



August 30, 2019

Mr. Jason A. Miller
Land Protection Manager
Commonwealth of Virginia
Department of Environmental Quality
Piedmont Regional Office
4949-A Cox Road
Glen Allen, Virginia 23060

**Re: Shoosmith Sanitary Landfill, Permit No. 587
Table 3.1 Column B Constituent Detection Notification
Third Quarter 2019 Groundwater Monitoring Event
Project No. 2190527.00/Phase 01**

Dear Mr. Miller:

On behalf of Shoosmith Bros., Inc., and in accordance with 9VAC20-81-250.B.3.c.(1), LaBella Associates, D.P.C., P.C. (LaBella) is hereby notifying the Virginia Department of Environmental Quality (DEQ) of detections of Virginia Solid Waste Management Regulations (VSWMR) Table 3.1 Column B constituents at the Shoosmith Sanitary Landfill during the third quarter 2019 compliance monitoring event. The complete laboratory data packages for the third quarter 2019 monitoring event were received on August 9, 20, 21, and 23, 2019.

The Column B constituents detected during the third quarter 2019 monitoring event are listed on the attached Analysis Detects Report, provided by Air, Water, and Soil Laboratories, Inc. (AWS) and Pace Analytical Services, LLC (Pace). **As shown, there were no new Column B constituents detected during the third quarter 2019 groundwater monitoring event.** Including the results from the third quarter 2019 groundwater monitoring events, the current list of Table 3.1 Column B detected constituents includes: cyanide; tin; bis(2-ethylhexyl)phthalate; di-n-butylphthalate; dichlorodifluoromethane; heptachlor; endosulfan I; kepone; sulfide; naphthalene; mercury; 1,3 dichlorobenzene; total cresols; and m,p-cresols.

Please note that the analytical data provided by the laboratory has not undergone data validation. Data validation will be completed 30 days from the receipt of the laboratory data package.



Please contact me at rsmith@labellapc.com or at (804) 355-4520 if you have any questions or comments.

Respectfully,
LaBella Associates

Ryan Smith
Technical Consultant

Attachment: AWS Analysis Detects Reports
Pace Report of Laboratory Analysis

cc: Bruce Coble, Shoosmith Bros., Inc.
Dean Starook, DEQ-PRO
Geoff Christe, DEQ - CO

P:\Shoosmith\Shoosmith Sanitary LF\Groundwater\GMR\2019\07_2019\Report Correspondence\PN 587 - Column B detects letter.docx



Air Water & Soil Laboratories, Inc.
 1941 Reymet Road
 Richmond, VA 23237
 (804)-358-8295 - Telephone
 (804)-358-8297 - Fax

Analysis Detects Report

Client Name: LaBella Associates, D.P.C.
 Client Site ID: Shoosmith Sanitary Landfill
 Submitted To: Ryan Smith

Date Issued: 8/21/2019 10:36:46AM

Laboratory Sample ID: 19G1158-01 Client Sample ID: MW-115

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	01	SW6010C	165		5.0	10.0	1	ug/L
Cobalt	01	SW6010C	8.7		2.0	4.0	1	ug/L
Nickel	01	SW6010C	8.2	J	2.0	10.0	1	ug/L
Zinc	01	SW6010C	33.7		10.0	10.0	1	ug/L

Laboratory Sample ID: 19G1158-02 Client Sample ID: MW-107

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Arsenic	02	SW6020A	6.9		1.0	5.0	1	ug/L
Barium	02	SW6010C	75.0		5.0	10.0	1	ug/L
Benzene	02	SW8260B	2.28		0.40	1.00	1	ug/L
cis-1,2-Dichloroethylene	02	SW8260B	2.56		0.40	1.00	1	ug/L
Vinyl chloride	02	SW8260B	1.41		0.50	0.50	1	ug/L



Analysis Detects Report

Client Name: LaBella Associates, D.P.C.
 Client Site ID: Shoosmith Sanitary Landfill
 Submitted To: Ryan Smith

Date Issued: 8/21/2019 10:36:46AM

Laboratory Sample ID: 19G1158-03 Client Sample ID: MW-102

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	03	SW6010C	80.0		5.0	10.0	1	ug/L
Copper	03	SW6010C	6.3	J	3.0	10.0	1	ug/L
Mercury	03	SW7470A	0.39		0.20	0.20	1	ug/L
Nickel	03	SW6010C	16.1		2.0	10.0	1	ug/L
Zinc	03	SW6010C	18.1		10.0	10.0	1	ug/L
1,4-Dichlorobenzene	03	SW8260B	1.54		0.40	1.00	1	ug/L
Benzene	03	SW8260B	2.73		0.40	1.00	1	ug/L
cis-1,2-Dichloroethylene	03	SW8260B	0.42	J	0.40	1.00	1	ug/L
Tetrachloroethylene (PCE)	03	SW8260B	0.81	J	0.40	1.00	1	ug/L

