CBS

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February 17, 2015

To: DISTRIBUTION

Re: Surface Water, Flow and Water Level Monitoring
Second Quarter 2013
Neal's Landfill, Bloomington, Monroe County, Indiana

1.0 BACKGROUND

This report summarizes the results of surface water, flow and water level monitoring work completed by CBS Corporation during the second quarter of 2013 at the Neal's Landfill site.

Surface water monitoring was performed at a total of three locations (springs and streams) in accordance with the April 2002 Long Term Groundwater Monitoring Plan (LTGMP) that was modified in December 2009.

2.0 SURFACE WATER MONITORING

The monitoring work described in this report was performed on March 21, April 23, and May 14, 2013. The March-May time period constituted the second reporting quarter for Neal's Landfill for 2013.

Scope of Work

The scope of water sampling for this monitoring period comprised monthly sampling at South Spring and North Spring, as stipulated in the modified LTGWMP and summarized in Table 1. Surface water samples also have been collected from a small pool in Conard's Branch near Vernal Pike. The approximate locations of these stations are shown on Figure 1, Monitoring and Sampling Locations.

Sample Collection and Handling

Samples at the spring and stream locations were collected by carefully filling a new disposable beaker. The water was transferred from the beaker into pre-cleaned amber glass 1-liter bottles supplied by the analytical laboratory. Routine sampling parameters including temperature and conductivity were measured and recorded.

Samples were analyzed by Heritage Lab of Indianapolis, Indiana. All the samples except the Conard's Branch Pool samples were analyzed to a detection limit of 0.1 parts per billion (ppb) for all PCB parameters (except Aroclor 1221, detection limit 0.2 ppb) by EPA SW-846 method 8082. The Conard's

Branch Pool samples were analyzed to a detection limit of 0.01 ppb for all PCB parameters (except Aroclor 1221, detection limit 0.02 ppb). Samples were also analyzed for total suspended solids (TSS) by EPA method 160.2.

Quality Assurance

For quality assurance purposes, a duplicate sample and a field blank were collected during each sampling event. All environmental and blank samples were labeled and logged onto a chain of custody form. The samples were stored and transported on ice in insulated coolers. Custody of the water samples was maintained by CBS until shipment to the analytical laboratory.

Field blank samples for these sampling events were identified as NL5939, NL5944, and NL5950. No PCBs were detected in any of these samples.

Analytical Results for Surface Water Samples

Field parameter measurements, PCB analytical results, and QA/QC results for samples collected from South Spring and North Spring during this reporting period are reported in Tables 2 and 3. Historical groundwater monitoring data collected since the completion of the remedy in November 1999 for these two sampling stations are also reported in Tables 2 and 3. Results of water sampling at the Conard's Branch Pool station since December 2004 are reported in Table 4. Copies of the chain of custody forms are provided in Appendix A. Copies of the certificates of analysis are provided in Appendix B. A validation summary for these samples appears in Appendix C. Copies of the field sampling data sheets are on file at PSARA Technologies, Inc.'s Bloomington Branch Office.

3.0 Continuous Flow and Water Level Monitoring

Continuous monitoring of flow at Conard's Branch weir ended January 24, 2011, when that station's instrument was removed for use at other sites. Continuous monitoring of groundwater level in MW EPA-5A continued until the instrument there failed on April 29, 2011. The approximate locations of these monitoring stations are shown on Figure 1, Monitoring and Sampling Locations. Re-establishment or permanent abandonment of both of these monitoring locations will be determined when a new long term groundwater monitoring plan is established for the site.

Flow and Water Level Plots

Since no monitoring locations were instrumented during this reporting period, there are no plots.

Crest Gauges

The purpose of these gauges is to provide an indication of maximum water level in the piezometers that do not contain level logging transducers. Crest gauge measurements appear in Table 6. Piezometer-01 has neither a transducer nor a crest gauge, but the water level at this station is measured manually. Those observations appear in Table 7.

Piezometer-05 was originally installed as a two inch diameter PVC riser with the bottom five feet screened. In 2011, it was noted that the PVC riser was becoming curved. The crest gauge length was

shortened in order to pass through the curvature and reach the bottom. Crest gage observations in PZ-05 from June 2001 until January 2013 have been dry, i.e. no water indicated on the crest gauge and no standing water observed in the piezometer. After large rain events in January 2013, observations have consistently shown 2.5 to 3.7 feet of water resident in PZ-05.

The observations of curvature in the piezometer riser and the persistent presence of water suggest that there may have been a breach in the seal where the piezometer passes through the geomembrane of the landfill cap. A test for this condition was performed on March 14. This test did not indicate any breach of the landfill liner. Piezometer-05 water level will continue to be observed by direct measurement rather than by use of a crest gauge.

Potentiometric Data

Figure 1, Monitoring and Sampling Locations, includes potentiometric surface contours constructed on the basis of a groundwater levels survey performed on a single day during each reporting quarter. Water levels were measured by hand at eleven monitor wells at the site plus three additional monitoring points. The added water level monitoring points are two boreholes in the southeast area of the site, BH-A2 and BH-B2, and a standpipe installed in the buried SW Seep Sinkhole. The specific measurement locations are listed in the table insert on Figure 1. Second quarter water level measurements were performed on May 13, 2013.

If you have questions regarding the sampling and flow/water level monitoring activities or findings for this reporting quarter, please call Neill Vaughan at (812) 335-0424.

Sincerely,

Dorothy M. Alke
Vice President, Environmental Projects
BP:14-0031

Attachments

DISTRIBUTION
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TABLES

Table 1. Groundwater and Surface Water Monitoring Requirements
During the Second Quarter 2013
Neal's Landfill, Bloomington, Monroe County, Indiana

Monitoring Station	Parameter [a]	LTGWMP Frequency	Other Requirements/ Comment
South Spring	PCB, SS, C, T	Monthly	Qualitative or quantitative flow estimate, if possible
North Spring	PCB, SS, C, T	Monthly	Qualitative or quantitative flow estimate, if possible
Conard's Branch Pool at Vernal Pike	PCB, SS, C, T	Monthly	Qualitative or quantitative flow estimate, if possible
Spring Treatment Facility	PCB	Semi-monthly	Effluent
		Monthly	Influent
		Quarterly	Mid-carbon

[a] Parameters: PCB=polychlorinated biphenyl; SS=total suspended solids; C=conductivity; T=temperature.

Table 2. Post-Remediation PCB Results
South Spring
Neal's Landfill, Bloomington, Indiana

Sample ID	Sampling Date	PCB[a], ppb	Data Validated?	TSS, mg/L	Conductivity, uS/cm	Temperature, deg C	Flow[b], gal/min	NW Springs Total Flow[c], gpm
NL5951	**5/14/13**	**0.56**	**Y**	**4**	**440**	**12.1**	**80**	**452**
NL5952[d]	**5/14/13**	**0.61**	**Y**	**4**	**440**	**12.1**	**80**	**452**
NL5945	**4/23/13**	**0.54**	**Y**	**4**	**406**	**12.1**	**15**	**471**
NL5946[d]	**4/23/13**	**0.51**	**Y**	**5**	**406**	**12.1**	**15**	**471**
NL5940	**3/21/13**	**0.53**	**Y**	**6**	**421**	**11.1**	**2**	**504**
NL5941[d]	**3/21/13**	**0.53**	**Y**	**7**	**421**	**11.1**	**2**	**504**
NL5934	2/25/13	0.66	Y	7	543	11.9	60	305
NL5935[d]	2/25/13	0.65	Y	8	543	11.9	60	305
NL5928	1/18/13	1.0	Y	8	450	11.9	70	386
NL5929[d]	1/18/13	1.1	Y	9	450	11.9	70	386
NL5922	12/13/12	2.1	Y	2	619	12.2	15	45
NL5923[d]	12/13/12	1.9	Y	2	619	12.2	15	45
NL5917	11/15/12	1.8	Y	4	596	12.4	8	56
NL5918[d]	11/15/12	1.6	Y	4	596	12.4	8	56
NL5912	10/9/12	2.0	Y	5	559	12.8	50	88
NL5913[d]	10/9/12	2.0	Y	5	559	12.8	50	88
NL5907	9/12/12	1.7	Y	8	759	13.4	8	29
NL5908[d]	9/12/12	1.9	Y	12	759	13.4	8	29
NL5902	8/16/12	1.1	Y	7	603	13.9	4	42
NL5903[d]	8/16/12	1.2	Y	5	603	13.9	4	42
NL5897	7/17/12	0.80	Y	2	527	13.4	8	35
NL5898[d]	7/17/12	0.88	Y	2	527	13.4	8	35
NL5892	6/21/12	1.1	Y	4	596	13.1	15	32
NL5893[d]	6/21/12	1.0	Y	5	596	13.1	15	32
NL5887	5/15/12	0.73	Y	4	516	12.7	70	253
NL5888[d]	5/15/12	0.69	Y	4	516	12.7	70	253
NL5882	4/19/12	0.46	Y	5	451	12.9	50	326
NL5883[d]	4/19/12	0.44	Y	5	451	12.9	50	326
NL5877	3/13/12	0.71	Y	4	460	12.4	60	325
NL5878[d]	3/13/12	0.63	Y	4	460	12.4	60	325
NL5872	2/14/12	0.72	Y	4	494	11.9	50	250
NL5873[d]	2/14/12	0.78	Y	4	494	11.9	50	250
NL5867	1/25/12	1.2 J	Y	8	416	11.5	60	496
NL5868[d]	1/25/12	0.47 J	Y	7	416	11.5	60	496
NL5862	12/9/11	0.80	Y	10	456	12.1	75	425
NL5863[d]	12/9/11	0.83	Y	10	456	12.1	75	425
NL5857	11/17/11	1.8	Y	8	539	12.4	30	87
NL5858[d]	11/17/11	1.7	Y	8	539	12.4	30	87
NL5852	10/17/11	1.1	Y	10	567	13.3	8	22
NL5853[d]	10/17/11	1.1	Y	10	567	13.3	8	22

continued

Table 2. Post-Remediation PCB Results
South Spring
Neal's Landfill, Bloomington, Indiana

Sample ID	Sampling Date	PCB[a], ppb	Data Validated?	TSS, mg/L	Conductivity, uS/cm	Temperature, deg C	Flow[b], gal/min	NW Springs Total Flow[c], gpm
NL5847	9/22/11	0.87	Y	2	578	13.2	8	32
NL5848[d]	9/22/11	0.80	Y	7	578	13.2	8	32
NL5842	8/29/11	0.96	Y	3	589	13.2	8	37
NL5843[d]	8/29/11	0.97	Y	4	589	13.2	8	37
NL5837	7/20/11	0.72	Y	4	528	13.1	25	57
NL5838[d]	7/20/11	0.77	Y	4	528	13.1	25	57
NL5832	6/30/11	0.75	Y	5	488	12.8	80	143
NL5833[d]	6/30/11	0.76	Y	< 1	488	12.8	80	143
NL5827	5/20/11	0.44	Y	8	416	12.4	90	319
NL5828[d]	5/20/11	0.45	Y	8	416	12.4	90	319
NL5822	5/6/11	0.54	Y	14	377	12.1	120	936
NL5823[d]	5/6/11	0.53	Y	15	377	12.1	120	936
NL5817	3/24/11	0.67	Y	6	440	11.9	40	339
NL5818[d]	3/24/11	0.60	Y	5	440	11.9	40	339
NL5812	2/18/11	0.93	Y	3	528	12.3	80	146
NL5813[d]	2/18/11	0.97	Y	3	528	12.3	80	146
NL5807	1/25/11	1.4	Y	4	591	12.0	8	70
NL5808[d]	1/25/11	1.1	Y	4	591	12.0	8	70
NL5802	12/17/10	1.6	Y	4	616	11.8	6	151
NL5803[d]	12/17/10	1.5	Y	3	616	11.8	6	151
NL5797	11/19/10	0.92	Y	1	576	12.3	6	28
NL5798[d]	11/19/10	0.88	Y	1	576	12.3	6	28
NL5792	10/19/10	0.98 J	Y	3	595	13.4	0.5	23
NL5793[d]	10/19/10	0.43 J	Y	3	595	13.4	0.5	23
NL5787	9/14/10	0.94	Y	9	597	13.8	8	18
NL5788[d]	9/14/10	0.95	Y	9	597	13.8	8	18
NL5782	8/19/10	0.93	Y	3	601	13.7	2	41
NL5783[d]	8/19/10	0.99	Y	2	601	13.7	2	41
NL5777	7/27/10	0.73	Y	6	601	13.1	10	61
NL5778[d]	7/27/10	0.62	Y	5	601	13.1	10	61
NL5772	6/23/10	0.5	Y	13	456	13.3	160	241
NL5773[d]	6/23/10	0.52	Y	12	456	13.3	160	241
NL5767	5/25/10	0.56	Y	6	467	12.7	100	369
NL5768[d]	5/25/10	0.55	Y	6	467	12.7	100	369
NL5762	4/21/10	0.75	Y	7	520	12.2	100	163
NL5763[d]	4/21/10	0.71	Y	6	520	12.2	100	163
NL5757	3/31/10	0.61	Y	7	426	12.0	200	624
NL5758[d]	3/31/10	0.67	Y	8	426	12.0	200	624
NL5752	2/11/10	0.68 K	Y	6	602	12.0	70	261
NL5753[d]	2/11/10	0.68 K	Y	7	602	12.0	70	261

