJ	4.3 U
Isopropylbenzene	2100000	6.5 UJ	4.6 U	8 UJ	4.8 U	6.1 UR	4.4 U	6.1 UJ	3.4 U	4.3 UJ	4.3 U
Methyl Acetate	78000000	6.5 UJ	4.6 UJ	8 UJ	4.8 UJ	6.1 UJ	4.4 UJ	6.1 UJ	3.4 UJ	**1.6 J**	4.3 U
Methylcyclohexane	NL	**26 J**	4.6 U	**6.5 J**	4.8 U	**26 J**	4.4 U	**45 J**	3.4 U	4.3 UJ	4.3 U
o-Xylene	3800000	6.5 UJ	4.6 U	8 UJ	4.8 U	6.1 UR	4.4 U	**1.6 J**	3.4 U	4.3 UJ	4.3 U
Tetrachloroethene (Tetrachloroeth	550	6.5 UJ	4.6 U	8 UJ	4.8 U	6.1 UR	4.4 U	6.1 UJ	3.4 U	4.3 UJ	4.3 U
Toluene	5000000	**2.4 J**	4.6 U	**1.3 J**	4.8 U	**0.68 J**	4.4 U	**3.1 J**	3.4 U	4.3 UJ	4.3 U

Notes:
bold - Analyte was detected
bold and shaded - Analyte concentration exceeds the a
J - The identification of the analyte is acceptable; the re
mg/kg - Milligrams per kilogram
NL - No limit established
R - Rejected value
RSL - Regional Screening Level (Updated November 2
U - Analyte was analyzed for but not detected above th
ug/kg - Micrograms per kilogram

BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Sample ID	Residential Soil RSL	BLC-SB-18	BLC-SS-19	BLC-SS-32	BLC-SB-19	BLC-SS-20	BLC-SS-33	BLC-SB-20	BLC-SS-21	BLC-SB-21	BLC-SS-22
Location		BLC018	BLC019	BLC019	BLC019	BLC020	BLC020	BLC020	BLC021	BLC021	BLC022
Collection Date		10/27/2010	10/25/2010	10/25/2010	10/25/2010	10/26/2010	10/26/2010	10/26/2010	10/27/2010	10/27/2010	10/27/2010
Matrix		Subsurface Soil	Surface Soil	Surface Soil	Subsurface Soil	Surface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil
Sample Type		Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Cyanide (mg/kg)											
Cyanide	1600	0.63 U	0.56 U	0.56 U	0.52 U	0.57 U	2.1 R	0.51 U	0.54 U	0.52 U	**0.22 J**
Total Metals (mg/kg)											
Mercury	5.6	**0.009 J**	**0.032 J**	**0.024 J**	0.1 U	**0.033 J**	**0.026 J**	0.095 U	**0.012 J**	0.1 U	**0.1 J**
Arsenic	0.39	**16**	**56**	**46**	**8.2**	**17**	**40**	**8.3**	**47**	**8.5**	**18**
Barium	15000	**69**	**67**	**130**	20 U	**58**	**56**	**30**	**84**	**16 J**	**170**
Cadmium	70	**1**	**1.4**	**2**	0.49 U	**1.2**	**1.1**	0.52 U	**0.73**	**0.53**	**1.6**
Chromium	NL	**14**	**16**	**19**	**4.1**	**12**	**11**	**5.3**	**9.4**	**3.8**	**18**
Selenium	390	3.8 U	3.7 U	3.9 U	3.4 U	3.4 U	3.3 U	3.6 U	3.8 U	3.3 U	3.7 U
Silver	390	1.1 U	1.1 U	1.1 U	0.98 U	0.96 U	0.94 U	1 U	1.1 U	0.95 U	1.1 U
Pesticides (ug/kg)											
4,4'-DDD (p,p'-DDD)	2000	**6.7**	**120**	**140**	3.5 U	**5.5**	4.1 U	3.3 U	**96**	3.5 U	**6.4**
4,4'-DDE (p,p'-DDE)	1400	**0.95 J**	**1300**	**1200**	3.5 U	**39**	**11 N**	3.3 U	**1100**	3.5 U	**44**
4,4'-DDT (p,p'-DDT)	1700	**42**	**340**	**320**	3.5 U	**23**	**11**	3.3 U	**460**	3.5 U	**29**
Aldrin	29	2.1 U	9.8 U	9.9 U	1.8 U	2 U	2.1 U	1.7 U	9.4 U	1.8 U	2 U
alpha-BHC	77	2.1 U	**1.8 J**	**1.8 J**	1.8 U	2 U	2.1 U	1.7 U	9.4 U	1.8 U	2 U
alpha-Chlordane	NL	2.1 U	**1.9 NJ**	**1.9 NJ**	1.8 U	2 U	2.1 U	1.7 U	9.4 U	1.8 U	2 U
beta-BHC	270	2.1 U	9.8 U	9.9 U	1.8 U	2 U	4.1 U	1.7 U	9.4 U	1.8 U	2 U
delta-BHC	NL	2.1 U	9.8 U	9.9 U	1.8 U	2 U	2.1 U	1.7 U	9.4 U	1.8 U	2 U
Dieldrin	30	**1.5 J**	**30**	**42**	3.5 U	**5.9**	**2.8 J**	3.3 U	**17 J**	3.5 U	**1.8 J**
Endosulfan I (alpha)	NL	2.1 U	9.8 U	9.9 U	1.8 U	2 U	2.1 U	1.7 U	**3.7 J**	1.8 U	2 U
Endosulfan II (beta)	NL	4.1 U	19 U	19 U	3.5 U	3.9 U	4.1 U	3.3 U	18 U	3.5 U	3.9 U
Endosulfan Sulfate	NL	4.1 U	19 U	19 U	3.5 U	3.9 U	4.1 U	3.3 U	18 U	3.5 U	**0.46 NJ**
Endrin	18000	4.1 U	19 U	19 U	3.5 U	**0.64 J**	4.1 U	3.3 U	18 U	3.5 U	3.9 U
Endrin aldehyde	NL	4.1 U	19 U	19 U	3.5 U	3.9 U	4.1 U	3.3 U	18 U	3.5 U	3.9 U
Endrin ketone	NL	4.1 U	19 U	19 U	3.5 U	3.9 U	**1 NJ**	3.3 U	**3.3 NJ**	3.5 U	**1.3 J**
gamma-BHC (Lindane)	520	2.1 U	9.8 U	9.9 U	1.8 U	2 U	2.1 U	1.7 U	9.4 U	1.8 U	2 U
gamma-Chlordane	NL	**0.25 J**	9.8 U	9.9 U	1.8 U	**0.44 NJ**	**0.23 NJ**	1.7 U	9.4 U	1.8 U	**0.25 J**
Heptachlor	110	2.1 U	9.8 U	9.9 U	1.8 U	2 U	**0.58 NJ**	1.7 U	9.4 U	1.8 U	2 U
Heptachlor epoxide	53	2.1 U	9.8 U	9.9 U	1.8 U	2 U	2.1 U	1.7 U	9.4 U	1.8 U	**1.1 J**
Methoxychlor	310000	21 U	98 U	99 U	18 U	20 U	21 U	17 U	94 U	18 U	20 U

BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Sample ID	Residential Soil RSL	BLC-SB-18	BLC-SS-19	BLC-SS-32	BLC-SB-19	BLC-SS-20	BLC-SS-33	BLC-SB-20	BLC-SS-21	BLC-SB-21	BLC-SS-22
Location		BLC018	BLC019	BLC019	BLC019	BLC020	BLC020	BLC020	BLC021	BLC021	BLC022
Collection Date		10/27/2010	10/25/2010	10/25/2010	10/25/2010	10/26/2010	10/26/2010	10/26/2010	10/27/2010	10/27/2010	10/27/2010
Matrix		Subsurface Soil	Surface Soil	Surface Soil	Subsurface Soil	Surface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil
Sample Type		Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Polycyclic Aromatic Hydrocarbons (ug/kg)											
2-Methylnaphthalene	310000	4.1 U	1300	110 J	3.6 U	86	28	3.4 U	27	3.5 U	130 J
Anthracene	17000000	4.1 U	11000	230	3.6 U	430	91 J	3.4 U	8.4 J	3.5 U	36
Acenaphthene	3400000	4.1 U	3600 J	61 J	3.6 U	180	33	3.4 U	2.7 J	3.5 U	9.1
Acenaphthylene	NL	4.1 U	190 U	3.2 J	3.6 U	11 J	3.7 J	3.4 U	18 U	3.5 U	5
Benzo(a)anthracene	150	4.1 U	14000	530	3.6 U	1400	260	0.37 J	48	3.5 U	200 J
Benzo(a)pyrene	15	4.1 U	12000	430	4.3 U	1500	270	3.4 U	38	3.5 U	190 J
Benzo(b)fluoranthene	150	4.1 U	14000	570 J	0.43 J	1700 J	360	0.44 J	52	3.5 U	230
Benzo(g,h,i)perylene	NL	4.1 U	7800	230	0.42 J	790 J	230	3.4 U	19	3.5 U	110 J
Benzo(k)fluoranthene	1500	4.1 U	11000	450	3.6 U	1700	220	0.35 J	38	3.5 U	230
Chrysene	15000	4.1 U	15000	600	3.6 U	1800	320	0.42 J	61	3.5 U	260
Dibenzo(a,h)anthracene	15	4.1 U	2200 J	48 J	3.6 U	300 J	44 J	3.4 U	18 U	3.5 U	39
Fluorene	2300000	4.1 U	5400	83 J	3.6 U	170	34	3.4 U	3.2 J	3.5 U	13
Fluoranthene	2300000	0.51 J	43000	1400	3.6 U	3200	610	0.97 J	82	3.5 U	390
Indeno (1,2,3-cd) pyrene	150	4.1 U	7600	210	3.6 U	700	180 J	3.4 U	19	3.5 U	98 J
Naphthalene	3600	4.1 U	4500	79 J	3.6 U	36 J	11	3.4 U	18 U	3.5 U	85 J
Pyrene	1700000	4.1 U	33000	1400	3.6 U	3200	520	3.4 U	110	3.5 U	440
Semivolatile organic compounds (ug/kg)											
1,1-Biphenyl	3900000	210 U	610 J	200 U	180 U	330 U	210 U	180 U	180 U	180 U	200 U
1,2,4,5-Tetrachlorobenzene	18000	210 U	3900 U	200 U	180 U	330 U	210 U	180 U	180 U	180 U	200 U
2,4,5-Trichlorophenol	6100000	210 U	3900 U	200 U	180 U	330 U	210 U	180 U	180 U	180 U	200 U
Acetophenone	7800000	210 U	3900 U	200 U	180 U	330 U	210 U	180 U	180 U	180 U	200 U
Benzaldehyde	7800000	210 U	3900 U	200 U	180 U	330 U	210 U	180 U	180 U	180 U	200 U
Carbazole	NL	210 U	5200	120 J	180 U	250 J	50 J	180 U	180 U	180 U	23 J
Dibenzofuran	78000	210 U	5000	83 J	180 U	110 J	32 J	180 U	180 U	180 U	35 J
Pentachlorophenol	890	410 U	7500 U	380 U	360 U	650 U	410 UJ	340 U	360 U	350 U	380 U
Phenanthrene	NL	4.1 U	46000	1100	3.6 U	2200	450	3.4 U	67	3.5 U	270
Phenol	18000000	210 U	3900 U	200 U	180 U	330 U	210 U	180 U	180 U	180 U	200 U

BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Sample ID	Residential Soil RSL	BLC-SB-18	BLC-SS-19	BLC-SS-32	BLC-SB-19	BLC-SS-20	BLC-SS-33	BLC-SB-20	BLC-SS-21	BLC-SB-21	BLC-SS-22
Location		BLC018	BLC019	BLC019	BLC019	BLC020	BLC020	BLC020	BLC021	BLC021	BLC022
Collection Date		10/27/2010	10/25/2010	10/25/2010	10/25/2010	10/26/2010	10/26/2010	10/26/2010	10/27/2010	10/27/2010	10/27/2010
Matrix		Subsurface Soil	Surface Soil	Surface Soil	Subsurface Soil	Surface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil
Sample Type		Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
Volatile organic compounds (ug/kg)											
(m- and/or p-)Xylene	NL	4.7 UJ	5.8 UJ	10 UJ	4.2 U	3.8 U	12 UJ	5.7 U	6 UR	3.4 UJ	6.4 UR
1,2,3-Trichlorobenzene	49000	4.7 UJ	5.8 UJ	10 UJ	4.2 U	3.8 UJ	**2.6 J**	5.7 U	6 UR	3.4 UJ	**4.6 J**
1,2,4-Trichlorobenzene	22000	4.7 UJ	5.8 UJ	10 UJ	4.2 U	3.8 UJ	**2 J**	5.7 U	6 UR	3.4 UJ	**3.7 J**
1,2-Dichlorobenzene	1900000	4.7 UJ	5.8 UJ	10 UJ	4.2 U	3.8 UJ	12 UJ	5.7 U	6 UR	3.4 UJ	6.4 UR
1,3-Dichlorobenzene	NL	4.7 UJ	5.8 UJ	10 UJ	4.2 U	3.8 UJ	12 UJ	5.7 U	6 UR	3.4 UJ	6.4 UR
1,4-Dichlorobenzene	2400	4.7 UJ	5.8 UJ	10 UJ	4.2 U	3.8 UJ	12 UJ	5.7 U	6 UR	3.4 UJ	6.4 UR
Acetone	61000000	9.3 UJ	12 UJ	20 U	8.4 U	7.6 U	24 UJ	11 U	12 UJ	6.8 U	13 UJ
Benzene	1100	4.7 UJ	5.8 UJ	10 UJ	4.2 U	3.8 U	12 UJ	5.7 U	6 UR	3.4 UJ	6.4 UR
Carbon disulfide	820000	4.7 UJ	5.8 UJ	10 U	4.2 U	**4.2**	**19 J**	5.7 U	**2.6 J**	3.4 U	**2.6 J**
Chlorobenzene	290000	4.7 UJ	5.8 UJ	10 UJ	4.2 U	3.8 U	12 UJ	5.7 U	6 UR	3.4 UJ	6.4 UR
Chloromethane	120000	4.7 UJ	5.8 UJ	10 U	4.2 U	3.8 U	12 UJ	5.7 U	6 UJ	3.4 U	6.4 UJ
Cyclohexane	7000000	4.7 UJ	5.8 UJ	10 UJ	4.2 UJ	3.8 U	12 UJ	5.7 U	6 UR	3.4 UJ	6.4 UR
Ethyl Benzene	5400	4.7 UJ	5.8 UJ	10 UJ	4.2 U	3.8 U	12 UJ	5.7 U	6 UR	3.4 UJ	6.4 UR
Isopropylbenzene	2100000	4.7 UJ	5.8 UJ	10 UJ	4.2 U	3.8 U	12 UJ	5.7 U	6 UR	3.4 UJ	6.4 UR
Methyl Acetate	78000000	4.7 UJ	5.8 UJ	10 U	4.2 U	3.8 UJ	12 UJ	5.7 UJ	6 UJ	3.4 UJ	6.4 UJ
Methylcyclohexane	NL	4.7 UJ	5.8 UJ	**9 J**	4.2 U	3.8 U	12 UJ	5.7 U	6 UR	3.4 UJ	6.4 UR
o-Xylene	3800000	4.7 UJ	5.8 UJ	10 UJ	4.2 U	3.8 U	12 UJ	5.7 U	6 UR	3.4 UJ	6.4 UR
Tetrachloroethene (Tetrachloroeth	550	4.7 UJ	5.8 UJ	10 UJ	4.2 U	3.8 U	12 UJ	5.7 U	**1.2 J**	3.4 UJ	6.4 UR
Toluene	5000000	4.7 UJ	5.8 UJ	**1.5 J**	4.2 U	3.8 U	12 UJ	5.7 U	6 UR	3.4 UJ	6.4 UR