Laboratory Sample ID: 19G1158-04 Client Sample ID: MW-101R2

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	04	SW6010C	227		5.0	10.0	1	ug/L
Cobalt	04	SW6010C	2.3	J	2.0	4.0	1	ug/L
Nickel	04	SW6010C	65.7		2.0	10.0	1	ug/L
Zinc	04	SW6010C	20.3		10.0	10.0	1	ug/L



Analysis Detects Report

Client Name: LaBella Associates, D.P.C.
 Client Site ID: Shoosmith Sanitary Landfill
 Submitted To: Ryan Smith

Date Issued: 8/21/2019 10:36:46AM

Laboratory Sample ID: 19G1158-05 Client Sample ID: MW-19R

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Arsenic	05	SW6020A	2.3	J	1.0	5.0	1	ug/L
Barium	05	SW6010C	218		5.0	10.0	1	ug/L
Cadmium	05	SW6010C	3.2	J	2.0	4.0	1	ug/L
Chromium	05	SW6010C	4.1	J	4.0	10.0	1	ug/L
Copper	05	SW6010C	31.5		3.0	10.0	1	ug/L
Nickel	05	SW6010C	7.9	J	2.0	10.0	1	ug/L
Zinc	05	SW6010C	30.0		10.0	10.0	1	ug/L
1,4-Dichlorobenzene	05	SW8260B	1.54		0.40	1.00	1	ug/L
Benzene	05	SW8260B	5.72		0.40	1.00	1	ug/L
cis-1,2-Dichloroethylene	05	SW8260B	1.01		0.40	1.00	1	ug/L
Ethylbenzene	05	SW8260B	0.43	J	0.40	1.00	1	ug/L
o-Xylene	05	SW8260B	1.27		0.40	1.00	1	ug/L
Xylenes, Total	05	SW8260B	1.83	J	1.00	3.00	1	ug/L

Laboratory Sample ID: 19G1158-06 Client Sample ID: MW-20

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	06	SW6010C	278		5.0	10.0	1	ug/L

Laboratory Sample ID: 19G1158-07 Client Sample ID: MW-104D

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	07	SW6010C	221		5.0	10.0	1	ug/L
Nickel	07	SW6010C	6.5	J	2.0	10.0	1	ug/L
Benzene	07	SW8260B	1.90		0.40	1.00	1	ug/L
cis-1,2-Dichloroethylene	07	SW8260B	0.50	J	0.40	1.00	1	ug/L



Analysis Detects Report

Client Name: LaBella Associates, D.P.C.
 Client Site ID: Shoosmith Sanitary Landfill
 Submitted To: Ryan Smith

Date Issued: 8/21/2019 10:36:46AM

Laboratory Sample ID: 19G1158-08

Client Sample ID: MW-109

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	08	SW6010C	83.9		5.0	10.0	1	ug/L

Laboratory Sample ID: 19G1158-09

Client Sample ID: MW-110

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	09	SW6010C	126		5.0	10.0	1	ug/L

Laboratory Sample ID: 19G1158-10

Client Sample ID: MW-22

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	10	SW6010C	186		5.0	10.0	1	ug/L

Laboratory Sample ID: 19G1158-11

Client Sample ID: MW-16R2

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	11	SW6010C	58.7		5.0	10.0	1	ug/L



Analysis Detects Report

Client Name: LaBella Associates, D.P.C.
 Client Site ID: Shoosmith Sanitary Landfill
 Submitted To: Ryan Smith

Date Issued: 8/21/2019 10:36:46AM

Laboratory Sample ID: 19G1188-01 Client Sample ID: MW-8R2

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	01	SW6010C	232		5.0	10.0	1	ug/L
1,1-Dichloroethane	01	SW8260B	0.90	J	0.60	1.00	1	ug/L
Benzene	01	SW8260B	0.48	J	0.40	1.00	1	ug/L
Chlorobenzene	01	SW8260B	1.28		0.40	1.00	1	ug/L
cis-1,2-Dichloroethylene	01	SW8260B	3.41		0.40	1.00	1	ug/L

Laboratory Sample ID: 19G1188-02 Client Sample ID: MW-5R2

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	02	SW6010C	159		5.0	10.0	1	ug/L
Cobalt	02	SW6010C	8.4		2.0	4.0	1	ug/L
Nickel	02	SW6010C	16.1		2.0	10.0	1	ug/L
Zinc	02	SW6010C	15.1		10.0	10.0	1	ug/L
1,2-Dichlorobenzene	02	SW8260B	0.52	J	0.40	1.00	1	ug/L
Benzene	02	SW8260B	0.94	J	0.40	1.00	1	ug/L
cis-1,2-Dichloroethylene	02	SW8260B	3.13		0.40	1.00	1	ug/L