continued

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Sample ID	Sampling Date	PCB[a], ppb	Data Validated?	TSS, mg/L	Conductivity, uS/cm	Temperature, deg C	Flow[b], gal/min	NW Springs Total Flow[c], gpm
NL5747	1/19/10	0.71	Y	9	583	12.0	50	133
NL5748[d]	1/19/10	0.7	Y	9	583	12.0	50	133
NL5742	12/17/09	0.63	Y	11	461	11.9	100	377
NL5743[d]	12/17/09	0.68	Y	10	461	11.9	100	377
NL5737	11/10/09	0.89 K	Y	9	522	12.6	100	122
NL5738[d]	11/10/09	0.66 K	Y	9	522	12.6	100	122
NL5732	10/22/09	0.81	Y	3	531	12.7	60	100
NL5733[d]	10/22/09	0.81	Y	9	531	12.7	60	100
NL5727	9/30/09	1.1	Y	5	671	13.1	10	30
NL5728[d]	9/30/09	1.1	Y	5	671	13.1	10	30
NL5722	8/10/09	0.69	Y	7	527	13.0	50	115
NL5723[d]	8/10/09	0.69	Y	8	527	13.0	50	115
NL5717	7/9/09	0.63	Y	7	498	12.8	50	147
NL5718[d]	7/9/09	0.64	Y	6	498	12.8	50	147
NL5710	6/21/09	0.81	Y	8	529	12.6	50	174
NL5711[d]	6/21/09	0.9	Y	10	529	12.6	50	174
NL5705	5/19/09	0.75	Y	11	408	12.5	60	614
NL5706[d]	5/19/09	0.75	Y	11	408	12.5	60	614
NL5700	4/27/09	0.78	Y	3	468	12.1	60	224
NL5701[d]	4/27/09	0.83	Y	11	468	12.1	60	224
NL5695	4/9/09	0.69	Y	6	437	11.8	60	602
NL5696[d]	4/9/09	0.74	Y	7	437	11.8	60	602
NL5690	2/17/09	1.3	Y	11	437	11.5	70	343
NL5691[d]	2/17/09	1.4	Y	14	437	11.5	70	343
NL5685	1/23/09	1.2	Y	6	567	11.7	30	71
NL5686[d]	1/23/09	1.4	Y	28	567	11.7	30	71
NL5680	12/15/08	1.5	Y	11	585	11.8	90	102
NL5681[d]	12/15/08	1.5	Y	9	585	11.8	90	102
NL5673	11/19/08	1.4	Y	6	645	12.2	10	31
NL5674[d]	11/19/08	1.5	Y	7	645	12.2	10	31
NL5668	10/15/08	1.3	Y	12	657	13.7	4	38
NL5669[d]	10/15/08	1.3	Y	10	657	13.7	4	38
NL5660	9/11/08	1.2	Y	2	641	13.4	12	29
NL5661[d]	9/11/08	1.2	Y	4	641	13.4	12	29
NL5655	8/12/08	0.9	Y	3	602	13.0	40	48
NL5656[d]	8/12/08	0.94	Y	2	602	13.0	40	48
NL5648	7/17/08	0.67	Y	9	509	12.9	90	130
NL5649[d]	7/17/08	0.67	Y	8	509	12.9	90	130
NL5643	6/18/08	0.79	Y	15	452	12.9	40	357
NL5644[d]	6/18/08	0.82	Y	14	452	12.9	40	357

continued

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South Spring
Neal's Landfill, Bloomington, Indiana

Sample ID	Sampling Date	PCB[a], ppb	Data Validated?	TSS, mg/L	Conductivity, uS/cm	Temperature, deg C	Flow[b], gal/min	NW Springs Total Flow[c], gpm
NL5638	5/28/08	0.84	Y	10	482	12.1	80	193
NL5639[d]	5/28/08	0.74	Y	8	482	12.1	80	193
NL5633	4/9/08	0.63	Y	6	466	11.8	80	462
NL5634[d]	4/9/08	0.68	Y	5	466	11.8	80	462
NL5628	3/12/08	0.91	Y	6	541	11.6	100	415
NL5629[d]	3/12/08	0.82	Y	6	541	11.6	100	415
NL5623	2/28/08	0.99	Y	4	619	11.7	80	493
NL5624[d]	2/28/08	1.1 J	Y	6	619	11.7	80	493
NL5618	1/15/08	1.3	Y	5	559	12.0	150	178
NL5619[d]	1/15/08	1.4	Y	5	559	12.0	150	178
NL5611	12/19/07	1.8	Y	6	740	12.1	100	166
NL5612[d]	12/19/07	1.6	Y	7	740	12.1	100	166
--	11/20/07	--	--	--	--	--	DRY	18
NL5602	10/12/07	1.6	Y	5	663	14.0	1.5	19
NL5603[d]	10/12/07	1.7	Y	16	663	14.0	1.5	19
NL5597	9/20/07	1.7	Y	3	676	14.0	6	20
NL5598[d]	9/20/07	1.6	Y	2	676	14.0	6	20
NL5592	8/22/07	1.8	Y	3	645	13.9	15	22
NL5593[d]	8/22/07	1.8	Y	2	645	13.9	15	22
NL5586	7/10/07	1.0	Y	9	541	13.2	25	57
NL5587[d]	7/10/07	0.81	Y	9	541	13.2	25	57
NL5581	6/13/07	0.99	Y	3	562	12.6	25	61
NL5582[d]	6/13/07	1.1	Y	24	562	12.6	25	61
NL5574	5/14/07	0.84	Y	7	527	12.4	100	120
NL5575[d]	5/14/07	0.71	Y	5	527	12.4	100	120
NL5569	4/9/07	0.52	Y	12	470	11.7	150	421
NL5570[d]	4/9/07	0.52	Y	9	470	11.7	150	421
NL5564	3/13/07	0.79	Y	9	480	11.7	70	258
NL5565[d]	3/13/07	0.76	Y	10	480	11.7	70	258
NL5559	2/23/07	0.44	Y	16	428	10.4	200	592
NL5560[d]	2/23/07	0.46	Y	8	428	10.4	200	592
NL5553	1/11/07	0.71	Y	6	467	11.9	100	554
NL5554[d]	1/11/07	0.64	Y	10	467	11.9	100	554
NL5529	12/15/06	0.63	Y	15	459	11.8	80	673
NL5530[d]	12/15/06	0.34	Y	16	459	11.8	80	673
NL5524	11/27/06	0.82	Y	11	544	12.5	120	168
NL5525[d]	11/27/06	0.92	Y	9	544	12.5	120	168
NL5435	10/10/06	1.2	Y	2	577	13.0	40	59
NL5436[d]	10/10/06	1.1	Y	5	577	13.0	40	59
NL5430	9/27/06	1.5	Y	11	570	13.0	100	103

continued

Table 2. Post-Remediation PCB Results
South Spring
Neal's Landfill, Bloomington, Indiana

Sample ID	Sampling Date	PCB[a], ppb	Data Validated?	TSS, mg/L	Conductivity, uS/cm	Temperature, deg C	Flow[b], gal/min	NW Springs Total Flow[c], gpm
NL5431[d]	9/27/06	1.5	Y	6	570	13.0	100	103
NL5425	9/8/06	1.4	Y	5	573	13.4	25	45
NL5426[d]	9/8/06	1.3	Y	5	573	13.4	25	45
NL5420	8/22/06	0.76	Y	12	541	13.3	30	47
NL5421[d]	8/22/06	0.89	Y	6	541	13.3	30	47
NL5408	7/18/06	0.73	Y	18	575	13.0	30	64
NL5409[d]	7/18/06	0.67	Y	14	575	13.0	30	64
NL5397	6/14/06	0.84	Y	7	581	12.4	80	103
NL5398[d]	6/14/06	0.92	Y	6	581	12.4	80	103
NL5392	5/22/06	0.56	Y	6	504	12.3	160	232
NL5393[d]	5/22/06	0.53	Y	5	504	12.3	160	232
NL5387	4/5/06	0.51	Y	7	454	12.0	80	594
NL5388[d]	4/5/06	0.53	Y	6	454	12.0	80	594
NL5382	3/6/06	0.86 K	Y	4	556	11.9	120	121
NL5383[d]	3/6/06	0.97 K	Y	3	556	11.9	120	121
NL5377	2/8/06	0.62	Y	6	513	11.8	120	412
NL5378[d]	2/8/06	0.56	Y	8	513	11.8	120	412
NL5372	1/16/06	0.68	Y	5	488	12.0	160	591
NL5373[d]	1/16/06	0.76	Y	9	488	12.0	160	591
NL5365	12/6/05	1.2	Y	8	549	12.1	60	102
NL5366[d]	12/6/05	1.4	Y	9	549	12.1	60	102
NL5359	11/18/05	1.5	Y	12	491	12.5	50	295
NL5360[d]	11/18/05	1.3	Y	11	491	12.5	50	295
NL5254	10/30/05	1.2	Y	5	596	12.7	20	35
NL5255[d]	10/30/05	1.2	Y	5	596	12.7	20	35
NL5235	9/30/05	1.2	Y	< 1	564	13.2	100	156
NL5236[d]	9/30/05	1.1	Y	4	564	13.2	100	156
NL5221	8/3/05	0.42 J	Y	5	560	13.4	50	51
NL5222[d]	8/3/05	1.0 J	Y	6	560	13.4	50	51
NL5216	7/21/05	1.4	Y	5	560	13.2	50	67
NL5217[d]	7/21/05	1.5	Y	8	560	13.2	50	67
NL5209	6/7/05	0.84 J	Y	22	537	12.5	80	107
NL5210[d]	6/7/05	1.0 J	Y	23	537	12.5	80	107
NL5198	5/3/05	0.54	Y	4	492	12.2	80	258
NL5193	4/11/05	0.9	Y	3	489	12.3	120	311
NL5194[d]	4/11/05	0.85	Y	9	489	12.3	120	311
NL5181	3/8/05	1.2	Y	4	522	11.7	120	235
NL5182[d]	3/8/05	1.1	Y	4	522	11.7	120	235
NL5176	2/11/05	0.82	Y	9	523	11.8	120	318
NL5177[d]	2/11/05	0.96	Y	9	523	11.8	120	318

continued

Table 2. Post-Remediation PCB Results
South Spring
Neal's Landfill, Bloomington, Indiana

Sample ID	Sampling Date	PCB[a], ppb	Data Validated?	TSS, mg/L	Conductivity, uS/cm	Temperature, deg C	Flow[b], gal/min	NW Springs Total Flow[c], gpm
NL5156	1/19/05	0.77	Y	12	488	11.7	160	452
NL5157[d]	1/19/05	0.71	Y	12	488	11.7	160	452
NL4814	12/16/04	1.6	Y	5	543	12.0	90	228
NL4815[d]	12/16/04	1.5	Y	4	543	12.0	90	228
NL4810	11/17/04	1.5	Y	12	575	12.5	50	100
NL4811[d]	11/17/04	1.3	Y	3	575	12.5	50	100
NL4582	10/6/04	1.8	Y	17	628	12.8	10	29
NL4583[d]	10/6/04	1.9	Y	17	628	12.8	10	29
NL4574	9/9/04	1.1	Y	< 1	645	13.0	25	45
NL4575[d]	9/9/04	1.1	Y	5	645	13.0	25	45
NL4568	8/6/04	0.93	Y	5	580	13.0	30	67
NL4569[d]	8/6/04	0.98	Y	4	580	13.0	30	67
NL4566	7/27/04	0.78	Y	6	603	13.0	30	62
NL4567[d]	7/27/04	0.84	Y	6	603	13.0	30	62
NL4524	6/4/04	0.93	Y	6	465	12.4	100	243
NL4525[d]	6/4/04	0.91	Y	7	465	12.4	100	243
NL4520	5/5/04	0.78	Y	2	521	12.0	120	170
NL4521[d]	5/5/04	0.96	Y	4	521	12.0	120	170
NL4497	4/19/04	1.1	Y	7	541	12.2	50	155
NL4498[d]	4/19/04	1.2	Y	7	541	12.2	50	155
NL4353	3/9/04	0.75	Y	2	501	11.7	200	385
NL4354[d]	3/9/04	0.86	Y	4	501	11.7	200	385
NL4344	2/13/04	0.81	Y	5	542	11.9	200	441
NL4345[d]	2/13/04	0.96	Y	6	542	11.9	200	441
NL4332	1/14/04	1.2	Y	10	525	11.9	80	290
NL4333[d]	1/14/04	1.4	Y	11	525	11.9	80	290
NL4220	12/8/03	1	Y	8	530	12.2	80	255
NL4221[d]	12/8/03	1.1	Y	12	530	12.2	80	255
NL4216	11/5/03	1.1	Y	4	624	12.6	50	62
NL4217[d]	11/5/03	1.3	Y	3	624	12.6	50	62
NL4212	10/8/03	1.3	Y	4	613	12.8	20	37
NL4213[d]	10/8/03	1.3	Y	2	613	12.8	20	37
NL4208	9/9/03	1.2	Y	7	576	13.0	40	89
NL4209[d]	9/9/03	1.3	Y	6	576	13.0	40	89
NL4204	8/5/03	1.5	Y	4	587	12.7	60	158
NL4205[d]	8/5/03	1.4	Y	5	587	12.7	60	158
NL4200	7/9/03	1.1	Y	6	587	12.6	40	78
NL4201[d]	7/9/03	1.1	Y	3	587	12.6	40	78
NL1992	6/2/03	1.2	Y	7	579	12.2	50	104
NL1993[d]	6/2/03	1.3	Y	8	579	12.2	50	104

continued

Table 2. Post-Remediation PCB Results
South Spring
Neal's Landfill, Bloomington, Indiana