Notes:
bold - Analyte was detected
bold and shaded - Analyte concentration exceeds the a
J - The identification of the analyte is acceptable; the re
mg/kg - Milligrams per kilogram
NL - No limit established
R - Rejected value
RSL - Regional Screening Level (Updated November 2
U - Analyte was analyzed for but not detected above th
ug/kg - Micrograms per kilogram

BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Sample ID	Residential Soil RSL	BLC-SB-22	BLC-SS-23	BLC-SB-23	BLC-SS-24	BLC-SB-24	BLC-SS-25	BLC-SB-25	BLC-SS-26	BLC-SB-26	BLC-SS-27
Location		BLC022	BLC023	BLC023	BLC024	BLC024	BLC025	BLC025	BLC026	BLC026	BLC027
Collection Date		10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010
Matrix		Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil
Sample Type		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Cyanide (mg/kg)											
Cyanide	1600	0.63 U	0.58 U	0.62 U	0.15 J	0.082 J	0.13 J	0.56 U	0.56 U	0.61 U	0.55 U
Total Metals (mg/kg)											
Mercury	5.6	0.03 J	0.07 J	0.021 J	0.77	0.1 U	0.038 J	0.11 U	0.21	0.12 U	0.011 J
Arsenic	0.39	15	13	6.2	34	8	39	11	31	17	12
Barium	15000	76	110	280	58	20	150	32	300	150	32
Cadmium	70	0.98	0.97	0.69	5.5	0.51	1.7	0.64	0.57	1.2	0.49 U
Chromium	NL	12	21	12	74	4.4	19	5.8	14	16	6.9
Selenium	390	3.8 U	4 U	4.3 U	3.3 U	3.3 U	3.9 U	3.6 U	3.8 U	3.8 U	3.4 U
Silver	390	1.1 U	1.1 U	1.2 U	0.95 U	0.95 U	1.1 U	1 U	1.1 U	1.1 U	0.98 U
Pesticides (ug/kg)											
4,4'-DDD (p,p'-DDD)	2000	4.2 U	210	3.9 U	13	3.6 U	57	3.9 U	3.6 U	4.2 U	79
4,4'-DDE (p,p'-DDE)	1400	4.2 U	250	3.9 U	14	3.6 U	69	3.9 U	9.2 N	4.2 U	1400
4,4'-DDT (p,p'-DDT)	1700	4.2 U	110	3.9 U	71	3.6 U	270	3.4 J	6.2	4.2 U	98
Aldrin	29	2.2 U	1.9 U	2 U	2.2 U	1.9 U	3.8 U	2 U	1.9 U	2.2 U	18 U
alpha-BHC	77	2.2 U	0.76 J	2 U	2.2 U	1.9 U	0.38 J	0.63 J	1.9 U	2.2 U	18 U
alpha-Chlordane	NL	2.2 U	1.9 U	2 U	0.75 J	1.9 U	1.8 U	2 U	1.9 U	2.2 U	18 U
beta-BHC	270	2.2 U	1.9 U	2 U	6 U	1.9 U	2.9 U	2 U	3.4 U	2.2 U	18 U
delta-BHC	NL	2.2 U	1.9 U	2 U	1.1 NJ	1.9 U	1.8 U	2 U	0.63 NJ	2.2 U	18 U
Dieldrin	30	4.2 U	3 J	3.9 U	3.1 J	3.6 U	17	3.9 U	3.6 U	4.2 U	9.3 J
Endosulfan I (alpha)	NL	2.2 U	1 NJ	2 U	0.67 J	1.9 U	1.8 U	2 U	0.23 J	2.2 U	18 U
Endosulfan II (beta)	NL	4.2 U	3.6 U	3.9 U	4.2 U	3.6 U	3.5 U	3.9 U	3.6 U	4.2 U	35 U
Endosulfan Sulfate	NL	4.2 U	0.58 NJ	0.4 NJ	1.6 NJ	3.6 U	0.54 J	3.9 U	3.6 U	4.2 U	35 U
Endrin	18000	4.2 U	3.6 U	3.9 U	1.6 NJ	3.6 U	0.55 NJ	3.9 U	3.6 U	4.2 U	35 U
Endrin aldehyde	NL	4.2 U	1.7 NJ	3.9 U	4.2 U	3.6 U	3.5 U	3.9 U	3.6 U	4.2 U	35 U
Endrin ketone	NL	4.2 U	1.7 NJ	3.9 U	4.2 U	3.6 U	1.2 J	3.9 U	1.9 NJ	4.2 U	35 U
gamma-BHC (Lindane)	520	2.2 U	0.32 NJ	2 U	1.1 J	1.9 U	1.8 U	2 U	1.9 U	2.2 U	18 U
gamma-Chlordane	NL	2.2 U	1.9 U	2 U	0.86 J	1.9 U	1.8 U	2 U	1.9 U	2.2 U	18 U
Heptachlor	110	2.2 U	0.62 J	2 U	2.2 U	1.9 U	1.8 NJ	2 U	0.36 NJ	2.2 U	18 U
Heptachlor epoxide	53	2.2 U	5.3 U	2 U	2.2 U	1.9 U	6.4 U	2 U	1.9 U	2.2 U	18 U
Methoxychlor	310000	22 U	19 U	20 U	22 U	19 U	18 U	20 U	19 U	22 U	180 U

BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Sample ID	Residential Soil RSL	BLC-SB-22	BLC-SS-23	BLC-SB-23	BLC-SS-24	BLC-SB-24	BLC-SS-25	BLC-SB-25	BLC-SS-26	BLC-SB-26	BLC-SS-27
Location		BLC022	BLC023	BLC023	BLC024	BLC024	BLC025	BLC025	BLC026	BLC026	BLC027
Collection Date		10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010
Matrix		Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil
Sample Type		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Polycyclic Aromatic Hydrocarbons (ug/kg)											
2-Methylnaphthalene	310000	4.2 U	83 J	20	79 J	3.6 U	61 J	3.8 U	42	4 U	12
Anthracene	17000000	4.2 U	74 J	67 J	49 J	3.6 U	20	3.8 U	53	4 U	2.4 J
Acenaphthene	3400000	4.2 U	20	17	10	3.6 U	5.2	3.8 U	15	4 U	7 U
Acenaphthylene	NL	4.2 U	10	2.2 J	15	3.6 U	11	3.8 U	21 J	4 U	1.5 J
Benzo(a)anthracene	150	4.2 U	290	230	330	3.6 U	140 J	3.8 U	360	4 U	21
Benzo(a)pyrene	15	4.2 U	300	230	360	3.6 U	160 J	3.8 U	350	4 U	30
Benzo(b)fluoranthene	150	4.2 U	420	200 J	700	3.6 U	250 J	3.8 U	310	4 U	48
Benzo(g,h,i)perylene	NL	4.2 U	150 J	100 J	200 J	3.6 U	83 J	3.8 U	320	4 U	22
Benzo(k)fluoranthene	1500	4.2 U	400	250	420	3.6 U	200	3.8 U	360	4 U	39
Chrysene	15000	4.2 U	400	240	460	3.6 U	200	3.8 U	400	4 U	33
Dibenzo(a,h)anthracene	15	4.2 U	68 J	29 J	57 J	3.6 U	28	3.8 U	77	4 U	8.2
Fluorene	2300000	4.2 U	23	16	8.1	3.6 U	6.2	3.8 U	16	4 U	7 U
Fluoranthene	2300000	4.2 U	550	430	630	3.6 U	220	3.8 U	740	4 U	26
Indeno (1,2,3-cd) pyrene	150	4.2 U	150 J	100 J	190 J	3.6 U	87 J	3.8 U	310	4 U	21
Naphthalene	3600	4.2 U	50 J	12	35	3.6 U	24	3.8 U	24	4 U	7 U
Pyrene	1700000	4.2 U	600	470	670	3.6 U	270	3.8 U	690	4 U	32
Semivolatile organic compounds (ug/kg)											
1,1-Biphenyl	3900000	210 U	190 U	200 U	220 U	180 U	180 U	190 U	190 U	200 U	180 U
1,2,4,5-Tetrachlorobenzene	18000	210 U	190 U	200 U	220 U	180 U	180 U	190 U	190 U	200 U	180 U
2,4,5-Trichlorophenol	6100000	210 U	190 U	200 U	220 U	180 U	180 U	190 U	190 U	200 U	180 U
Acetophenone	7800000	210 U	190 U	200 U	220 U	180 U	180 U	34 J	190 U	200 U	180 U
Benzaldehyde	7800000	210 U	190 U	200 U	23 J	180 U	180 U	670	190 U	210	180 U
Carbazole	NL	210 U	37 J	200 U	31 J	180 U	180 U	190 U	27 J	200 U	180 U
Dibenzofuran	78000	210 U	41 J	200 U	38 J	180 U	27 J	190 U	25 J	200 U	180 U
Pentachlorophenol	890	420 U	360 U	400 U	430 U	360 U	350 U	380 U	370 U	400 U	350 U
Phenanthrene	NL	4.2 U	380	270	280	3.6 U	120 J	3.8 U	330	4 U	8.8
Phenol	18000000	210 U	190 U	200 U	220 U	180 U	180 U	22 J	190 U	200 U	180 U

BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Sample ID	Residential Soil RSL	BLC-SB-22	BLC-SS-23	BLC-SB-23	BLC-SS-24	BLC-SB-24	BLC-SS-25	BLC-SB-25	BLC-SS-26	BLC-SB-26	BLC-SS-27
Location		BLC022	BLC023	BLC023	BLC024	BLC024	BLC025	BLC025	BLC026	BLC026	BLC027
Collection Date		10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010
Matrix		Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil
Sample Type		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
Volatile organic compounds (ug/kg)											
(m- and/or p-)Xylene	NL	4.1 U	**480 J**	4.5 U	7.4 UJ	4.5 U	6.1 UR	4.2 U	5.4 UJ	4.3 U	5.1 UJ
1,2,3-Trichlorobenzene	49000	4.1 U	320 UJ	4.5 U	7.4 UR	4.5 U	6.1 UR	4.2 U	5.4 UJ	4.3 U	5.1 UR
1,2,4-Trichlorobenzene	22000	4.1 U	320 UJ	4.5 U	7.4 UR	4.5 U	6.1 UR	4.2 U	5.4 UJ	4.3 U	5.1 UR
1,2-Dichlorobenzene	1900000	4.1 U	320 UJ	4.5 U	7.4 UR	4.5 U	6.1 UR	4.2 U	5.4 UJ	4.3 U	5.1 UR
1,3-Dichlorobenzene	NL	4.1 U	320 UJ	4.5 U	7.4 UR	4.5 U	6.1 UR	4.2 U	5.4 UJ	4.3 U	5.1 UR
1,4-Dichlorobenzene	2400	4.1 U	320 UJ	4.5 U	7.4 UR	4.5 U	6.1 UR	4.2 U	5.4 UJ	4.3 U	5.1 UR
Acetone	61000000	8.2 U	630 UJ	**28**	15 UJ	9.1 U	12 UJ	8.3 U	11 U	8.5 UJ	10 UJ
Benzene	1100	4.1 U	320 UJ	4.5 U	7.4 UJ	4.5 U	6.1 UR	4.2 U	5.4 UJ	4.3 U	5.1 UJ
Carbon disulfide	820000	4.1 U	320 UJ	4.5 U	**21 J**	4.5 U	**1.3 J**	4.2 U	**1.1 J**	4.3 U	1.2 UJ
Chlorobenzene	290000	4.1 U	320 UJ	4.5 U	7.4 UJ	4.5 U	6.1 UR	4.2 U	5.4 UJ	4.3 U	5.1 UJ
Chloromethane	120000	4.1 U	320 UJ	4.5 U	7.4 UJ	4.5 U	6.1 UJ	4.2 U	5.4 U	4.3 U	5.1 UJ
Cyclohexane	7000000	4.1 U	320 UJ	4.5 U	7.4 UJ	4.5 U	6.1 UR	4.2 U	5.4 UJ	4.3 U	5.1 UJ
Ethyl Benzene	5400	4.1 U	**170 J**	4.5 U	7.4 UJ	4.5 U	6.1 UR	4.2 U	5.4 UJ	4.3 U	5.1 UJ
Isopropylbenzene	2100000	4.1 U	**110 J**	4.5 U	7.4 UJ	4.5 U	6.1 UR	4.2 U	5.4 UJ	4.3 U	5.1 UJ
Methyl Acetate	78000000	4.1 UJ	320 UJ	4.5 U	7.4 UJ	4.5 U	6.1 UJ	4.2 U	5.4 U	4.3 U	5.1 UJ
Methylcyclohexane	NL	4.1 U	320 UJ	4.5 U	7.4 UJ	4.5 U	6.1 UR	4.2 U	5.4 UJ	4.3 U	5.1 UJ
o-Xylene	3800000	4.1 U	**440 J**	4.5 U	7.4 UJ	4.5 U	6.1 UR	4.2 U	5.4 UJ	4.3 U	5.1 UJ
Tetrachloroethene (Tetrachloroeth	550	4.1 U	320 UJ	4.5 U	7.4 UJ	4.5 U	6.1 UR	4.2 U	5.4 UJ	4.3 U	5.1 UJ
Toluene	5000000	4.1 U	**410 J**	4.5 U	7.4 UJ	4.5 U	6.1 UR	4.2 U	5.4 UJ	4.3 U	0.6 UJ

Notes:

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mg/kg - Milligrams per kilogram

NL - No limit established

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RSL - Regional Screening Level (Updated November 2