Analysis Detects Report

Client Name: LaBella Associates, D.P.C.
 Client Site ID: Shoosmith Sanitary Landfill
 Submitted To: Ryan Smith

Date Issued: 8/21/2019 10:36:46AM

Laboratory Sample ID: 19G1188-03 Client Sample ID: MW-18

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	03	SW6010C	435		5.0	10.0	1	ug/L
Cobalt	03	SW6010C	5.1		2.0	4.0	1	ug/L
Nickel	03	SW6010C	5.7	J	2.0	10.0	1	ug/L
Zinc	03	SW6010C	13.1		10.0	10.0	1	ug/L
1,4-Dichlorobenzene	03	SW8260B	1.02		0.40	1.00	1	ug/L
Benzene	03	SW8260B	2.49		0.40	1.00	1	ug/L
cis-1,2-Dichloroethylene	03	SW8260B	1.39		0.40	1.00	1	ug/L
Vinyl chloride	03	SW8260B	0.71		0.50	0.50	1	ug/L

Laboratory Sample ID: 19G1188-04 Client Sample ID: MW-3R

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	04	SW6010C	114		5.0	10.0	1	ug/L
Cobalt	04	SW6010C	4.5		2.0	4.0	1	ug/L
Nickel	04	SW6010C	3.2	J	2.0	10.0	1	ug/L
1,4-Dichlorobenzene	04	SW8260B	1.18		0.40	1.00	1	ug/L
Benzene	04	SW8260B	0.90	J	0.40	1.00	1	ug/L

Laboratory Sample ID: 19G1188-05 Client Sample ID: MW-17R

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	05	SW6010C	215		5.0	10.0	1	ug/L
1,1-Dichloroethane	05	SW8260B	1.12		0.60	1.00	1	ug/L
1,4-Dichlorobenzene	05	SW8260B	0.82	J	0.40	1.00	1	ug/L
Benzene	05	SW8260B	0.99	J	0.40	1.00	1	ug/L
cis-1,2-Dichloroethylene	05	SW8260B	5.00		0.40	1.00	1	ug/L



Analysis Detects Report

Client Name: LaBella Associates, D.P.C.
 Client Site ID: Shoosmith Sanitary Landfill
 Submitted To: Ryan Smith

Date Issued: 8/21/2019 10:36:46AM

Laboratory Sample ID: 19G1188-06 **Client Sample ID: MW-13R**

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	06	SW6010C	96.4		5.0	10.0	1	ug/L
Cobalt	06	SW6010C	4.9		2.0	4.0	1	ug/L
Nickel	06	SW6010C	6.8	J	2.0	10.0	1	ug/L

Laboratory Sample ID: 19G1188-07 **Client Sample ID: MW-23**

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	07	SW6010C	56.1		5.0	10.0	1	ug/L
Cadmium	07	SW6010C	3.0	J	2.0	4.0	1	ug/L
Cobalt	07	SW6010C	8.3		2.0	4.0	1	ug/L
Copper	07	SW6010C	137		3.0	10.0	1	ug/L
Nickel	07	SW6010C	28.4		2.0	10.0	1	ug/L
Zinc	07	SW6010C	73.8		10.0	10.0	1	ug/L

Laboratory Sample ID: 19G1189-01 **Client Sample ID: MW-21**

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Arsenic	01	SW6020A	1.3	J	1.0	5.0	1	ug/L
Barium	01	SW6010C	46.0		5.0	10.0	1	ug/L
Chromium	01	SW6010C	6.3	J	4.0	10.0	1	ug/L



Analysis Detects Report

Client Name: LaBella Associates, D.P.C.
 Client Site ID: Shoosmith Sanitary Landfill
 Submitted To: Ryan Smith

Date Issued: 8/21/2019 10:36:46AM

Laboratory Sample ID: 19G1189-02

Client Sample ID: MW-7

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	02	SW6010C	55.4		5.0	10.0	1	ug/L
Cobalt	02	SW6010C	2.3	J	2.0	4.0	1	ug/L

Laboratory Sample ID: 19G1189-03

Client Sample ID: MW-11

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	03	SW6010C	47.4		5.0	10.0	1	ug/L

Laboratory Sample ID: 19G1189-04

Client Sample ID: MW-6

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	04	SW6010C	116		5.0	10.0	1	ug/L
Cobalt	04	SW6010C	2.2	J	2.0	4.0	1	ug/L
Lead	04	SW6020A	6.43	J	6.00	10.0	1	ug/L
Nickel	04	SW6010C	3.0	J	2.0	10.0	1	ug/L

Laboratory Sample ID: 19G1189-05

Client Sample ID: MW-108

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Barium	05	SW6010C	26.8		5.0	10.0	1	ug/L

Note that this report is not the "Certificate of Analysis". This report only lists the target analytes that displayed concentrations that exceeded the detection limit specified for that analyte. For a complete listing of all analytes requested and the results of the analysis see the "Certificate of Analysis".