Sample ID	Sampling Date	PCB[a], ppb	Data Validated?	TSS, mg/L	Conductivity, uS/cm	Temperature, deg C	Flow[b], gal/min	NW Springs Total Flow[c], gpm
NL1982	5/14/03	0.68	Y	10	483	12.1	200	525
NL1983[d]	5/14/03	0.7	Y	8	483	12.1	200	525
NL1911	4/10/03	0.95	Y	4	511	12.0	100	246
NL1912[d]	4/10/03	0.88	Y	5	511	12.0	100	246
NL1907	3/17/03	0.9	Y	42	490	11.8	100	426
NL1908[d]	3/17/03	1.0	Y	35	490	11.8	100	426
NL1903	2/7/03	1.5	Y	7	626	11.7	25	102
NL1904[d]	2/7/03	1.6	Y	6	626	11.7	25	102
NL1899	1/10/03	< 0.2 R	Y	2	530	12.1	50	182
NL1900[d]	1/10/03	1.6	Y	4	530	12.1	50	182
NL1895	12/3/02	1.8	Y	6	593	11.9	10	30
NL1896[d]	12/3/02	1.7	Y	4	593	11.9	10	30
NL1885	11/12/02	2.4	Y	18	434	12.5	40	150
NL1886[d]	11/12/02	2.6	Y	17	434	12.5	40	150
NL1871	10/10/02	1.9	Y	4	616	13.0	25	29
NL1872[d]	10/10/02	1.9	Y	4	616	13.0	25	29
NL1867	9/4/02	1.6	Y	8	605	13.1	20	36
NL1868[d]	9/4/02	2	Y	10	605	13.1	20	36
NL1863	8/8/02	1.3	Y	9	609	13.1	25	42
NL1864[d]	8/8/02	1.4	Y	4	609	13.1	25	42
NL1858	7/17/02	1.4	Y	7	605	12.9	50	74
NL1859[d]	7/17/02	1.5	Y	4	605	12.9	50	74
NL1844	6/11/02	1.1	Y	5	521	12.7	50	290
NL1845[d]	6/11/02	0.91	Y	9	521	12.7	50	290
NL1771	5/21/02	0.89	Y	9	484	12.2	>100	359
NL1772[d]	5/21/02	0.81	Y	9	484	12.2	>100	359
NL1764	4/11/02	0.77	Y	5	450	12.0	40	554
NL1765[d]	4/11/02	0.65	Y	2	450	12.0	40	554
NL1757	3/14/02	0.96	Y	5	429	12.2	60	461
NL1758[d]	3/14/02	0.96	Y	5	429	12.2	60	461
NL1699	2/13/02	2.3 R	Y	4	461	12.1	100	249
NL1700[d]	2/13/02	1	Y	7	461	12.1	100	249
NL1693	1/22/02	0.48	Y	8	551	12.1	20	100
NL1694[d]	1/22/02	0.7	Y	9	551	12.1	20	100
NL1686	1/3/02	1	Y	7	531	12.1	15	136
NL1692[d]	1/3/02	0.64	Y	5	531	12.1	15	136
NL1680	11/15/01	1.2	Y	7	572	12.7	25	94
NL1681[d]	11/15/01	1.3	Y	4	572	12.7	25	94
NL1630	10/19/01	1.4	Y	5	526	12.8	80	245
NL1631[d]	10/19/01	1.3	Y	7	526	12.8	80	245

continued

Table 2. Post-Remediation PCB Results
South Spring
Neal's Landfill, Bloomington, Indiana

Sample ID	Sampling Date	PCB[a], ppb	Data Validated?	TSS, mg/L	Conductivity, uS/cm	Temperature, deg C	Flow[b], gal/min	NW Springs Total Flow[c], gpm
NL1620	9/14/01	1.6	Y	13	538	13.5	20	77
NL1621[d]	9/14/01	2	Y	9	538	13.5	20	77
NL1614	8/16/01	1.4	Y	11	535	13.3	10	60
NL1615[d]	8/16/01	1.5	Y	11	535	13.3	10	60
NL1606	7/27/01	1.6	Y	22	534	13.5	30	96
NL1607[d]	7/27/01	1.5	Y	23	534	13.5	30	96
NL1599	6/14/01	1.4	Y	8	479	12.7	NR	102
NL1600[d]	6/14/01	0.89	Y	8	479	12.7	NR	102
NL1534	5/15/01	1.5	Y	23	569	12.4	10	72
NL1535[d]	5/15/01	1.6	Y	20	569	12.4	10	72
NL1526	4/11/01	1.5	Y	17	484	12.5	50	278
NL1527[d]	4/11/01	1.3	Y	17	484	12.5	50	278
NL1519	3/21/01	0.93	Y	10	526	12.3	NR	253
NL1520[d]	3/21/01	0.92	Y	6	526	12.3	NR	253
NL1512	2/27/01	0.83	Y	7	453	11.7	NR	457
NL1513[d]	2/27/01	0.78	Y	9	453	11.7	NR	457
NL1397	12/21/00	0.84	Y	9	485	11.6	NR	177+NR
NL1398[d]	12/21/00	0.91	Y	7	485	11.6	NR	177+NR
NL1387	10/19/00	1.1	Y	10	504	12.8	NR	537
NL1388[d]	10/19/00	1	Y	12	504	12.8	NR	537
NL1331	8/15/00	2.3	Y	7	658	13.4	NR	51
NL1332[d]	8/15/00	2.4	Y	4	658	13.4	NR	51
NL1255	6/13/00	1.6 J	Y	9	560	12.8	NR	42+NR
NL1256[d]	6/13/00	2.2 J	Y	6	560	12.8	NR	42+NR
NL1210	4/14/00	0.81	Y	4	467	12.2	NR	164+NR
NL1211[d]	4/14/00	0.73	Y	NR	467	12.2	NR	164+NR
NL1113	2/22/00	1.8	Y	8	460	11.7	NR	113+NR
NL1097	12/18/99	2.4	Y	5	603	12.2	NR	NR
NL1083	11/1/99	1.0	Y	5	347	13.9	NR	NR
NL1084[d]	11/1/99	1.1	Y	2	347	13.9	NR	NR

[a]Samples were analyzed to a detection limit of 0.1 ppb for all PCB parameters except Aroclor 1221 (detection limit 0.2 ppb or 0.5 ppb). Other detection limits may occasionally result from non-normal sample volumes, dilutions, etc.

[b]Flow estimated visually.

[c]NL Spring Water Treatment Facility average flow rate for the day plus Conard's Branch flow at the time of sampling.

[d]Duplicate sample.

NR = Not reported.

J = Estimated value. The QA/QC data indicated an analytical bias.

K = Estimated value due to QA blank contamination

R=Unusable data. QA/QC data indicated significant deficiencies in the analytical data.

Table 3. Post-Remediation PCB Results
North Spring
Neal's Landfill, Bloomington, Indiana

Sample ID	Sampling Date	PCB[a], ppb	Data Validated?	TSS, mg/L	Conductivity, uS/cm	Temperature, deg C	Flow[b], gal/min
NL5949	**5/14/13**	**0.13**	**Y**	**2**	**385**	**11.6**	**25**
NL5943	**4/23/13**	**0.11**	**Y**	**< 1**	**354**	**11.4**	**6**
NL5938	**3/21/13**	**0.13**	**Y**	**< 1**	**364**	**10.9**	**8**
NL5932	2/25/13	0.21	Y	1	389	10.9	20
NL5926	1/18/13	0.25	Y	< 1	428	11.4	25
NL5920	12/13/12	0.93	Y	3	573	12.2	2
NL5915	11/15/12	0.59	Y	3	563	13.0	5
NL5910	10/9/12	0.59	Y	1	593	9.8	4
NL5905	9/12/12	0.56	Y	5	733	14.9	6
NL5900	8/16/12	0.57	Y	4	572	15.2	5
NL5895	7/17/12	0.45	Y	< 1	512	15.2	8
NL5890	6/21/12	0.58	Y	13	541	13.6	12
NL5885	5/15/12	0.29	Y	< 1	478	12.5	25
NL5880	4/19/12	0.14 J	Y	< 1	416	13.1	30
NL5875	3/13/12	0.22	Y	3	399	11.4	40
NL5870	2/14/12	0.24	Y	< 1	430	11.0	60
NL5865	1/25/12	0.11 J	Y	< 1	367	10.7	120
NL5860	12/9/11	0.20	Y	2	436	12.1	40
NL5855	11/17/11	0.77	Y	8	522	13.1	15
NL5850	10/17/11	0.59	Y	3	578	13.8	20
NL5845	9/22/11	0.48	Y	6	554	14.6	20
NL5840	8/29/11	0.66	Y	1	558	14.7	8
NL5835	7/20/11	0.40	Y	2	486	14.3	15
NL5830	6/30/11	0.29	Y	2	432	13.2	40
NL5825	5/20/11	0.18 J	Y	1	354	12.0	80
NL5820	5/6/11	< 0.10	Y	1	305	11.5	50
NL5815	3/24/11	0.25	Y	21	358	10.8	2.5
NL5810	2/18/11	1.1	Y	1	407	10.8	40
NL5805	1/25/11	0.63	Y	1	502	10.4	9
NL5800	12/17/10	0.98	Y	2	569	11.3	5
NL5795	11/19/10	0.76	Y	2	560	13.2	6
NL5790	10/19/10	0.43	Y	2	570	14.6	2.5
NL5785	9/14/10	0.57	Y	21	556	15.9	8
NL5780	8/19/10	0.68	Y	1	542	16.2	3
NL5775	7/27/10	0.34	Y	9	535	14.8	3
NL5770	6/23/10	0.15 J	Y	1	469	12.7	80
NL5765	5/25/10	0.13 J	Y	1	426	12.2	50
NL5760	4/21/10	0.34	Y	2	444	11.4	40
NL5755	3/31/10	0.12 J	Y	1	400	11.2	120
NL5750	2/11/10	0.22 K	Y	1	453	10.7	20

continued

Table 3. Post-Remediation PCB Results
North Spring
Neal's Landfill, Bloomington, Indiana

Sample ID	Sampling Date	PCB[a], ppb	Data Validated?	TSS, mg/L	Conductivity, uS/cm	Temperature, deg C	Flow[b], gal/min
NL5745	1/19/10	0.37	Y	1	471	10.8	40
NL5740	12/17/09	0.19 J	Y	2	432	11.7	60
NL5735	11/10/09	0.42 K	Y	1	498	12.8	20
NL5730	10/22/09	0.52	Y	< 1	513	13.4	18
NL5725	9/30/09	0.72	Y	4	628	14.3	10
NL5720	8/10/09	0.41	Y	< 1	498	13.8	30
NL5715	7/9/09	0.32	Y	1	462	13.6	25
NL5708	6/21/09	0.31	Y	1	452	12.6	30
NL5703	5/19/09	0.18 J	Y	< 1	391	11.7	50
NL5698	4/27/09	0.27	Y	2	399	11.3	30
NL5693	4/9/09	0.14 J	Y	< 1	393	11.0	60
NL5688	2/17/09	0.41	Y	< 1	408	10.5	50
NL5683	1/23/09	0.76	Y	4	527	10.3	15
NL5678	12/15/08	1.0	Y	< 1	586	11.4	40
NL5671	11/19/08	1.1	Y	4	617	12.7	20
NL5666	10/15/08	0.98	Y	1	629	14.2	15
NL5658	9/11/08	0.75	Y	< 1	608	14.4	20
NL5653	8/12/08	0.71	Y	2	567	13.9	20
NL5646	7/17/08	0.51	Y	3	551	13.1	30
NL5641	6/18/08	0.37	Y	1	506	12.1	150
NL5636	5/28/08	0.48	Y	2	446	11.6	40
NL5631	4/9/08	0.17 J	Y	< 1	383	11.0	50
NL5626	3/12/08	0.30	Y	1	410	10.7	50
NL5621	2/28/08	0.35	Y	1	432	10.7	100
NL5616	1/15/08	0.66	Y	1	500	11.2	40
NL5609	12/19/07	0.80	Y	1	507	11.5	40
NL5605	11/20/07	1.7	Y	3	654	13.3	10
NL5607[c]	11/20/07	1.6	Y	< 1	654	13.3	10
NL5600	10/12/07	1.2	Y	6	645	14.5	10
NL5595	9/20/07	1.3	Y	2	637	14.6	12
NL5590	8/22/07	1.1	Y	2	612	14.4	12
NL5584	7/10/07	0.55	Y	5	519	13.5	15
NL5579	6/13/07	0.66	Y	11	527	12.6	20
NL5572	5/14/07	0.40	Y	< 1	481	11.8	60
NL5567	4/9/07	0.17 J	Y	< 1	404	11.0	120
NL5562	3/13/07	0.28	Y	3	425	10.8	75
NL5557	2/23/07	< 0.10	Y	< 1	336	10.7	225
NL5551	1/11/07	0.20	Y	1	403	11.4	150
NL5527	12/15/06	0.15 J	Y	< 1	394	11.7	120
NL5522	11/27/06	0.40	Y	4	499	12.2	50

continued

Table 3. Post-Remediation PCB Results
North Spring
Neal's Landfill, Bloomington, Indiana

Sample ID	Sampling Date	PCB[a], ppb	Data Validated?	TSS, mg/L	Conductivity, uS/cm	Temperature, deg C	Flow[b], gal/min
NL5433	10/10/06	1.0	Y	5	566	14.0	30
NL5428	9/27/06	0.81	Y	3	555	14.1	20
NL5423	9/8/06	1.1	Y	2	558	14.5	10
NL5418	8/22/06	0.55	Y	5	533	14.5	12
NL5406	7/18/06	0.45	Y	7	545	13.5	15
NL5395	6/14/06	0.51	Y	2	512	12.4	40
NL5390	5/22/06	0.27	Y	2	446	11.7	60
NL5385	4/5/06	0.12 J	Y	< 1	371	11.3	70
NL5380	3/6/06	0.40 K	Y	2	471	10.9	35
NL5375	2/8/06	0.27	Y	1	471	10.1	60
NL5370	1/16/06	0.17 J	Y	< 1	398	11.4	120
NL5363	12/6/05	0.74	Y	3	508	12.1	90
NL5357	11/18/05	0.68	Y	< 1	477	12.9	30
NL5252	10/30/05	0.83	Y	3	565	13.8	10
NL5233	9/30/05	0.78	Y	4	540	14.4	40
NL5219	8/3/05	0.78	Y	< 1	525	14.4	25
NL5214	7/21/05	0.92	Y	< 1	527	13.9	15
NL5207	6/7/05	0.46 J	Y	3	476	12.4	50
NL5196	5/3/05	0.24	Y	< 1	412	11.6	60
NL5191	4/11/05	0.26	Y	< 1	395	11.4	80
NL5179	3/8/05	0.41	Y	< 1	432	10.8	80
NL5174	2/11/05	0.32	Y	< 1	402	10.9	70
NL5154	1/19/05	0.16 J	Y	< 1	411	11.2	120
NL4812	12/16/04	0.45	Y	4	479	11.8	30
NL4808	11/17/04	0.82	Y	2	513	12.8	35
NL4580	10/6/04	1.4	Y	4	591	14.1	15
NL4572	9/9/04	0.88	Y	< 1	600	14.2	15
NL4571	8/6/04	0.56	Y	3	530	13.8	15
NL4556	7/16/04	0.43	Y	6	465	13.2	20
NL4518	5/5/04	0.26	Y	< 1	420	11.3	40
NL4500	4/19/04	0.35	Y	< 1	450	11.2	30
NL4356	3/9/04	0.2	Y	< 1	400	10.8	100
NL4347	2/13/04	0.34	Y	< 1	393	10.7	100
NL4335	1/14/04	0.42	Y	3	438	11.2	50
NL4223	12/8/03	0.35	Y	< 1	449	11.9	30
NL4219	11/5/03	0.86	Y	< 1	570	13.0	10
NL4215	10/8/03	1.2	Y	< 1	580	13.7	10
NL4211	9/9/03	0.67	Y	< 1	524	14.0	10
NL4207	8/5/03	0.75	Y	< 1	515	13.3	20
NL4203	7/9/03	0.68	Y	8	532	13.1	15

continued

Table 3. Post-Remediation PCB Results
North Spring
Neal's Landfill, Bloomington, Indiana