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BLACKLEAF CHEMICALS
SUMMARY OF ANALYTICAL RESULTS

Sample ID	Residential Soil RSL	BLC-SB-27	BLC-SS-28	BLC-SB-28	BLC-SS-29	BLC-SB-29	BLC-SS-30	BLC-SS-34	BLC-SB-30
Location		BLC027	BLC028	BLC028	BLC029	BLC029	BLC030	BLC030	BLC030
Collection Date		10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010
Matrix		Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Surface Soil	Subsurface Soil
Sample Type		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample
Cyanide (mg/kg)									
Cyanide	1600	0.55 U	0.58 U	0.61 U	0.57 U	0.54 U	0.53 J	0.62 U	0.51 U
Total Metals (mg/kg)									
Mercury	5.6	0.0072 J	0.073 J	0.023 J	0.028 J	0.1 U	0.038 J	0.045 J	0.11 U
Arsenic	0.39	11	17	7.6	13	10	23	33	5.7
Barium	15000	20 U	64	77	60	26	150	110	17 U
Cadmium	70	0.49 U	0.47 U	0.46 U	0.43 U	0.37 U	1.8	1.7	0.43 U
Chromium	NL	4.6	20	15	13	5.5	12	12	3.3
Selenium	390	3.5 U	3.3 U	3.2 U	3 U	2.6 U	3.9 U	4.2 U	3 U
Silver	390	0.99 U	0.95 U	0.92 U	0.87 U	0.74 U	1.1 U	1.2 U	0.87 U
Pesticides (ug/kg)									
4,4'-DDD (p,p'-DDD)	2000	3.5 U	10	4.3 U	24	3.6 U	72	140	10
4,4'-DDE (p,p'-DDE)	1400	3.5 U	100	0.51 J	58	3.6 U	440	360	1.3 J
4,4'-DDT (p,p'-DDT)	1700	3.5 U	33	14	33	0.5 J	150	1000	20
Aldrin	29	1.8 U	1.7 U	2.2 U	1.8 U	1.9 U	4 U	0.4 NJ	1.8 U
alpha-BHC	77	1.8 U	1.7 U	2.2 U	1.8 U	1.9 U	1.1 NJ	1.6 J	1.8 U
alpha-Chlordane	NL	1.8 U	21	2.2 U	1.8 U	1.9 U	0.51 NJ	9.7	1.8 U
beta-BHC	270	1.8 U	1.7 U	2.2 U	1.8 U	1.9 U	4.1 N	28	1.8 U
delta-BHC	NL	1.8 U	1.7 U	2.2 U	1.8 U	1.9 U	0.75 NJ	3.5 U	0.21 J
Dieldrin	30	3.5 U	1.3 NJ	4.3 U	5.9	3.6 U	6.5 J	99	0.56 J
Endosulfan I (alpha)	NL	1.8 U	1.7 U	2.2 U	1.8 U	1.9 U	4 U	3.5 U	1.8 U
Endosulfan II (beta)	NL	3.5 U	0.44 J	4.3 U	3.4 U	3.6 U	7.8 U	0.8 J	3.5 U
Endosulfan Sulfate	NL	3.5 U	3.3 U	4.3 U	3.4 U	3.6 U	7.8 U	6.8 U	3.5 U
Endrin	18000	3.5 U	1.2 J	4.3 U	3.4 U	3.6 U	7.8 U	6.8 U	3.5 U
Endrin aldehyde	NL	3.5 U	3.3 U	4.3 U	3.4 U	3.6 U	2.1 NJ	6.8 U	3.5 U
Endrin ketone	NL	3.5 U	3.3 U	4.3 U	3.4 U	3.6 U	7.8 U	1.3 J	3.5 U
gamma-BHC (Lindane)	520	1.8 U	1.7 U	2.2 U	1.8 U	1.9 U	0.53 J	0.49 J	1.8 U
gamma-Chlordane	NL	1.8 U	18	2.2 U	1.8 U	1.9 U	4 U	10 U	1.8 U
Heptachlor	110	1.8 U	1.7 U	2.2 U	1.8 U	1.9 U	0.55 J	3.5 U	1.8 U
Heptachlor epoxide	53	1.8 U	1.7 U	2.2 U	1.8 U	1.9 U	4 U	3.5 U	1.8 U
Methoxychlor	310000	18 U	2.1 NJ	22 U	18 U	19 U	40 U	35 U	18 U