Air Water & Soil Laboratories, Inc.
 1941 Reymet Road
 Richmond, VA 23237
 (804)-358-8295 - Telephone
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Analysis Detects Report

Client Name: LaBella Associates, D.P.C.
 Client Site ID: Shoosmith
 Submitted To: Ryan Smith

Date Issued: 8/9/2019 2:04:08PM

Laboratory Sample ID: 19G1270-01 Client Sample ID: MW-103D

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Antimony	01	SW6020A	16.6		1.00	5.00	1	ug/L
Arsenic	01	SW6020A	1.9	J	1.0	5.0	1	ug/L
Barium	01	SW6010C	140		5.0	10.0	1	ug/L
Cobalt	01	SW6010C	4.0		2.0	4.0	1	ug/L
Nickel	01	SW6010C	4.0	J	2.0	10.0	1	ug/L
2-Butanone (MEK)	01	SW8260B	5.62		3.00	5.00	1	ug/L
Acetone	01	SW8260B	15.8		7.00	10.0	1	ug/L
Benzene	01	SW8260B	1.06		0.40	1.00	1	ug/L
cis-1,2-Dichloroethylene	01	SW8260B	1.61		0.40	1.00	1	ug/L
Ethylbenzene	01	SW8260B	2.52		0.40	1.00	1	ug/L
m+p-Xylenes	01	SW8260B	4.21		0.60	2.00	1	ug/L
o-Xylene	01	SW8260B	1.80		0.40	1.00	1	ug/L
Tetrachloroethylene (PCE)	01	SW8260B	0.60	J	0.40	1.00	1	ug/L
Toluene	01	SW8260B	8.64		0.50	1.00	1	ug/L
Xylenes, Total	01	SW8260B	6.01		1.00	3.00	1	ug/L

Note that this report is not the "Certificate of Analysis". This report only lists the target analytes that displayed concentrations that exceeded the detection limit specified for that analyte. For a complete listing of all analytes requested and the results of the analysis see the "Certificate of Analysis".



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 1941 Reymet Road
 Richmond, VA 23237
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Analysis Detects Report

Client Name: LaBella Associates, D.P.C.
 Client Site ID: Shoosmith
 Submitted To: Ryan Smith

Date Issued: 8/20/2019 2:51:11PM

Laboratory Sample ID: 19H0175-01

Client Sample ID: MW-114R

Parameter	Samp ID	Reference Method	Sample Results	Qual	LOD	LOQ	Dil. Factor	Units
Arsenic	01	SW6020A	4.7	J	1.0	5.0	1	ug/L
Barium	01	SW6010C	67.5		5.0	10.0	1	ug/L
Chromium	01	SW6010C	11.1		4.0	10.0	1	ug/L
Cobalt	01	SW6010C	14.2		2.0	4.0	1	ug/L
Copper	01	SW6010C	17.7		3.0	10.0	1	ug/L
Lead	01	SW6020A	6.44	J	6.00	10.0	1	ug/L
Nickel	01RE1	SW6010C	3.3	J	2.0	10.0	1	ug/L
Vanadium	01	SW6010C	19.9		8.0	10.0	1	ug/L
Zinc	01	SW6010C	18.6		10.0	10.0	1	ug/L
Acetone	01	SW8260B	7.99	J	7.00	10.0	1	ug/L

Note that this report is not the "Certificate of Analysis". This report only lists the target analytes that displayed concentrations that exceeded the detection limit specified for that analyte. For a complete listing of all analytes requested and the results of the analysis see the " Certificate of Analysis".