Sample ID	Sampling Date	PCB[a], ppb	Data Validated?	TSS, mg/L	Conductivity, uS/cm	Temperature, deg C	Flow[b], gal/min
NL1995	6/2/03	0.66	Y	5	496	11.9	15
NL1985	5/14/03	0.18 J	Y	< 1	392	11.4	70
NL1914	4/10/03	0.36	Y	2	396	11.0	50
NL1910	3/17/03	0.24	Y	2	388	10.7	40
NL1906	2/7/03	0.63	Y	< 1	473	10.3	15
NL1902	1/10/03	0.58	Y	< 1	453	11.2	20
NL1898	12/3/02	1.3	Y	< 1	564	12.1	10
NL1888	11/12/02	0.82	Y	2	441	13.1	15
NL1874	10/10/02	1.6	Y	3	592	14.7	15
NL1870	9/4/02	1.1	Y	3	564	14.8	10
NL1866	8/8/02	1.2	Y	8	570	14.5	15
NL1861	7/17/02	0.71	Y	<1	543	13.8	50
NL1847	6/11/02	0.54	Y	2	466	12.4	40
NL1774	5/21/02	0.3	Y	2	410	11.7	60
NL1766	4/11/02	0.2	Y	<1	379	11.3	40
NL1760	3/14/02	0.22	Y	8	357	11.1	80
NL1702	2/13/02	0.42	Y	3	387	11.0	40
NL1696	1/22/02	0.39	Y	4	472	10.9	15
NL1688	1/3/02	0.56	Y	2	465	11.1	20
NL1683	11/15/01	0.78	Y	<1	512	12.7	15
NL1633	10/19/01	0.57	Y	6	463	13.1	25
NL1623	9/14/01	1.1	Y	<1	521	14.3	15
NL1617	8/16/01	0.79	Y	4	504	14.8	10
NL1609	7/27/01	0.89	Y	7	531	13.7	20
NL1601	6/14/01	<0.1 R	Y	9	432	12.7	12
NL1536	5/15/01	1.1	Y	15	517	12.5	12
NL1528	4/11/01	0.63	Y	2	398	11.2	60
NL1522	3/21/01	0.31	Y	<1	435	10.8	NR
NL1514	2/27/01	0.23	Y	2	377	10.9	NR
NL1399	12/21/00	0.33	Y	NR	419	11.4	NR
NL1393	10/19/00	0.36	Y	5	473	13.0	NR
NL1333	8/15/00	1.5	Y	3	623	14.7	NR
NL1259	6/13/00	1.6 J	Y	3	521	13.0	NR
NL1212	4/14/00	0.29	Y	<1	409	11.4	NR
NL1112	2/22/00	0.68	Y	4	491	10.5	NR
NL1098	12/18/99	2.1	Y	10	599	12.1	NR
NL1085	11/1/99	1.2	Y	2	400	14.1	NR

[a]Samples were analyzed to a detection limit of 0.1 ppb for all PCB parameters except Aroclor 1221 (detection limit 0.2 ppb or 0.5 ppb). Other detection limits may occasionally result from non-normal sample volumes, dilutions, etc.

[b]Flow estimated visually.

[c]Duplicate sample.

NA = Not applicable.

NR = Not reported.

J = Estimated value. The QA/QC data indicated an analytical bias.

K = Estimated value due to QA blank contamination

R=Unusable data. QA/QC data indicated significant deficiencies in the analytical data.

Table 4. Post-remediation PCB Results
Conard's Branch Pool by Vernal Pike
Neal's Landfill, Bloomington, Indiana

Sample ID	Sampling Date	PCB[a], ppb	Data Validated?	TSS, mg/L	Conductivity, uS/cm	Temperature, deg C	Flow[c], gal/min
NL5948	**5/14/13**	**0.031**	**Y**	**2**	**420**	**12.5**	**400**
NL5942	**4/23/13**	**0.059**	**Y**	**1**	**389**	**12.1**	**600**
NL5937	**3/21/13**	**0.062**	**Y**	**2**	**401**	**7.8**	**500**
NL5931	2/25/13	0.023	Y	2	496	7.6	300
NL5925	1/18/13	0.042	Y	3	437	7.9	450
NL5919	12/13/12	0.03	Y	1	597	1.9	40
NL5914	11/15/12	0.028	Y	2	571	4.4	50
NL5909	10/9/12	0.045	Y	1	568	9.8	90
NL5904	9/12/12	0.039	Y	2	630	17.7	10
NL5899	8/16/12	0.049	Y	7	529	20.3	4
NL5894	7/17/12	0.060	Y	11	492	25.0	5
NL5889	6/21/12	0.061	Y	4	537	22.7	40
NL5884	5/15/12	0.037	Y	6	478	16.9	250
NL5879	4/19/12	0.023	Y	2	442	15.9	300
NL5874	3/13/12	0.078	Y	8	432	15.6	500
NL5869	2/14/12	0.024	Y	1	458	8.5	400
NL5864	1/25/12	0.081	Y	5	401	9.0	700
NL5859	12/9/11	0.035	Y	5	445	9.8	300
NL5854	11/17/11	0.03	Y	2	525	8.2	100
NL5849	10/17/11	0.045	Y	1	532	10.0	15
NL5844	9/22/11	0.045	Y	4	521	16.5	40
NL5839	8/29/11	0.070	Y	3	486	18.7	12
NL5834	7/20/11	0.082	Y	11	484	24.7	90
NL5829	6/30/11	0.084	Y	4	456	17.1	140
NL5824	5/20/11	0.061	Y	2	398	13.1	250
NL5819	5/6/11	0.17	Y	7	360	11.8	1300
NL5814	3/24/11	0.064	Y	4	411	8.5	500
NL5809	2/18/11	0.051	Y	3	455	12.8	240
NL5804	1/25/11	0.036	Y	6	542	3.0	30
NL5799	12/17/10	0.026 J	Y	5	545	0.6	15
NL5794	11/19/10	0.038	Y	1	522	6.3	20
NL5789	10/19/10	0.033	Y	3	558	13.3	2
NL5784	9/14/10	0.047	Y	3	532	22.1	20
NL5779	8/19/10	0.063	Y	1	549	23.4	20
NL5774	7/27/10	0.044	Y	3	560	23.4	80
NL5769	6/23/10	0.11	Y	5	448	18.2	240
NL5764	5/25/10	0.089	Y	13	445	18.4	250
NL5759	4/21/10	0.076	Y	4	483	10.6	125
NL5754	3/31/10	0.10	Y	7	423	11.6	500
NL5749	2/11/10	0.090 K	Y	7	527	9.1	220

continued

Table 4. Post-remediation PCB Results
Conard's Branch Pool by Vernal Pike
Neal's Landfill, Bloomington, Indiana

Sample ID	Sampling Date	PCB[a], ppb	Data Validated?	TSS, mg/L	Conductivity, uS/cm	Temperature, deg C	Flow[c], gal/min
NL5744	1/19/10	0.048	Y	2	519	6.4	90
NL5739	12/17/09	0.11	Y	4	448	9.2	450
NL5734	11/10/09	0.086 K	Y	6	493	14.7	100
NL5729	10/22/09	0.056	Y	2	519	14.5	70
NL5724	9/30/09	0.046	Y	5	583	15.7	25
NL5719	8/10/09	0.10	Y	4	487	22.7	90
NL5714	7/9/09	0.11	Y	3	471	18.5	150
NL5707	6/21/09	0.11	Y	9	501	18.8	200
NL5702	5/19/09	0.14	Y	6	401	15.8	500
NL5697	4/27/09	0.073	Y	3	424	18.2	200
NL5692	4/9/09	0.11	Y	8	413	11.6	600
NL5687	2/17/09	0.14	Y	7	428	9.9	400
NL5682	1/23/09	0.077	Y	4	500	5.3	80
NL5677	12/15/08	0.05	Y	3	537	4.7	100
NL5670	11/19/08	0.023	Y	2	612	5.1	30
NL5665	10/15/08	0.09	Y	1	609	18.9	12
NL5657	9/11/08	0.076	Y	3	548	19.7	25
NL5652	8/12/08	0.084	Y	4	548	17.7	60
NL5645	7/17/08	0.11	Y	5	501	17.9	150
NL5640	6/18/08	0.13	Y	4	438	15.6	200
NL5635	5/28/08	0.11	Y	3	451	14.4	180
NL5630	4/9/08	0.12	Y	3	420	16.8	480
NL5625	3/12/08	0.075	Y	2	501	8.5	500
NL5620	2/28/08	0.16 J	Y	4	546	8.4	450
NL5615	1/15/08	0.096	Y	3	521	4.1	180
NL5608	12/19/07	0.055	Y	2	672	6.7	160
NL5604	11/20/07	0.04	Y	2	612	12.4	14
NL5599	10/12/07	0.051	Y	3	614	13.1	10
NL5594	9/20/07	0.068	Y	2	539	24	12
NL5589	8/22/07	0.068	Y	7	564	24.0	25
NL5583	7/10/07	0.10	Y	17	430	27.7	40
NL5578	6/13/07	0.077	Y	6	519	19.5	50
NL5571	5/14/07	0.093	Y	< 1	447	22.7	180
NL5566	4/9/07	0.076	Y	4	443	12.0	280
NL5561	3/13/07	0.087	Y	3	417	17.1	150
NL5556	2/23/07	0.11	Y	6	403	8.0	400
NL5550	1/11/07	0.10	Y	1	445	10.8	700
NL5526	12/15/06	0.13	Y	7	446	10.3	350
NL5521	11/27/06	0.097	Y	6	510	12.8	150
NL5432	10/10/06	0.094 K	Y	3	563	14.2	50

continued

Table 4. Post-remediation PCB Results
Conard's Branch Pool by Vernal Pike
Neal's Landfill, Bloomington, Indiana

Sample ID	Sampling Date	PCB[a], ppb	Data Validated?	TSS, mg/L	Conductivity, uS/cm	Temperature, deg C	Flow[c], gal/min
NL5427	9/27/06	0.11	Y	6	559	14.0	120
NL5422	9/8/06	0.14 K	Y	6	526	16.7	45
NL5417	8/22/06	0.070	Y	9	503	23.0	40
NL5405	7/18/06	0.081	Y	8	547	21.5	40
NL5394	6/14/06	0.074	Y	2	516	16.8	100
NL5389	5/22/06	0.079	Y	4	468	13.7	400
NL5384	4/5/06	0.10 K	Y	8	418	14.8	600
NL5379	3/6/06	0.087 K	Y	1	486	7.9	150
NL5374	2/8/06	0.15 J	Y	4	471	10.1	415[d]
NL5369	1/16/06	0.33	Y	15	459	11.8	400
NL5362	12/6/05	0.071 J	Y	11	532	3.4	90
NL5361	12/1/05	0.071	Y	5	506	7.7	200
NL5356	11/18/05	0.16 J	Y	8	493	10.7	350
NL5251[b]	10/30/05	< 0.10	Y	3	554	11.7	40
NL5232[b]	9/30/05	0.16 J	Y	5	545	17.7	80
NL5224	8/17/05	0.083	Y	< 1	525	24.5	60
NL5223	8/10/05	0.11 J	Y	5	535	21.6	40
NL5218	8/3/05	< 0.01	Y	3	525	25.1	30
NL5213[b]	7/21/05	0.17 J	Y	3	493	22.7	50
NL5206[b]	6/7/05	< 0.10	Y	4	472	20.1	70
NL5200	5/4/05	0.037	Y	< 1	467	12.6	245[d]
NL5195[b]	5/3/05	< 0.10	Y	< 1	454	12.8	150
NL5190[b]	4/11/05	0.12 J	Y	2	433	17.9	120
NL5183[b]	3/10/05	< 0.10	Y	4	480	7.2	180
NL5178[b]	3/8/05	0.11 J	Y	4	472	8.7	180
NL4816	12/16/04	0.12	Y	13	513	8.3	150

[a]Samples were analyzed to a detection limit of 0.01 ppb for all PCB parameters except Aroclor 1221 (detection limit of 0.02 ppb).

[b]Analyzed at a detection limit of 0.1 ppb.

[c]Flow estimated visually.

[d]Flow calculated from readings obtained with a manual flow velocity meter.

J = Estimated value. The QA/QC data indicated an analytical bias.