BLACKLEAF CHEMICALS
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Collection Date		10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010	10/27/2010
Matrix		Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Subsurface Soil	Surface Soil	Surface Soil	Subsurface Soil
Sample Type		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample
Polycyclic Aromatic Hydrocarbons (ug/kg)									
2-Methylnaphthalene	310000	3.5 U	1.3 J	0.64 J	19	3.6 U	48	94 J	3.6 U
Anthracene	17000000	3.5 U	3.3 U	0.63 J	2.9 J	3.6 U	19 J	42 J	3.6 U
Acenaphthene	3400000	3.5 U	3.3 U	4.2 U	6.9 U	3.6 U	6.4 J	3.1 J	3.6 U
Acenaphthylene	NL	3.5 U	3.3 U	4.2 U	1.7 J	3.6 U	4.1 J	6.5	3.6 U
Benzo(a)anthracene	150	3.5 U	2.3 J	2.4 J	25	3.6 U	85	140 J	3.6 U
Benzo(a)pyrene	15	3.5 U	5.5 U	5.5 U	31	3.6 U	67	150 J	3.6 U
Benzo(b)fluoranthene	150	3.5 U	5.8	2.5 J	39	3.6 U	93	230	3.6 U
Benzo(g,h,i)perylene	NL	3.5 U	3.4	1.9 J	26	3.6 U	51	150 J	3.6 U
Benzo(k)fluoranthene	1500	3.5 U	3.8	2.1 J	30	3.6 U	74	150 J	3.6 U
Chrysene	15000	3.5 U	3.5	2.4 J	33	3.6 U	100	190	3.6 U
Dibenzo(a,h)anthracene	15	3.5 U	0.85 J	0.57 J	9.7	3.6 U	19 J	25	3.6 U
Fluorene	2300000	3.5 U	3.3 U	4.2 U	0.91 J	3.6 U	6.8 J	4.8	3.6 U
Fluoranthene	2300000	3.5 U	4.1	5.9	28	3.6 U	170	240	3.6 U
Indeno (1,2,3-cd) pyrene	150	3.5 U	2.9 J	1.7 J	25	3.6 U	47	140 J	3.6 U
Naphthalene	3600	3.5 U	3.3 U	4.2 U	6.9 U	3.6 U	28	43 J	3.6 U
Pyrene	1700000	3.5 U	170 U	4.5	51	3.6 U	180	250	3.6 U
Semivolatile organic compounds (ug/kg)									
1,1-Biphenyl	3900000	180 U	170 U	220 U	180 U	190 U	200 U	180 U	180 U
1,2,4,5-Tetrachlorobenzene	18000	180 U	170 U	220 U	180 U	190 U	200 U	180 U	180 U
2,4,5-Trichlorophenol	6100000	180 U	170 U	220 U	180 U	190 U	200 U	180 U	180 U
Acetophenone	7800000	180 U	170 U	220 U	180 U	190 U	200 U	180 U	180 U
Benzaldehyde	7800000	180 U	170 U	170 J	180 U	190 U	200 U	180 U	180 U
Carbazole	NL	180 U	170 U	220 U	180 U	190 U	200 U	180 U	180 U
Dibenzofuran	78000	180 U	170 U	220 U	180 U	190 U	200 U	36 J	180 U
Pentachlorophenol	890	350 U	330 U	420 U	340 U	360 U	380 U	1 J	360 UJ
Phenanthrene	NL	3.5 U	3.3 U	3 J	21	3.6 U	120	140 J	3.6 U
Phenol	18000000	180 U	170 U	220 U	180 U	190 U	200 U	180 U	180 U

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Sample Type		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample
Volatile organic compounds (ug/kg)									
(m- and/or p-)Xylene	NL	4.7 U	4.3 U	4.3 U	**0.8 J**	4.4 U	5.5 UJ	6.1 UJ	4.8 U
1,2,3-Trichlorobenzene	49000	4.7 U	4.3 U	4.3 U	4.3 UR	4.4 U	**1.3 J**	6.1 UR	4.8 U
1,2,4-Trichlorobenzene	22000	4.7 U	4.3 U	4.3 U	4.3 UR	4.4 U	**1.1 J**	6.1 UR	4.8 U
1,2-Dichlorobenzene	1900000	4.7 U	4.3 U	4.3 U	4.3 UR	4.4 U	5.5 UJ	6.1 UR	4.8 U
1,3-Dichlorobenzene	NL	4.7 U	4.3 U	4.3 U	4.3 UR	4.4 U	5.5 UJ	6.1 UR	4.8 U
1,4-Dichlorobenzene	2400	4.7 U	4.3 U	4.3 U	4.3 UR	4.4 U	5.5 UJ	6.1 UR	4.8 U
Acetone	61000000	9.3 U	8.7 U	**13**	8.6 UJ	8.9 U	11 UJ	12 UJ	9.5 UJ
Benzene	1100	4.7 U	4.3 U	4.3 U	4.3 UJ	4.4 U	5.5 UJ	6.1 UJ	4.8 U
Carbon disulfide	820000	4.7 U	4.3 U	4.3 U	**2.1 J**	4.4 U	**0.61 J**	**1.4 J**	4.8 U
Chlorobenzene	290000	4.7 U	4.3 U	4.3 U	4.3 UJ	4.4 U	5.5 UJ	6.1 UJ	4.8 U
Chloromethane	120000	4.7 U	4.3 U	4.3 U	4.3 UJ	4.4 U	5.5 U	6.1 U	4.8 U
Cyclohexane	7000000	4.7 U	4.3 U	4.3 U	4.3 UJ	4.4 U	5.5 UJ	6.1 UJ	4.8 U
Ethyl Benzene	5400	4.7 U	4.3 U	4.3 U	4.3 UJ	4.4 U	5.5 UJ	6.1 UJ	4.8 U
Isopropylbenzene	2100000	4.7 U	4.3 U	4.3 U	4.3 UJ	4.4 U	5.5 UJ	6.1 UJ	4.8 U
Methyl Acetate	78000000	4.7 U	4.3 U	4.3 U	4.3 UJ	4.4 U	5.5 U	6.1 U	4.8 U
Methylcyclohexane	NL	4.7 U	4.3 U	4.3 U	**24 J**	4.4 U	5.5 UJ	6.1 UJ	4.8 U
o-Xylene	3800000	4.7 U	4.3 U	4.3 U	4.3 UJ	4.4 U	5.5 UJ	6.1 UJ	4.8 U
Tetrachloroethene (Tetrachloroeth	550	4.7 U	4.3 U	4.3 U	4.3 UJ	4.4 U	5.5 UJ	6.1 UJ	4.8 U
Toluene	5000000	4.7 U	4.3 U	4.3 U	**1.3 J**	4.4 U	5.5 UJ	6.1 UJ	4.8 U

Notes:

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bold and shaded - Analyte concentration exceeds the a

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