ANALYTICAL RESULTS

Project: Shoosmith Sanitary Landfill
Pace Project No.: 92440874

Sample: MW-114R **Lab ID: 92440874001** Collected: 08/09/19 08:45 Received: 08/09/19 09:35 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8081 OC Pesticides RVE Analytical Method: EPA 8081B Preparation Method: EPA 3510C									
Aldrin	ND	ug/L	0.050	0.022	1	08/13/19 15:58	08/17/19 23:31	309-00-2	
alpha-BHC	ND	ug/L	0.050	0.019	1	08/13/19 15:58	08/17/19 23:31	319-84-6	
beta-BHC	ND	ug/L	0.050	0.014	1	08/13/19 15:58	08/17/19 23:31	319-85-7	
delta-BHC	ND	ug/L	0.050	0.020	1	08/13/19 15:58	08/17/19 23:31	319-86-8	
gamma-BHC (Lindane)	ND	ug/L	0.050	0.012	1	08/13/19 15:58	08/17/19 23:31	58-89-9	
Chlordane (Technical)	ND	ug/L	0.20	0.20	1	08/13/19 15:58	08/17/19 23:31	57-74-9	
4,4'-DDD	ND	ug/L	0.050	0.0069	1	08/13/19 15:58	08/17/19 23:31	72-54-8	
4,4'-DDE	ND	ug/L	0.050	0.0064	1	08/13/19 15:58	08/17/19 23:31	72-55-9	
4,4'-DDT	ND	ug/L	0.050	0.018	1	08/13/19 15:58	08/17/19 23:31	50-29-3	
Dieldrin	ND	ug/L	0.050	0.0073	1	08/13/19 15:58	08/17/19 23:31	60-57-1	
Endosulfan I	ND	ug/L	0.050	0.0094	1	08/13/19 15:58	08/17/19 23:31	959-98-8	
Endosulfan II	ND	ug/L	0.050	0.0065	1	08/13/19 15:58	08/17/19 23:31	33213-65-9	
Endosulfan sulfate	ND	ug/L	0.050	0.0091	1	08/13/19 15:58	08/17/19 23:31	1031-07-8	
Endrin	ND	ug/L	0.050	0.0089	1	08/13/19 15:58	08/17/19 23:31	72-20-8	
Endrin aldehyde	ND	ug/L	0.050	0.013	1	08/13/19 15:58	08/17/19 23:31	7421-93-4	
Heptachlor	ND	ug/L	0.050	0.016	1	08/13/19 15:58	08/17/19 23:31	76-44-8	
Heptachlor epoxide	ND	ug/L	0.050	0.0097	1	08/13/19 15:58	08/17/19 23:31	1024-57-3	
Methoxychlor	ND	ug/L	0.15	0.033	1	08/13/19 15:58	08/17/19 23:31	72-43-5	L1
Toxaphene	ND	ug/L	0.20	0.20	1	08/13/19 15:58	08/17/19 23:31	8001-35-2	
Surrogates									
Tetrachloro-m-xylene (S)	82	%	10-130		1	08/13/19 15:58	08/17/19 23:31	877-09-8	
Decachlorobiphenyl (S)	72	%	10-130		1	08/13/19 15:58	08/17/19 23:31	2051-24-3	
8082 GCS PCB RVE Analytical Method: EPA 8082A Preparation Method: EPA 3510C									
PCB-1016 (Aroclor 1016)	ND	ug/L	0.50	0.22	1	08/13/19 15:58	08/14/19 16:33	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/L	0.50	0.32	1	08/13/19 15:58	08/14/19 16:33	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/L	0.50	0.21	1	08/13/19 15:58	08/14/19 16:33	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/L	0.50	0.44	1	08/13/19 15:58	08/14/19 16:33	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/L	0.50	0.34	1	08/13/19 15:58	08/14/19 16:33	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/L	0.50	0.24	1	08/13/19 15:58	08/14/19 16:33	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/L	0.50	0.30	1	08/13/19 15:58	08/14/19 16:33	11096-82-5	
Surrogates									
Decachlorobiphenyl (S)	69	%	10-130		1	08/13/19 15:58	08/14/19 16:33	2051-24-3	
8151A CI Acid Herbicide Waters Analytical Method: EPA 8151A Preparation Method: EPA 8151A									
2,4-D	ND	ug/L	5.0	1.6	1	08/15/19 10:00	08/16/19 21:05	94-75-7	
Dinoseb	ND	ug/L	5.0	1.2	1	08/15/19 10:00	08/16/19 21:05	88-85-7	
2,4,5-T	ND	ug/L	5.0	1.1	1	08/15/19 10:00	08/16/19 21:05	93-76-5	
2,4,5-TP (Silvex)	ND	ug/L	10.0	1.0	1	08/15/19 10:00	08/16/19 21:05	93-72-1	
Surrogates									
2,4-DCAA (S)	86	%	10-155		1	08/15/19 10:00	08/16/19 21:05	19719-28-9	
8270 APP9 RV Analytical Method: EPA 8270D Preparation Method: EPA 3510C									
Acenaphthene	ND	ug/L	10.0	1.6	1	08/15/19 18:25	08/16/19 14:37	83-32-9	
Acenaphthylene	ND	ug/L	10.0	1.6	1	08/15/19 18:25	08/16/19 14:37	208-96-8	
Acetophenone	ND	ug/L	10.0	1.8	1	08/15/19 18:25	08/16/19 14:37	98-86-2	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Shoosmith Sanitary Landfill