K = Estimated value due to QA blank contamination

Table 5. Continuous Flow and Water Level Monitoring
Neal's Landfill
Monroe County, Indiana

Monitoring Station	Parameter	Reported Monitoring Period	Instrument
Conard's Branch Weir	Water level/flow	Ended January 24, 2011	In-Situ LevelTroll
NL Rain Gauge	Rainfall	Q2	Tipping bucket, recording rain gauge
MW EPA-5A	Water level	Ended April 29, 2011	In-Situ Mini-Troll
PZ-02, -03, -04, -05	Water level	Q2	Crest gauge

Table 6. Crest Gauge Data
Neal's Landfill
Monroe County, Indiana

Date	Apparent Movement (in) PZ-02	PZ-03	PZ-04	PZ-05
5/23/2013	**1**	**0**	**0**	**3.73 ft. water[5]**
3/28/2013	**0**	**0**	**0**	**3.68 ft. water[5]**
3/11/2013	**--**	**--**	**--**	**3.42 ft. water[5]**
2/28/2013	0	0	0	3.52 ft. water[5]
1/28/2013	--	--	0	2.55 ft. water[5]
1/23/2013	0	0	0	2.58 ft. water[5]
1/11/2013	0	0	0	0
12/5/2012	0	0	0	0
11/7/2012	0	0	0	0
10/12/2012	0	0	0	0
9/28/2012	0	0	0	0
9/10/2012	1.7	0	2.9	2.6
5/2/2012	0	0	0	0
4/9/2012	0	0	0	0
2/22/2012	2	1.6	0	5
1/18/2012	0	0	0	0
1/16/2012	2	0	0	0
12/5/2011	0	0	0	0
11/23/2011	0	0	0	0
11/15/2011	2	0	0	0
10/28/2011	0	0	0	0
9/26/2011	0	0	0	0
9/14/2011	0	0	0	0
6/16/2011	0	0	0	0
2/17/2011	0	0	0	0
11/10/2010	0	0	0	0
7/8/2010	0	0	0	0
2/11/2010	0	0	0	0
10/22/2009	0	0	0	0
8/25/2009	2.6	0	0	0
5/31/2009	2.6	0	0	0
2/18/2009	2.6	0	0	0
11/13/2008	0	0	0	0
10/22/2008	0	0	0	0
9/10/2008	0	0	0	0
8/1/2008	0	0	0	0
7/18/2008	0	0	0	0
6/25/2008	0	0	0	0
6/6/2008	0	0	0	0
5/20/2008	0	0	0	0
4/30/2008	0	0	0	0
4/9/2008	2	0	0	0

continued

Table 6. Crest Gauge Data
Neal's Landfill
Monroe County, Indiana

Date	Apparent Movement (in) PZ-02	PZ-03	PZ-04	PZ-05
2/13/2008	0	0	0	0
8/27/2007	0	0	0	0
8/3/2007	0	0	0	0
7/5/2007	0	0	0	0
6/25/2007	0	0	0	0
5/31/2007	0	0	0	0
5/8/2007	0	0	0	0
4/20/2007	0	0	0	0
3/23/2007	0	0	0	0
3/10/2007	0	0	0	0
2/19/2007	0	0	0	0
2/8/2007	0	0	0	0
1/18/2007	0	0	0	0
1/2/2007	0	0	0	0
11/8/2006	0	0	0	0
9/28/2006	0	0	0	0
9/13/2006	0	0	0	0
8/22/2006	0	0	0	0
8/3/2006	0	0	0	0
7/25/2006	0	0	0	0
7/11/2006	0	0	0	0
6/12/2006	0	0	0	0
5/18/2006	0	0	0	0
5/2/2006	5	0	0	0
4/3/2006	0	0	0	0
3/10/2006	0	0	0	0
2/28/2006	0	0	0	0
2/15/2006	0	0	0	0
2/1/2006	0	0	0	0
1/16/2006	0	0	0	0
1/5/2006	0	0	0	0
12/20/2005	0	0	0	0
11/2/2005	0	0	0	0
10/11/2005	2.4	0	0	0
9/19/2005	0	0	0	0
8/31/2005	0	0	0	0
8/8/2005	0	0	0	0
7/19/2005	0	0	0	0
6/22/2005	0	0	0	0
5/12/2005	0	0	0	0
5/3/2005	0	0	0	0
4/13/2005	0	0	0	4.3

continued

Table 6. Crest Gauge Data
Neal's Landfill
Monroe County, Indiana

Date	Apparent Movement (in) PZ-02	PZ-03	PZ-04	PZ-05
3/25/2005	-Note [3]	0	4.4	NR[4]
2/18/2005	0	0	0	0
2/3/2005	0	0	0	1
12/7/2004	0	0	0	0
11/22/2004	0	0	0	0
10/26/2004	0	0	0	0
10/7/2004	0	0	0	0
9/23/2004	0	0	0	0
9/10/2004	0	0	0	0
8/31/2004	0	0	0	0
8/11/2004	0	0	0	0
8/3/2004	0	0	0	0
7/13/2004	0	0	0	0
6/25/2004	0	0	0	0
6/15/2004	0	0	0	0
5/25/2004	0	0	0	0
5/10/2004	0	0	0	0
4/22/2004	0	0	0	0
4/13/2004	0	0	0	0
3/25/2004	0	0	0	0
3/11/2004	0	0	0	0
2/26/2004	0	0	0	0
2/12/2004	0	0	0	0
1/29/2004	0	0	0	0
1/15/2004	0	0	0	0
12/31/2003	0	0	0	0
12/8/2003	0	0	0	0
11/20/2003	0	0	0	0
11/5/2003	0	0	0	0
10/23/2003	0	0	0	0
10/9/2003	0	0	0	0
9/29/2003	0	0	0	0
9/11/2003	0	0	0	0
8/29/2003	0	0	0	0
8/15/2003	0	0	0	0
8/1/2003	0	0	0	0
7/17/2003	0	0	0	0
7/3/2003	0	0	0	0
6/19/2003	0	0	0	0
6/6/2003	0	0	0	0
5/19/2003	0	0	0	0
5/8/2003	0	0	0	0

continued

Table 6. Crest Gauge Data
Neal's Landfill
Monroe County, Indiana

Date	Apparent Movement (in) PZ-02	PZ-03	PZ-04	PZ-05
4/23/2003	0	0	0	0
4/7/2003	0	0	0	0
3/19/2003	0	0	0	0
3/6/2003	0	0	0	0
2/20/2003	0	0	0	0
2/11/2003	0	0	0	0
1/28/2003	0	0	0	0
1/13/2003	0	0	0	0
12/30/2002	0	0	0	0
12/13/2002	0	0	0	0
12/2/2002	0	0	0	0
11/14/2002	0	-Note [1]	0	0
10/31/2002	0	-Note [1]	0	0
10/17/2002	0	-Note [1]	0	0
10/3/2002	0	-Note [1]	0	0
9/19/2002	0	-Note [1]	0	0
9/9/2002	0	-Note [1]	0	0
8/22/2002	0	-Note [1]	0	0
8/9/2002	0	0.6	0	0
7/26/2002	0	0.4	0	0
7/11/2002	0	2	0	0
6/27/2002	0	0.25	0	0
6/14/2002	0	0.6	-Note [2]	0
5/31/2002	0	0.5	0	0
5/16/2002	0	0.75	0	0
5/3/2002	0	1.75	0	0
4/18/2002	0	2.5	0	0
4/4/2002	0	0	0	0
3/21/2002	0	3.25	0	0
3/8/2002	0	2	0	0
2/8/2002	0	1.75	0	0
1/25/2002	0	4.25	0	0
1/9/2002	0	4.75	0	0
10/25/2001	0	4.9	0	0
10/9/2001	0	2.6	0	0
9/21/2001	0	2.6	0	0
9/7/2001	0	3.25	0	0
8/28/2001	0	0	Reinstalled	Reinstalled
6/14/2001	0	0.75	0	0

[1] Crest gauge removed from piezometer; miniTroll instrument installed.

[2] No measurement possible due to jammed lock on piezometer.

[3] Gauge became damp, then dried prior to inspection in such a manner as to produce an inconclusive chalk line. Dampness most likely caused by condensation of well humidity, not an actual piezometric rise.

[4] No record.

[5] Actual measured water column present.

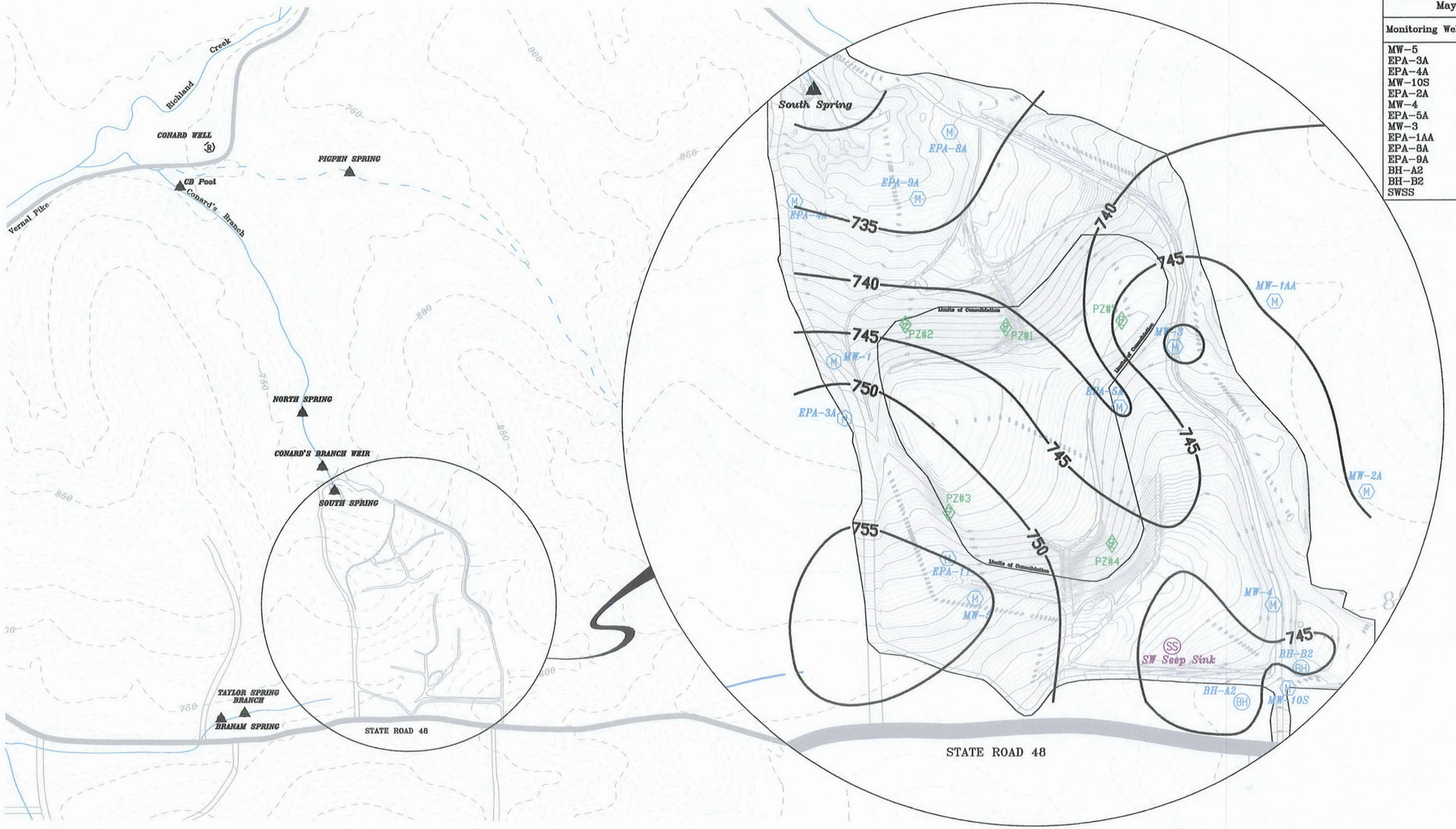
Table 7. Piezometer-01 Water Elevations
Neal's Landfill
Monroe County, Indiana

Date	Water Elevation (ft)	Date	Water Elevation (ft)	Date	Water Elevation (ft)
9/29/2003	772.53	1/5/2006	772.22	8/1/2008	771.96
10/9/2003	772.55	1/16/2006	772.17	9/10/2008	771.95
11/5/2003	772.58	2/15/2006	772.14	10/22/2008	771.93
11/20/2003	772.64	2/28/2006	772.12	11/13/2008	771.54
12/8/2003	772.61	3/10/2006	772.14	2/18/2009	771.54
1/15/2004	772.55	3/29/2006	772.08	5/31/2009	771.36
1/29/2004	772.52	5/2/2006	772.10	8/25/2009	771.28
2/12/2004	772.5	5/18/2006	772.14	10/22/2009	771.21
2/26/2004	772.53	6/12/2006	772.07	2/11/2010	771.25
3/11/2004	772.55	7/11/2006	771.99	7/8/2010	Dry
3/25/2004	772.47	7/25/2006	771.69	11/10/2010	Dry
4/13/2004	772.55	8/3/2006	771.97	2/17/2011	Dry
4/22/2004	772.50	8/22/2006	771.94	6/16/2011	Dry
5/10/2004	772.38	9/13/2006	771.92	9/14/2011	770.94
5/25/2004	772.41	11/8/2006	771.92	9/26/2011	770.91
6/15/2004	772.39	1/2/2007	771.90	10/28/2011	770.92
6/25/2004	772.38	1/18/2007	771.90	11/23/2011	770.92
7/13/2004	772.42	2/8/2007	771.84	1/18/2012	770.92
8/3/2004	772.42	2/19/2007	771.90	2/22/2012	770.93
8/11/2004	772.39	3/10/2007	772.00	4/9/2012	770.92
8/31/2004	772.34	3/23/2007	771.98	5/2/2012	770.93
9/10/2004	772.30	4/20/2007	771.99	7/16/2012	770.80
9/23/2004	772.25	5/8/2007	772.00	9/10/2012	770.42
10/7/2004	772.22	5/31/2007	771.96	9/28/2012	770.80
10/26/2004	772.28	6/12/2007	771.96	10/12/2012	770.78
11/22/2004	772.27	6/26/2007	771.94	11/7/2012	772.83
12/7/2004	772.40	8/4/2007	771.86	12/5/2012	770.91
2/3/2005	772.21	8/27/2007	771.84	1/23/2013	770.92
2/18/2005	772.27	2/13/2008	771.82	2/28/2013	770.84
4/13/2005	772.35	6/12/2007	771.96	3/28/2013	770.81
5/3/2005	772.19	6/26/2007	771.94	5/23/2013	770.75
5/12/2005	771.58	8/4/2007	771.86		
7/19/2005	772.03	8/27/2007	771.84		
8/8/2005	772.03	2/13/2008	771.82		
8/31/2005	772.09	4/9/2008	771.75		
9/19/2005	772.06	4/30/2008	771.83		
10/11/2005	772.03	5/20/2008	771.77		
11/2/2005	772.04	6/6/2008	771.78		
12/20/2005	772.05	7/18/2008	772.01		

Note: PZ-01 bottom is at 770.4 feet elevation.

FIGURES

Monitor Well Water Levels May 13, 2013	
Monitoring Well	Water Level Elevation
MW-5	756.15
EPA-3A	753.45
EPA-4A	734.57
MW-10S	750.03
EPA-2A	744.68
MW-4	747.27
EPA-5A	739.90
MW-3	752.08
EPA-1AA	743.99
EPA-8A	733.47
EPA-9A	731.95
BH-A2	741.92
BH-B2	743.25
SWSS	743.10



Scale 1"=250'

Graphic Scale
0 350 700
(In Feet)

NL Potentiometric surface 13-05-13.dwg Sheet (Layout1)

PSARA TECHNOLOGIES, INC.

LEGEND

- NORTH SPRING — Spring Locations / WEIR
- MW-5 — Monitoring Well Locations
- PZ#3 — Piezometer Locations
- ® — Residential Well Location
- Contours located outside of Landfill Area are based on the USGS 7.5 Minute Quadrangle Whitehall, IND.
- 745 — Potentiometric surface Contour, May 13, 2013

No.	Date	Revision	By

CBS Corporation

Figure 1.
Monitoring and Sampling Locations
Neals Landfill
Bloomington, Indiana

Drawn By:	Date:	Scale:
RLR	7/29/13	1"=700'

APPENDIX A

Chain of Custody Records

01089646

HERITAGE ENVIRONMENTAL SERVICES, LLC.

COMMERCIAL LABORATORY OPERATIONS

7901 West Morris Street Indianapolis IN 46231

www.heritage-enviro.com (800)827-4374 Fax: (317) 486-5095

I-088130

Customer name/number: CBS Corp | Submitter #

Project Name: Neal's Landfill

Z Quote No: (Given to you by your contact)

PO No. or Project/Activity ID: BL-0396

PRINT HERITAGE TSR NAME:

CUSTOMER STATUS: New / Existing

If no previous credit has been established with Heritage, **prepayment** (check,VISA,etc) is required at the time of sample submittal to the laboratory.

Sampled By: S. Johnson

Analyses Requested (Note special detection limits or methods)

Date Sampled	Time sampled	Comp	Grab	Sample ID and/or Location where your sample was taken	Sample type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Swipe, Other	Number of Containers	PCB (Det. Limit 0.01)	TSS	PCB (Det. Limit 0.1)	Remarks:	Lab use only Sample No.
3-21	1015 AM/PM		✓	NL5937	WS	3	X	X			~~A97866-10~~ ~~A97866-36~~ JMZ
	1030 AM/PM		✓	NL5938	WS	4		X	X	MS/MSD	636
	1040 AM/PM		✓	NL5939	WS	2		X	X		637
	1055 AM/PM		✓	NL5940	WS	2		X	X		638
↓	1055 AM/PM		✓	NL5941	WS	2		X	X	Dup	639
	AM/PM										
	AM/PM										
	AM/PM										
	AM/PM										
	AM/PM										

Send Report To:

Co: CBS Corp

Add: 2002 W. Vernal Pike

Bloomington, IN 47404

Attn: N. Vaughan

Phone: (812) 335-0424 Yes

Fax: ( )

E-mail:

Sample Turn Around Time

Standard: Rush Date ___/___/___ Mo Day Yr

(Accelerated TAT subject to Additional Charge)

(Date must be Accepted and Approved by Lab)

Relinquished by: (Signature)	Date/Time 3/22/13 1500	Received by: (Signature) Jeff Express
Relinquished by: (Signature)	Date/Time /	Received by: (Signature)
Relinquished by: (Signature)	Date/Time /	Received by: (Signature)
Received for Lab by: (Signature)	Date 3.22-13 Temp. 4.6 (4.8) °C	
	Time 16:15 ROI: (Yes) / No	

Laboratory use only	Yes	No
Custody seals present/intact?	✓	
Broken containers?		✓
COC agree with sample labels?	✓	
Correct containers for testing?	✓	
Headspace issues acceptable?	✓	
Holding time(s) acceptable?	✓	
Preservative pH's acceptable?	✓	
Was pH left unadjusted?	✓	

Comments:

ORIGINAL

01091180

HERITAGE ENVIRONMENTAL SERVICES, LLC.

COMMERCIAL LABORATORY OPERATIONS

7901 West Morris Street Indianapolis IN 46231

www.heritage-enviro.com (800)827-4374 Fax: (317) 486-5095

I-088170

Customer name/number: CBS | Submitter #

Project Name: Neal's Landfill

Z Quote No: (Given to you by your contact)

PO No. or Project/Activity ID: BL-0396

PRINT HERITAGE TSR NAME:

CUSTOMER STATUS: New / Existing

If no previous credit has been established with Heritage, **prepayment** (check,VISA,etc) is required at the time of sample submittal to the laboratory.

Sampled By: S. Johnson, C. Bissell

Analyses Requested (Note special detection limits or methods)

Send Report To:

Co: CBS Corp

Add: 2002 W. Vernal Pike Bloomington IN 47404

Attn: N. Vaughan

Phone: (812) 335-0424 Yes

Fax: ( )

E-mail:

Sample Turn Around Time

Standard: Rush Date / / (Mo Day Yr)

(Accelerated TAT subject to Additional Charge) (Date must be Accepted and Approved by Lab)

Date Sampled	Time sampled	Comp	Grab	Sample ID and/or Location where your sample was taken	Sample type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Swipe, Other	Number of Containers	PCB (Det Limit ± 0.1 ppb)	TSS	PCB (Det Limit ± 0.01 ppb)	PCB (Det Limit ± 0.1 ppb)	Remarks:	Lab use only Sample No.
4-23	945 AM/PM	X		NL 5942	WS	3	X	X	X			A81233
	955 AM/PM	X		NL 5943	WS	4				X	MS/MSD	234
	1000 AM/PM	X		NL 5944	WS	2				X		235
	1010 AM/PM	X		NL 5945	WS	2				X		236
	1010 AM/PM	X		NL 5946	WS	2				X		237
	1015 AM/PM	X		NL 5947	WS	3			X			238
	AM/PM											
	AM/PM											
	AM/PM											
	AM/PM											

Relinquished by: (Signature) Date/Time 4/23/13 1950 — Received by: (Signature) Jeff Express

Relinquished by: (Signature) Date/Time / — Received by: (Signature)

Relinquished by: (Signature) Date/Time / — Received by: (Signature)

Received by: Lab by: (Signature) — Date 4/23/13 — Temp. 3.0 (2) °C — Time 1740 — ROI: ~~Yes~~ / No

Laboratory use only	Yes	No
Custody seals present/intact?	—	
Broken containers?		—
COC agree with sample labels?	✓	
Correct containers for testing?	✓	
Headspace issues acceptable?	✓	
Holding time(s) acceptable?	✓	
Preservative pH's acceptable?	✓	
Was pH left unadjusted?	✓	

Comments:

ORIGINAL

01091976

ES

HERITAGE ENVIRONMENTAL SERVICES, LLC.

COMMERCIAL LABORATORY OPERATIONS

7901 West Morris Street Indianapolis IN 46231

www.heritage-enviro.com (800)827-4374 Fax: (317) 486-5095

I - 088174

Customer name/number: CBS Corp | Submitter #

Project Name: Neal's Landfill

Z Quote No: (Given to you by your contact)

PO No. or Project/Activity ID: BL-0396

PRINT HERITAGE TSR NAME:

CUSTOMER STATUS: New / Existing

If no previous credit has been established with Heritage, **prepayment** (check,VISA,etc) is required at the time of sample submittal to the laboratory.

Sampled By: N. Vaughan, S. Johnson

Date Sampled	Time sampled	Comp	Grab	Sample ID and/or Location where your sample was taken	Sample type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Swipe, Other	Number of Containers	PCB (Det. limit 0.01PPB)	TSS	PCB (Det. limit 0.1 PPB)							Remarks:	Lab use only Sample No.
5-14	920 AM/PM			NL 5948	WS	3	X	X									A983409
	935 AM/PM			NL 5949	WS	4		X	X							MS/MSD	410
	940 AM/PM			NL 5950	WS	2		X	X								411
	950 AM/PM			NL 5951	WS	2		X	X								412
	950 AM/PM			NL 5952	WS	2		X	X								413
	1000 AM/PM			NL 5953	WS	3	X	X									414
	AM/PM																
	AM/PM																
	AM/PM																
	AM/PM																

Send Report To:

Co: CBS Corp

Add: 2000 W. Vernal Pike Bloomington IN 47404

Attn: N. Vaughan

Phone: (812) 335-0424 Yes

Fax: ( )

E-mail:

Sample Turn Around Time

Standard: Rush Date / / (Mo Day Yr)

(Accelerated TAT subject to Additional Charge)
(Date must be Accepted and Approved by Lab)

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
N. Vaughan	5-15-13 1100	Jeff Express
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
	/	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
	/	
Received for Lab by: (Signature)	Date 5/15/13	Temp. 2.2(2.4) °C
	Time 1230	ROI: Yes / No

Laboratory use only	Yes	No
Custody seals present/intact?	—	
Broken containers?		✓
COC agree with sample labels?	✓	
Correct containers for testing?	✓	
Headspace issues acceptable?	✓	
Holding time(s) acceptable?	✓	
Preservative pH's acceptable?	✓	
Was pH left unadjusted?	✓	

Comments:

ORIGINAL

APPENDIX B

Certificates of Analysis

HERITAGE
ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	22-MAR-13	A978640
	Completed	**PO Number**
	PROCESSING	BL-0396
	Printed	**Sampled**
	02-APR-13	21-MAR-13 10:15

Report To	Bill To
RUSS CEPKO CBS CORP - NATIONAL CITY CENTER 20 STANWIX STREET 10TH FLOOR PITTSBURG, PA 15222-1384	BETH STEIGERWALD CBS CORPORATION 20 STANWIX STREET 10TH FLOOR PITTSBURGH, PA 15222

Sample Description

CLIENT ID: NL5937
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 2226 - CBS CORPORATION
DATA PACKAGE #: 64435
MATRIX: WS
LOCATION: NEALS LANDFILL

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: T. WATSON | Analysis Date: 25-MAR-13 | Instrument: PREP | Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	2000		mL
FINAL VOLUME	1.0		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082A NELAC:Y

Analyst: A. LEACH | Analysis Date: 27-MAR-13 14:26 | Instrument: GC/ECD | Test: O301.7.0

Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P230.1.0

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.01	ug/L
PCB AROCLOR 1221	BDL	0.01	ug/L
PCB AROCLOR 1232	BDL	0.01	ug/L
PCB AROCLOR 1242	0.062	0.01	ug/L
PCB AROCLOR 1248	BDL	0.01	ug/L
PCB AROCLOR 1254	BDL	0.01	ug/L
PCB AROCLOR 1260	BDL	0.01	ug/L
PCB AROCLOR 1262	BDL	0.01	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	112.0		% Rec
...			
SUMMATION OF AROCLORS	0.062	0.01	ug/L

HERITAGE
ENVIRONMENTAL SERVICES

Sample ID: A978640 NL5937

TOTAL SUSPENDED SOLIDS DRIED AT 103-105 DEGREES C SM 2540 D, 19TH ED.			NELAC:Y
Analyst: C. ANYANWUTAKU	Analysis Date: 26-MAR-13 19:00		Test: G403.8.0
Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	2	1	mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature 4.6 C.
Sample chain of custody number 088130.

Approved by: CHRISTOPHER BOYLE 02-APR-13

HERITAGE
ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	22-MAR-13	A978636
	Completed	**PO Number**
	PROCESSING	BL-0396
	Printed	**Sampled**
	02-APR-13	21-MAR-13 10:30

Report To	Bill To
RUSS CEPKO CBS CORP - NATIONAL CITY CENTER 20 STANWIX STREET 10TH FLOOR PITTSBURG, PA 15222-1384	BETH STEIGERWALD CBS CORPORATION 20 STANWIX STREET 10TH FLOOR PITTSBURGH, PA 15222

Sample Description

CLIENT ID: NL5938
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 2226 - CBS CORPORATION
DATA PACKAGE #: 64435
MATRIX: WS
LOCATION: NEALS LANDFILL

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: T. WATSON | Analysis Date: 25-MAR-13 | Instrument: PREP | Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082A NELAC:Y

Analyst: A. LEACH | Analysis Date: 27-MAR-13 14:26 | Instrument: GC/ECD | Test: O301.7.0

Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P230.1.0

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.10	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	0.13	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	92.0		% Rec
...			
SUMMATION OF AROCLORS	0.13	0.10	ug/L

HERITAGE
ENVIRONMENTAL SERVICES

Sample ID: A978636 NL5938

AR1242 is degraded

TOTAL SUSPENDED SOLIDS DRIED AT 103-105 DEGREES C SM 2540 D, 19TH ED.			NELAC:Y
Analyst: C. ANYANWUTAKU	Analysis Date: 26-MAR-13 19:00		Test: G403.8.0
Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	BDL	1	mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature 5.6 C.
Sample chain of custody number 088139.