Pace Project No.: 92440874

Sample: MW-114R **Lab ID: 92440874001** Collected: 08/09/19 08:45 Received: 08/09/19 09:35 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8270 APP9 RV			Analytical Method: EPA 8270D Preparation Method: EPA 3510C						
2-Acetylaminofluorene	ND	ug/L	20.0	3.1	1	08/15/19 18:25	08/16/19 14:37	53-96-3	L1
4-Aminobiphenyl	ND	ug/L	10.0	3.3	1	08/15/19 18:25	08/16/19 14:37	92-67-1	
Anthracene	ND	ug/L	10.0	1.7	1	08/15/19 18:25	08/16/19 14:37	120-12-7	
Benzo(a)anthracene	ND	ug/L	10.0	1.8	1	08/15/19 18:25	08/16/19 14:37	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	2.1	1	08/15/19 18:25	08/16/19 14:37	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	1.9	1	08/15/19 18:25	08/16/19 14:37	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	1.4	1	08/15/19 18:25	08/16/19 14:37	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	1.9	1	08/15/19 18:25	08/16/19 14:37	207-08-9	
Benzyl alcohol	ND	ug/L	20.0	2.6	1	08/15/19 18:25	08/16/19 14:37	100-51-6	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1.6	1	08/15/19 18:25	08/16/19 14:37	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	1.6	1	08/15/19 18:25	08/16/19 14:37	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	20.0	2.8	1	08/15/19 18:25	08/16/19 14:37	59-50-7	
4-Chloroaniline	ND	ug/L	20.0	2.8	1	08/15/19 18:25	08/16/19 14:37	106-47-8	
Chlorobenzilate	ND	ug/L	10.0	4.6	1	08/15/19 18:25	08/16/19 14:37	510-15-6	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1.8	1	08/15/19 18:25	08/16/19 14:37	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1.8	1	08/15/19 18:25	08/16/19 14:37	111-44-4	
2-Chloronaphthalene	ND	ug/L	10.0	1.5	1	08/15/19 18:25	08/16/19 14:37	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1.2	1	08/15/19 18:25	08/16/19 14:37	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1.6	1	08/15/19 18:25	08/16/19 14:37	7005-72-3	
Chrysene	ND	ug/L	10.0	1.7	1	08/15/19 18:25	08/16/19 14:37	218-01-9	
Diallate	ND	ug/L	10.0	5.3	1	08/15/19 18:25	08/16/19 14:37	2303-16-4	
Dibenz(a,h)anthracene	ND	ug/L	10.0	1.6	1	08/15/19 18:25	08/16/19 14:37	53-70-3	
Dibenzofuran	ND	ug/L	10.0	1.5	1	08/15/19 18:25	08/16/19 14:37	132-64-9	
3,3'-Dichlorobenzidine	ND	ug/L	20.0	3.0	1	08/15/19 18:25	08/16/19 14:37	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1.4	1	08/15/19 18:25	08/16/19 14:37	120-83-2	
2,6-Dichlorophenol	ND	ug/L	10.0	6.0	1	08/15/19 18:25	08/16/19 14:37	87-65-0	
Diethylphthalate	ND	ug/L	10.0	2.4	1	08/15/19 18:25	08/16/19 14:37	84-66-2	
Dimethoate	ND	ug/L	10.0	4.8	1	08/15/19 18:25	08/16/19 14:37	60-51-5	
P-Dimethylaminoazobenzene	ND	ug/L	5.0	1.9	1	08/15/19 18:25	08/16/19 14:37	60-11-7	
7,12-Dimethylbenz(a)anthracene	ND	ug/L	10.0	4.0	1	08/15/19 18:25	08/16/19 14:37	57-97-6	
3,3'-Dimethylbenzidine	ND	ug/L	12.0	10.8	1	08/15/19 18:25	08/16/19 14:37	119-93-7	
2,4-Dimethylphenol	ND	ug/L	10.0	1.4	1	08/15/19 18:25	08/16/19 14:37	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1.6	1	08/15/19 18:25	08/16/19 14:37	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	1.8	1	08/15/19 18:25	08/16/19 14:37	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	20.0	15.2	1	08/15/19 18:25	08/16/19 14:37	534-52-1	
1,3-Dinitrobenzene	ND	ug/L	20.0	4.6	1	08/15/19 18:25	08/16/19 14:37	99-65-0	
2,4-Dinitrophenol	ND	ug/L	50.0	40.5	1	08/15/19 18:25	08/16/19 14:37	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1.2	1	08/15/19 18:25	08/16/19 14:37	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1.4	1	08/15/19 18:25	08/16/19 14:37	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	1.8	1	08/15/19 18:25	08/16/19 14:37	117-84-0	
Diphenylamine	ND	ug/L	10.0	1.7	1	08/15/19 18:25	08/16/19 14:37	122-39-4	
Disulfoton	ND	ug/L	10.0	7.0	1	08/15/19 18:25	08/16/19 14:37	298-04-4	
bis(2-Ethylhexyl)phthalate	ND	ug/L	6.0	2.1	1	08/15/19 18:25	08/16/19 14:37	117-81-7	
Ethyl methanesulfonate	ND	ug/L	20.0	5.3	1	08/15/19 18:25	08/16/19 14:37	62-50-0	
Famphur	ND	ug/L	10.0	8.4	1	08/15/19 18:25	08/16/19 14:37	52-85-7	
Fluoranthene	ND	ug/L	10.0	1.7	1	08/15/19 18:25	08/16/19 14:37	206-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Shoosmith Sanitary Landfill