Approved by: CHRISTOPHER BOYLE 02-APR-13

HERITAGE ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	22-MAR-13	A978637
	Completed	**PO Number**
	PROCESSING	BL-0396
	Printed	**Sampled**
	02-APR-13	21-MAR-13 10:40

Report To	Bill To
RUSS CEPKO CBS CORP - NATIONAL CITY CENTER 20 STANWIX STREET 10TH FLOOR PITTSBURG, PA 15222-1384	BETH STEIGERWALD CBS CORPORATION 20 STANWIX STREET 10TH FLOOR PITTSBURGH, PA 15222

Sample Description

CLIENT ID: NL5939
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 2226 - CBS CORPORATION
DATA PACKAGE #: 64435
MATRIX: WS
LOCATION: NEALS LANDFILL

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: T. WATSON | Analysis Date: 25-MAR-13 | Instrument: PREP | Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082A NELAC:Y

Analyst: A. LEACH | Analysis Date: 27-MAR-13 14:26 | Instrument: GC/ECD | Test: O301.7.0

Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P230.1.0

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.10	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	BDL	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	72.0		% Rec
...			
SUMMATION OF AROCLORS	BDL	0.10	ug/L

HERITAGE
ENVIRONMENTAL SERVICES

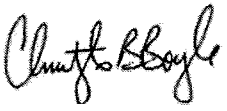
Sample ID: A978637 NL5939

TOTAL SUSPENDED SOLIDS DRIED AT 103-105 DEGREES C SM 2540 D, 19TH ED.			NELAC:Y
Analyst: C. ANYANWUTAKU	Analysis Date: 26-MAR-13 19:00		Test: G403.8.0
Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	BDL	1	mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature 5.6 C.
Sample chain of custody number 088139.



Approved by: CHRISTOPHER BOYLE 02-APR-13

HERITAGE
ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	22-MAR-13	A978638
	Completed	**PO Number**
	PROCESSING	BL-0396
	Printed	**Sampled**
	02-APR-13	21-MAR-13 10:55

Report To	Bill To
RUSS CEPKO CBS CORP - NATIONAL CITY CENTER 20 STANWIX STREET 10TH FLOOR PITTSBURG, PA 15222-1384	BETH STEIGERWALD CBS CORPORATION 20 STANWIX STREET 10TH FLOOR PITTSBURGH, PA 15222

Sample Description

CLIENT ID: NL5940
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 2226 - CBS CORPORATION
DATA PACKAGE #: 64435
MATRIX: WS
LOCATION: NEALS LANDFILL

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: T. WATSON Analysis Date: 25-MAR-13 Instrument: PREP Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082A NELAC:Y

Analyst: A. LEACH Analysis Date: 27-MAR-13 14:26 Instrument: GC/ECD Test: O301.7.0

Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P230.1.0

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.10	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	0.53	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	98.0		% Rec
...			
SUMMATION OF AROCLORS	0.53	0.10	ug/L

HERITAGE
ENVIRONMENTAL SERVICES

Sample ID: A978638 NL5940

TOTAL SUSPENDED SOLIDS DRIED AT 103-105 DEGREES C SM 2540 D, 19TH ED.			NELAC:Y
Analyst: C. ANYANWUTAKU	Analysis Date: 26-MAR-13 19:00		Test: G403.8.0
Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	6	1	mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature 5.6 C.
Sample chain of custody number 088139.

Approved by: CHRISTOPHER BOYLE 02-APR-13

HERITAGE
ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	22-MAR-13	A978639
	Completed	**PO Number**
	PROCESSING	BL-0396
	Printed	**Sampled**
	02-APR-13	21-MAR-13 10:55

Report To	Bill To
RUSS CEPKO CBS CORP - NATIONAL CITY CENTER 20 STANWIX STREET 10TH FLOOR PITTSBURG, PA 15222-1384	BETH STEIGERWALD CBS CORPORATION 20 STANWIX STREET 10TH FLOOR PITTSBURGH, PA 15222

Sample Description

CLIENT ID: NL5941
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 2226 - CBS CORPORATION
DATA PACKAGE #: 64435
MATRIX: WS
LOCATION: NEALS LANDFILL

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: T. WATSON | Analysis Date: 25-MAR-13 | Instrument: PREP | Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082A NELAC:Y

Analyst: A. LEACH | Analysis Date: 27-MAR-13 14:26 | Instrument: GC/ECD | Test: O301.7.0

Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P230.1.0

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.10	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	0.53	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	96.0		% Rec
...			
SUMMATION OF AROCLORS	0.53	0.10	ug/L

HERITAGE
ENVIRONMENTAL SERVICES

Sample ID: A978639 NL5941

TOTAL SUSPENDED SOLIDS DRIED AT 103-105 DEGREES C SM 2540 D, 19TH ED.			NELAC:Y
Analyst: C. ANYANWUTAKU	Analysis Date: 26-MAR-13 19:00		Test: G403.8.0
Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	7	1	mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature 5.6 C.
Sample chain of custody number 088139.

Approved by: CHRISTOPHER BOYLE 02-APR-13

HERITAGE
ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	23-APR-13	A981233
	Completed	**PO Number**
	PROCESSING	BL-0396
	Printed	**Sampled**
	29-APR-13	23-APR-13 09:45

Report To	Bill To
RUSS CEPKO CBS CORP - NATIONAL CITY CENTER 20 STANWIX STREET 10TH FLOOR PITTSBURG, PA 15222-1384	BETH STEIGERWALD CBS CORPORATION 20 STANWIX STREET 10TH FLOOR PITTSBURGH, PA 15222

Sample Description

CLIENT ID: NL5942
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 2226 - CBS CORPORATION
DATA PACKAGE #: 64563
MATRIX: WS
LOCATION: NEALS LANDFILL

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: B. WOOD | Analysis Date: 24-APR-13 | Instrument: PREP | Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	2000		mL
FINAL VOLUME	1.0		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082A NELAC:Y

Analyst: T. WATSON | Analysis Date: 25-APR-13 15:34 | Instrument: GC/ECD | Test: O301.7.0

Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P230.1.0

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.01	ug/L
PCB AROCLOR 1221	BDL	0.01	ug/L
PCB AROCLOR 1232	BDL	0.01	ug/L
PCB AROCLOR 1242	0.059	0.01	ug/L
PCB AROCLOR 1248	BDL	0.01	ug/L
PCB AROCLOR 1254	BDL	0.01	ug/L
PCB AROCLOR 1260	BDL	0.01	ug/L
PCB AROCLOR 1262	BDL	0.01	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	68.0		% Rec
...			
SUMMATION OF AROCLORS	0.059	0.01	ug/L

HERITAGE
ENVIRONMENTAL SERVICES

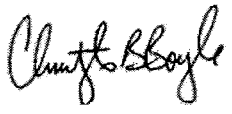
Sample ID: A981233 NL5942

TOTAL SUSPENDED SOLIDS DRIED AT 103-105 DEGREES C SM 2540 D, 19TH ED.			NELAC:Y
Analyst: C. ANYANWUTAKU	Analysis Date: 24-APR-13 15:30		Test: G403.8.0
Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	1	1	mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature 3 C.
Sample chain of custody number 088170.



Approved by: CHRISTOPHER BOYLE 29-APR-13

HERITAGE ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	23-APR-13	A981234
	Completed	**PO Number**
	PROCESSING	BL-0396
	Printed	**Sampled**
	29-APR-13	23-APR-13 09:55

Report To	Bill To
RUSS CEPKO CBS CORP - NATIONAL CITY CENTER 20 STANWIX STREET 10TH FLOOR PITTSBURG, PA 15222-1384	BETH STEIGERWALD CBS CORPORATION 20 STANWIX STREET 10TH FLOOR PITTSBURGH, PA 15222

Sample Description

CLIENT ID: NL5943
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 2226 - CBS CORPORATION
DATA PACKAGE #: 64563
MATRIX: WS
LOCATION: NEALS LANDFILL

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: C. HIPSKIND | Analysis Date: 24-APR-13 | Instrument: PREP | Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	800		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082A NELAC:Y

Analyst: T. WATSON | Analysis Date: 25-APR-13 15:34 | Instrument: GC/ECD | Test: O301.7.0

Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P230.1.0

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.10	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	BDL	0.10	ug/L
PCB AROCLOR 1248	0.11	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	90.0		% Rec
...			
SUMMATION OF AROCLORS	0.11	0.10	ug/L

HERITAGE
ENVIRONMENTAL SERVICES

Sample ID: A981234 NL5943

TOTAL SUSPENDED SOLIDS DRIED AT 103-105 DEGREES C SM 2540 D, 19TH ED.			NELAC:Y
Analyst: C. ANYANWUTAKU	Analysis Date: 24-APR-13 15:30		Test: G403.8.0
Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	BDL	1	mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature 3 C.
Sample chain of custody number 088170.

Approved by: CHRISTOPHER BOYLE 29-APR-13

HERITAGE
ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	23-APR-13	A981235
	Completed	**PO Number**
	PROCESSING	BL-0396
	Printed	**Sampled**
	29-APR-13	23-APR-13 10:00

Report To	Bill To
RUSS CEPKO CBS CORP - NATIONAL CITY CENTER 20 STANWIX STREET 10TH FLOOR PITTSBURG, PA 15222-1384	BETH STEIGERWALD CBS CORPORATION 20 STANWIX STREET 10TH FLOOR PITTSBURGH, PA 15222

Sample Description

CLIENT ID: NL5944
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 2226 - CBS CORPORATION
DATA PACKAGE #: 64563
MATRIX: WS
LOCATION: NEALS LANDFILL

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: C. HIPSKIND Analysis Date: 24-APR-13 Instrument: PREP Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082A NELAC:Y

Analyst: T. WATSON Analysis Date: 25-APR-13 15:34 Instrument: GC/ECD Test: O301.7.0

Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P230.1.0

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.10	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	BDL	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	70.0		% Rec
...			
SUMMATION OF AROCLORS	BDL	0.10	ug/L

HERITAGE
ENVIRONMENTAL SERVICES

Sample ID: A981235 NL5944

TOTAL SUSPENDED SOLIDS DRIED AT 103-105 DEGREES C SM 2540 D, 19TH ED.			NELAC:Y
Analyst: C. ANYANWUTAKU	Analysis Date: 24-APR-13 15:30		Test: G403.8.0
Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	BDL	1	mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature 3 C.
Sample chain of custody number 088170.

Approved by: CHRISTOPHER BOYLE 29-APR-13

HERITAGE
ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	23-APR-13	A981236
	Completed	**PO Number**
	PROCESSING	BL-0396
	Printed	**Sampled**
	29-APR-13	23-APR-13 10:10

Report To	Bill To
RUSS CEPKO CBS CORP - NATIONAL CITY CENTER 20 STANWIX STREET 10TH FLOOR PITTSBURG, PA 15222-1384	BETH STEIGERWALD CBS CORPORATION 20 STANWIX STREET 10TH FLOOR PITTSBURGH, PA 15222

Sample Description

CLIENT ID: NL5945
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 2226 - CBS CORPORATION
DATA PACKAGE #: 64563
MATRIX: WS
LOCATION: NEALS LANDFILL

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: B. WOOD | Analysis Date: 24-APR-13 | Instrument: PREP | Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082A NELAC:Y

Analyst: T. WATSON | Analysis Date: 25-APR-13 15:34 | Instrument: GC/ECD | Test: O301.7.0

Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P230.1.0

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.10	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	0.54	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	90.0		% Rec
...			
SUMMATION OF AROCLORS	0.54	0.10	ug/L

HERITAGE
ENVIRONMENTAL SERVICES

Sample ID: A981236 NL5945

TOTAL SUSPENDED SOLIDS DRIED AT 103-105 DEGREES C SM 2540 D, 19TH ED.			NELAC:Y
Analyst: C. ANYANWUTAKU	Analysis Date: 24-APR-13 15:30		Test: G403.8.0
Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	4	1	mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature 3 C.
Sample chain of custody number 088170.

Approved by: CHRISTOPHER BOYLE 29-APR-13

HERITAGE
ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	23-APR-13	A981237
	Completed	**PO Number**
	PROCESSING	BL-0396
	Printed	**Sampled**
	29-APR-13	23-APR-13 10:10

Report To	Bill To
RUSS CEPKO CBS CORP - NATIONAL CITY CENTER 20 STANWIX STREET 10TH FLOOR PITTSBURG, PA 15222-1384	BETH STEIGERWALD CBS CORPORATION 20 STANWIX STREET 10TH FLOOR PITTSBURGH, PA 15222

Sample Description

CLIENT ID: NL5946
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 2226 - CBS CORPORATION
DATA PACKAGE #: 64563
MATRIX: WS
LOCATION: NEALS LANDFILL

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: B. WOOD | Analysis Date: 24-APR-13 | Instrument: PREP | Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082A NELAC:Y

Analyst: T. WATSON | Analysis Date: 25-APR-13 15:34 | Instrument: GC/ECD | Test: O301.7.0

Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P230.1.0

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.10	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	0.51	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	82.0		% Rec
...			
SUMMATION OF AROCLORS	0.51	0.10	ug/L

HERITAGE
ENVIRONMENTAL SERVICES

Sample ID: A981237 NL5946

TOTAL SUSPENDED SOLIDS DRIED AT 103-105 DEGREES C SM 2540 D, 19TH ED.			NELAC:Y
Analyst: C. ANYANWUTAKU	Analysis Date: 24-APR-13 15:30		Test: G403.8.0
Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	5	1	mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature 3 C.
Sample chain of custody number 088170.