Pace Project No.: 92440874

Sample: MW-114R **Lab ID: 92440874001** Collected: 08/09/19 08:45 Received: 08/09/19 09:35 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8270 APP9 RV Analytical Method: EPA 8270D Preparation Method: EPA 3510C									
Fluorene	ND	ug/L	10.0	1.6	1	08/15/19 18:25	08/16/19 14:37	86-73-7	
Hexachlorocyclopentadiene	ND	ug/L	10.0	1.7	1	08/15/19 18:25	08/16/19 14:37	77-47-4	
Hexachloroethane	ND	ug/L	10.0	2.0	1	08/15/19 18:25	08/16/19 14:37	67-72-1	
Hexachloropropene	ND	ug/L	10.0	1.7	1	08/15/19 18:25	08/16/19 14:37	1888-71-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	1.6	1	08/15/19 18:25	08/16/19 14:37	193-39-5	
Isodrin	ND	ug/L	20.0	4.8	1	08/15/19 18:25	08/16/19 14:37	465-73-6	
Isophorone	ND	ug/L	10.0	1.6	1	08/15/19 18:25	08/16/19 14:37	78-59-1	
Isosafrole	ND	ug/L	10.0	3.4	1	08/15/19 18:25	08/16/19 14:37	120-58-1	
Kepone	ND	ug/L	10.0	8.5	1	08/15/19 18:25	08/16/19 14:37	143-50-0	
Methapyrilene	ND	ug/L	50.0	2.3	1	08/15/19 18:25	08/16/19 14:37	91-80-5	
3-Methylcholanthrene	ND	ug/L	10.0	5.7	1	08/15/19 18:25	08/16/19 14:37	56-49-5	
Methyl methanesulfonate	ND	ug/L	5.0	4.3	1	08/15/19 18:25	08/16/19 14:37	66-27-3	
2-Methylnaphthalene	ND	ug/L	10.0	1.4	1	08/15/19 18:25	08/16/19 14:37	91-57-6	
Methyl parathion	ND	ug/L	10.0	4.5	1	08/15/19 18:25	08/16/19 14:37	298-00-0	
2-Methylphenol(o-Cresol)	ND	ug/L	10.0	1.2	1	08/15/19 18:25	08/16/19 14:37	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	10.0	1.2	1	08/15/19 18:25	08/16/19 14:37	15831-10-4	
1-Naphthalenamine	ND	ug/L	5.0	2.9	1	08/15/19 18:25	08/16/19 14:37	134-32-7	
2-Naphthalenamine	ND	ug/L	5.0	4.2	1	08/15/19 18:25	08/16/19 14:37	91-59-8	
Naphthalene	ND	ug/L	10.0	1.4	1	08/15/19 18:25	08/16/19 14:37	91-20-3	
1,4-Naphthoquinone	ND	ug/L	5.0	4.4	1	08/15/19 18:25	08/16/19 14:37	130-15-4	
2-Nitroaniline	ND	ug/L	50.0	4.2	1	08/15/19 18:25	08/16/19 14:37	88-74-4	
3-Nitroaniline	ND	ug/L	50.0	2.3	1	08/15/19 18:25	08/16/19 14:37	99-09-2	
4-Nitroaniline	ND	ug/L	20.0	2.2	1	08/15/19 18:25	08/16/19 14:37	100-01-6	
Nitrobenzene	ND	ug/L	10.0	2.1	1	08/15/19 18:25	08/16/19 14:37	98-95-3	
2-Nitrophenol	ND	ug/L	10.0	1.4	1	08/15/19 18:25	08/16/19 14:37	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	3.5	1	08/15/19 18:25	08/16/19 14:37	100-02-7	
5-Nitro-o-toluidine	ND	ug/L	10.0	3.9	1	08/15/19 18:25	08/16/19 14:37	99-55-8	
N-Nitrosodiethylamine	ND	ug/L	20.0	4.0	1	08/15/19 18:25	08/16/19 14:37	55-18-5	
N-Nitrosodimethylamine	ND	ug/L	10.0	1.2	1	08/15/19 18:25	08/16/19 14:37	62-75-9	
N-Nitroso-di-n-butylamine	ND	ug/L	10.0	3.2	1	08/15/19 18:25	08/16/19 14:37	924-16-3	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	2.2	1	08/15/19 18:25	08/16/19 14:37	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1.7	1	08/15/19 18:25	08/16/19 14:37	86-30-6	
N-Nitrosomethylethylamine	ND	ug/L	10.0	3.5	1	08/15/19 18:25	08/16/19 14:37	10595-95-6	
N-Nitrosopiperidine	ND	ug/L	20.0	3.8	1	08/15/19 18:25	08/16/19 14:37	100-75-4	
N-Nitrosopyrrolidine	ND	ug/L	10.0	3.8	1	08/15/19 18:25	08/16/19 14:37	930-55-2	
O,O,O-Triethylphosphorothioate	ND	ug/L	10.0	4.5	1	08/15/19 18:25	08/16/19 14:37	126-68-1	
Parathion (Ethyl parathion)	ND	ug/L	10.0	4.1	1	08/15/19 18:25	08/16/19 14:37	56-38-2	
Pentachlorobenzene	ND	ug/L	10.0	3.5	1	08/15/19 18:25	08/16/19 14:37	608-93-5	
Pentachloronitrobenzene	ND	ug/L	20.0	4.4	1	08/15/19 18:25	08/16/19 14:37	82-68-8	
Pentachlorophenol	ND	ug/L	25.0	2.2	1	08/15/19 18:25	08/16/19 14:37	87-86-5	
Phenacetin	ND	ug/L	20.0	4.2	1	08/15/19 18:25	08/16/19 14:37	62-44-2	
Phenanthrene	ND	ug/L	10.0	1.7	1	08/15/19 18:25	08/16/19 14:37	85-01-8	
Phenol	ND	ug/L	10.0	0.92	1	08/15/19 18:25	08/16/19 14:37	108-95-2	
p-Phenylenediamine	ND	ug/L	10.0	4.2	1	08/15/19 18:25	08/16/19 14:37	106-50-3	
Phorate	ND	ug/L	10.0	5.3	1	08/15/19 18:25	08/16/19 14:37	298-02-2	
Pronamide	ND	ug/L	10.0	4.6	1	08/15/19 18:25	08/16/19 14:37	23950-58-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Shoosmith Sanitary Landfill

Pace Project No.: 92440874

Sample: MW-114R **Lab ID: 92440874001** Collected: 08/09/19 08:45 Received: 08/09/19 09:35 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
8270 APP9 RV									
Analytical Method: EPA 8270D Preparation Method: EPA 3510C									
Pyrene	ND	ug/L	10.0	2.1	1	08/15/19 18:25	08/16/19 14:37	129-00-0	
Safrole	ND	ug/L	10.0	4.5	1	08/15/19 18:25	08/16/19 14:37	94-59-7	
1,2,4,5-Tetrachlorobenzene	ND	ug/L	10.0	2.8	1	08/15/19 18:25	08/16/19 14:37	95-94-3	
2,3,4,6-Tetrachlorophenol	ND	ug/L	10.0	1.4	1	08/15/19 18:25	08/16/19 14:37	58-90-2	
Thionazin	ND	ug/L	20.0	4.8	1	08/15/19 18:25	08/16/19 14:37	297-97-2	
O-Toluidine	ND	ug/L	10.0	3.7	1	08/15/19 18:25	08/16/19 14:37	95-53-4	
2,4,5-Trichlorophenol	ND	ug/L	10.0	1.4	1	08/15/19 18:25	08/16/19 14:37	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1.5	1	08/15/19 18:25	08/16/19 14:37	88-06-2	
1,3,5-Trinitrobenzene	ND	ug/L	10.0	4.7	1	08/15/19 18:25	08/16/19 14:37	99-35-4	
Surrogates									
Nitrobenzene-d5 (S)	73	%	13-130		1	08/15/19 18:25	08/16/19 14:37	4165-60-0	
2-Fluorobiphenyl (S)	74	%	13-130		1	08/15/19 18:25	08/16/19 14:37	321-60-8	
Terphenyl-d14 (S)	105	%	25-130		1	08/15/19 18:25	08/16/19 14:37	1718-51-0	
Phenol-d6 (S)	41	%	10-130		1	08/15/19 18:25	08/16/19 14:37	13127-88-3	
2-Fluorophenol (S)	55	%	10-130		1	08/15/19 18:25	08/16/19 14:37	367-12-4	
2,4,6-Tribromophenol (S)	90	%	10-137		1	08/15/19 18:25	08/16/19 14:37	118-79-6	

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