Approved by: CHRISTOPHER BOYLE 29-APR-13

HERITAGE
ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	15-MAY-13	A983409
	Completed	**PO Number**
	PROCESSING	BL-0396
	Printed	**Sampled**
	23-MAY-13	14-MAY-13 09:20

Report To	Bill To
RUSS CEPKO CBS CORP - NATIONAL CITY CENTER 20 STANWIX STREET 10TH FLOOR PITTSBURG, PA 15222-1384	BETH STEIGERWALD CBS CORPORATION 20 STANWIX STREET 10TH FLOOR PITTSBURGH, PA 15222

Sample Description

CLIENT ID: NL5948
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 2226 - CBS CORPORATION
DATA PACKAGE #: 64662
MATRIX: WS
LOCATION: NEAL'S LANDFILL

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: C. HIPSKIND | Analysis Date: 16-MAY-13 | Instrument: PREP | Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	2000		mL
FINAL VOLUME	1.0		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082A NELAC:Y

Analyst: E. WERNZ | Analysis Date: 16-MAY-13 14:14 | Instrument: GC/ECD | Test: O301.7.0

Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P230.1.0

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.01	ug/L
PCB AROCLOR 1221	BDL	0.01	ug/L
PCB AROCLOR 1232	BDL	0.01	ug/L
PCB AROCLOR 1242	BDL	0.01	ug/L
PCB AROCLOR 1248	0.031	0.01	ug/L
PCB AROCLOR 1254	BDL	0.01	ug/L
PCB AROCLOR 1260	BDL	0.01	ug/L
PCB AROCLOR 1262	BDL	0.01	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	66.0		% Rec
...			
SUMMATION OF AROCLORS	0.031	0.01	ug/L

HERITAGE
ENVIRONMENTAL SERVICES

Sample ID: A983409 NL5948

Aroclor 1248 is degraded.

TOTAL SUSPENDED SOLIDS DRIED AT 103-105 DEGREES C SM 2540 D, 19TH ED. NELAC Y

Analyst: C. ANYANWUTAKU Analysis Date: 17-MAY-13 12:00 Test: G403.8.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	2	1	mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature 2.2 C.
Sample chain of custody number 088174.

Approved by: CHRISTOPHER BOYLE 21-MAY-13

HERITAGE
ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	15-MAY-13	A983410
	Completed	**PO Number**
	PROCESSING	BL-0396
	Printed	**Sampled**
	23-MAY-13	14-MAY-13 09:35

Report To	Bill To
RUSS CEPKO CBS CORP - NATIONAL CITY CENTER 20 STANWIX STREET 10TH FLOOR PITTSBURG, PA 15222-1384	BETH STEIGERWALD CBS CORPORATION 20 STANWIX STREET 10TH FLOOR PITTSBURGH, PA 15222

Sample Description

CLIENT ID: NL5949
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 2226 - CBS CORPORATION
DATA PACKAGE #: 64662
MATRIX: WS
LOCATION: NEAL'S LANDFILL

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: C. HIPSKIND | Analysis Date: 16-MAY-13 | Instrument: PREP | Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082A NELAC:Y

Analyst: E. WERNZ | Analysis Date: 16-MAY-13 14:14 | Instrument: GC/ECD | Test: O301.7.0

Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P230.1.0

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.10	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	BDL	0.10	ug/L
PCB AROCLOR 1248	0.13	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	104.0		% Rec
...			
SUMMATION OF AROCLORS	0.13	0.10	ug/L

HERITAGE
ENVIRONMENTAL SERVICES

Sample ID: A983410 NL5949

Aroclor 1248 is degraded.

TOTAL SUSPENDED SOLIDS DRIED AT 103-105 DEGREES C SM 2540 D, 19TH ED. NELAC:Y

Analyst: C. ANYANWUTAKU Analysis Date: 17-MAY-13 12:00 Test: G403.8.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	2	1	mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature 2.2 C.
Sample chain of custody number 088174.

Approved by: CHRISTOPHER BOYLE 21-MAY-13

HERITAGE
ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	15-MAY-13	A983411
	Completed	**PO Number**
	PROCESSING	BL-0396
	Printed	**Sampled**
	23-MAY-13	14-MAY-13 09:40

Report To	Bill To
RUSS CEPKO CBS CORP - NATIONAL CITY CENTER 20 STANWIX STREET 10TH FLOOR PITTSBURG, PA 15222-1384	BETH STEIGERWALD CBS CORPORATION 20 STANWIX STREET 10TH FLOOR PITTSBURGH, PA 15222

Sample Description

CLIENT ID: NL5950
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 2226 - CBS CORPORATION
DATA PACKAGE #: 64662
MATRIX: WS
LOCATION: NEAL'S LANDFILL

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: K. VEST | Analysis Date: 16-MAY-13 | Instrument: PREP | Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082A NELAC:Y

Analyst: E. WERNZ | Analysis Date: 17-MAY-13 14:14 | Instrument: GC/ECD | Test: O301.7.0

Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P230.1.0

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.10	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	BDL	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	98.0		% Rec
...			
SUMMATION OF AROCLORS	BDL	0.10	ug/L

HERITAGE
ENVIRONMENTAL SERVICES

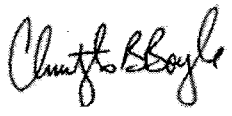
Sample ID: A983411 NL5950

TOTAL SUSPENDED SOLIDS DRIED AT 103-105 DEGREES C SM 2540 D, 19TH ED.			NELAC:Y
Analyst: C. ANYANWUTAKU	Analysis Date: 17-MAY-13 12:00		Test: G403.8.0
Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	BDL	1	mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature 2.2 C.
Sample chain of custody number 088174.



Approved by: CHRISTOPHER BOYLE 21-MAY-13

HERITAGE ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	15-MAY-13	A983412
	Completed	**PO Number**
	PROCESSING	BL-0396
	Printed	**Sampled**
	23-MAY-13	14-MAY-13 09:50

Report To	Bill To
RUSS CEPKO CBS CORP - NATIONAL CITY CENTER 20 STANWIX STREET 10TH FLOOR PITTSBURG, PA 15222-1384	BETH STEIGERWALD CBS CORPORATION 20 STANWIX STREET 10TH FLOOR PITTSBURGH, PA 15222

Sample Description

CLIENT ID: NL5951
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 2226 - CBS CORPORATION
DATA PACKAGE #: 64662
MATRIX: WS
LOCATION: NEAL'S LANDFILL

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: K. VEST | Analysis Date: 16-MAY-13 | Instrument: PREP | Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082A NELAC:Y

Analyst: E. WERNZ | Analysis Date: 17-MAY-13 14:14 | Instrument: GC/ECD | Test: O301.7.0

Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P230.1.0

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.10	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	0.56	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	90.0		% Rec
...			
SUMMATION OF AROCLORS	0.56	0.10	ug/L

HERITAGE
ENVIRONMENTAL SERVICES

Sample ID: A983412 NL5951

AR1242 is degraded

TOTAL SUSPENDED SOLIDS DRIED AT 103-105 DEGREES C SM 2540 D, 19TH ED.			NELAC:Y
Analyst: C. ANYANWUTAKU	Analysis Date: 17-MAY-13 12:00		Test: G403.8.0
Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	4	1	mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature 2.2 C.
Sample chain of custody number 088174.

Approved by: CHRISTOPHER BOYLE 21-MAY-13

HERITAGE
ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	15-MAY-13	A983413
	Completed	**PO Number**
	PROCESSING	BL-0396
	Printed	**Sampled**
	23-MAY-13	14-MAY-13 09:50

Report To	Bill To
RUSS CEPKO CBS CORP - NATIONAL CITY CENTER 20 STANWIX STREET 10TH FLOOR PITTSBURG, PA 15222-1384	BETH STEIGERWALD CBS CORPORATION 20 STANWIX STREET 10TH FLOOR PITTSBURGH, PA 15222

Sample Description

CLIENT ID: NL5952
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 2226 - CBS CORPORATION
DATA PACKAGE #: 64662
MATRIX: WS
LOCATION: NEAL'S LANDFILL

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: C. HIPSKIND | Analysis Date: 16-MAY-13 | Instrument: PREP | Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082A NELAC:Y

Analyst: E. WERNZ | Analysis Date: 17-MAY-13 14:14 | Instrument: GC/ECD | Test: O301.7.0

Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P230.1.0

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.10	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	0.61	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	92.0		% Rec
...			
SUMMATION OF AROCLORS	0.61	0.10	ug/L

HERITAGE
ENVIRONMENTAL SERVICES

Sample ID: A983413 NL5952

AR1242 is degraded

TOTAL SUSPENDED SOLIDS DRIED AT 103-105 DEGREES C SM 2540 D, 19TH ED.			NELAC:Y
Analyst: C. ANYANWUTAKU	Analysis Date: 17-MAY-13 12:00		Test: G403.8.0
Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	4	1	mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature 2.2 C.
Sample chain of custody number 088174.

Approved by: CHRISTOPHER BOYLE 21-MAY-13

APPENDIX C

Data Validation

Validation Results
March 21, 2013
Neal's Landfill GWM Samples

1. Validation of the following samples has been completed:

   - **NL 5937-NL5941**

2. Validation was performed per the requirements for level 4 data in the project QAPjP. This includes a check for; Holding Time, Calibration, Blank Contamination, Precision, Accuracy, and Accuracy of Nominal Reporting Limits against method requirements.

3. Based on this review **no data qualifications are recommended.**

4. The QAPjP requires an assessment of the overall data quality with respect to Precision, Accuracy, Representativeness, Completeness and Comparability (PARCC).

   o Precision and accuracy: Precision and accuracy were accessed by reviewing the lab performance on lab spiked samples, lab spike duplicates and field duplicates. All requirements were met.

   o Representativeness: The representativeness requirement involves an assessment of the field sampling and lab analytical techniques. The fields sampling locations and techniques as well as lab procedures were in accordance with the approved sampling plan and QAPjP. Therefore the representativeness requirements were met.

   o Completeness: The completeness goal for the project was for all project data to be 90% accepted. Completeness is calculated by dividing the total number of acceptable analyses by the total performed. An acceptable analysis is defined as one that conformed to QC protocols and is not rejected. All these analyses were accepted. The project completeness goal has been met to date.

   o Comparability: All the samples taken, analyzed and validated by CBS were taken by CBS or it's contractors sampling crews using the same procedures as previous samples at this location. These samples were analyzed by Heritage Labs. Care should be taken when attempting to trend Heritage sample results with other labs using slightly different procedures. Overall these results should be directly comparable to other Heritage lab results from these locations.

Overall, the main objective of the sampling event was to determine if PCBs are present at a concentration of **0.1 ppb** or more **(0.01 ppb for CB Pool VP)**. This data is of sufficient quality to satisfy this goal.

Validation Results
April 23, 2013
Heritage SDG #64563
Neal's Landfill GWM Samples

1. Validation of the following samples has been completed:

   - **NL 5942-NL5947**

2. Validation was performed per the requirements for level 4 data in the project QAPjP. This includes a check for; Holding Time, Calibration, Blank Contamination, Precision, Accuracy, and Accuracy of Nominal Reporting Limits against method requirements.

3. Based on this review **no data qualifications are recommended.**

4. The QAPjP requires an assessment of the overall data quality with respect to Precision, Accuracy, Representativeness, Completeness and Comparability (PARCC).

   o Precision and accuracy: Precision and accuracy were accessed by reviewing the lab performance on lab spiked samples, lab spike duplicates and field duplicates. All requirements were met.

   o Representativeness: The representativeness requirement involves an assessment of the field sampling and lab analytical techniques. The fields sampling locations and techniques as well as lab procedures were in accordance with the approved sampling plan and QAPjP. Therefore the representativeness requirements were met.

   o Completeness: The completeness goal for the project was for all project data to be 90% accepted. Completeness is calculated by dividing the total number of acceptable analyses by the total performed. An acceptable analysis is defined as one that conformed to QC protocols and is not rejected. All these analyses were accepted. The project completeness goal has been met to date.

   o Comparability: All the samples taken, analyzed and validated by CBS were taken by CBS or it's contractors sampling crews using the same procedures as previous samples at this location. These samples were analyzed by Heritage Labs. Care should be taken when attempting to trend Heritage sample results with other labs using slightly different procedures. Overall these results should be directly comparable to other Heritage lab results from these locations.

Overall, the main objective of the sampling event was to determine if PCBs are present at a concentration of **0.1 ppb** or more **(0.01 ppb for CB Pool VP)**. This data is of sufficient quality to satisfy this goal.

Validation Results
May 14, 2013
Heritage SDG #64662
Neal's Landfill GWM Samples

1. Validation of the following samples has been completed:

   - **NL 5948-NL5953**

2. Validation was performed per the requirements for level 4 data in the project QAPjP. This includes a check for; Holding Time, Calibration, Blank Contamination, Precision, Accuracy, and Accuracy of Nominal Reporting Limits against method requirements.

3. Based on this review **no data qualifications are recommended.**

4. The QAPjP requires an assessment of the overall data quality with respect to Precision, Accuracy, Representativeness, Completeness and Comparability (PARCC).

   o Precision and accuracy: Precision and accuracy were accessed by reviewing the lab performance on lab spiked samples, lab spike duplicates and field duplicates. All requirements were met.

   o Representativeness: The representativeness requirement involves an assessment of the field sampling and lab analytical techniques. The fields sampling locations and techniques as well as lab procedures were in accordance with the approved sampling plan and QAPjP. Therefore the representativeness requirements were met.

   o Completeness: The completeness goal for the project was for all project data to be 90% accepted. Completeness is calculated by dividing the total number of acceptable analyses by the total performed. An acceptable analysis is defined as one that conformed to QC protocols and is not rejected. All these analyses were accepted. The project completeness goal has been met to date.

   o Comparability: All the samples taken, analyzed and validated by CBS were taken by CBS or it's contractors sampling crews using the same procedures as previous samples at this location. These samples were analyzed by Heritage Labs. Care should be taken when attempting to trend Heritage sample results with other labs using slightly different procedures. Overall these results should be directly comparable to other Heritage lab results from these locations.

Overall, the main objective of the sampling event was to determine if PCBs are present at a concentration of **0.1 ppb** or more **(0.01 ppb for CB Pool VP)**. This data is of sufficient quality to satisfy this goal.