

**TABLE 2**  
**GROUNDWATER MONITORING LABORATORY ANALYTICAL DATA SUMMARY**  
**NORTH PROVIDENCE LANDFILL**  
**NORTH PROVIDENCE, RHODE ISLAND**

Sample & Date	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	RIDEM Method 1 GW Objectives	
	11/06/23	11/06/23	11/06/23	11/06/23	11/06/23	11/06/23	11/06/23	11/06/23	11/06/23	11/06/23	GA	GB
<b>VOCs by EPA 8260C</b>	<b>Concentration (µg/L)</b>											
Acetone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	n/e	n/e
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	5	140
Bromobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
2-Butanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	n/e	n/e
tert-butyl Alcohol	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	n/e	n/e
sec-butylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
n-butyl Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
tert-butylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
tert-butyl Methyl Ether (MTBE)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	40	5000
Carbon Disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
Carbon Tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	5	70
Chlorobenzene	<1	<1	20	<1	<1	3	<1	<1	<1	<1	100	3200
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
4-chlorotoluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
2-chlorotoluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
1,2-dibromo-3-chloropropane (DBCP)	<1 <sup>t</sup>	<1 <sup>t</sup>	<1 <sup>t</sup>	<1 <sup>t</sup>	<1 <sup>t</sup>	<1 <sup>t</sup>	<1 <sup>t</sup>	<1 <sup>t</sup>	<1 <sup>t</sup>	<1 <sup>t</sup>	0.2	2
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
Ethylene Dibromide (EDB)	<1 <sup>t</sup>	<1 <sup>t</sup>	<1 <sup>t</sup>	<1 <sup>t</sup>	<1 <sup>t</sup>	<1 <sup>t</sup>	<1 <sup>t</sup>	<1 <sup>t</sup>	<1 <sup>t</sup>	<1 <sup>t</sup>	0.05	n/e
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1 <sup>t</sup>	n/e	n/e
1,2-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	600	n/e
1,3-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	600	n/e
1,4-Dichlorobenzene	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	75	n/e
1,1-Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
1,2-Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	5	110
trans-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	100	2800
cis-1,2-dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	70	2400
1,1-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	7	7
1,2-Dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	5	3000
2,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
cis-1,3-Dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
trans-1,3-Dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
1,1-Dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
Diethyl ether	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	n/e	n/e
1,4-Dioxane	<500	<500	<500	<500	<500	<500	<500	<500	<500	<500	n/e	n/e
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	700	1600
Hexachlorobutadiene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
2-Hexanone	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	n/e	n/e
Isopropylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
p-isopropyltoluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
Methylene Chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	5	n/e
4-Methyl-2-pentanone	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	n/e	n/e
Naphthalene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	20	n/e
n-Propylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	100	2200
1,1,1,2-Tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
Tetrachloroethene (PCE)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	5	150
Tetrahydrofuran	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	n/e	n/e
Toluene	<1	9	<1	<1	<1	<1	<1	<1	<1	2	1000	1700
1,2,4-Trichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	70	n/e
1,2,3-Trichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
1,1,2-Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	5	n/e
1,1,1-Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	200	3100
Trichloroethene (TCE)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	5	540
1,2,3-Trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
1,3,5-Trimethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
1,2,4-Trimethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
Vinyl Chloride	<1	<1	<1	<1	<1	<b>4</b>	<1	<1	<1	<1	2	2
o-xylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	10000	n/e
m,p-xylene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	n/e	n/e
1,1,2,2-Tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
Tert-amyl Methyl Ether	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
1,3-Dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
Ethyl Tert-butyl ether	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
Diisopropyl Ether	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
Dichlorodifluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	n/e	n/e
<b>Dissolved Metals by EPA 200.8 **</b>	<b>Concentration (mg/L)</b>											
Antimony	0.001	0.0026	0.0001	0.0001	0.0002	<0.0001	0.0005	<0.0001	<0.0001	0.0003	0.006	n/e
Arsenic	0.0002	0.0006	0.0003	0.0002	0.0004	0.0004	0.0004	0.0006	<0.0001	0.0008	0.01	n/e
Barium	0.043	0.328	0.144	0.036	0.058	0.016	0.005	0.074	0.004	0.183	2	n/e
Cadmium	<0.0001	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	0.005	n/e
Chromium	0.0001	0.0016	0.0004	0.0001	0.0002	<0.0001	0.0002	0.0002	0.0001	0.0006	0.1	n/e
Cobalt	<0.0001	0.0051	0.0011	0.001	0.0001	0.0002	0.0012	0.0072	0.0009	0.0147	n/e	n/e
Copper	0.002	0.005	<0.001	<0.001	<0.001	<0.001	0.008	0.001	<0.001	0.004	1.3	n/e
Lead	<0.0001	0.0138	<0.0001	<0.0001	0.0002	<0.0001	0.0022	<0.0001	<0.0001	0.0005	0.015	n/e
Nickel	<0.001	0.051	0.003	<0.001	<0.001	<0.001	0.004	0.002	<0.001	0.049	0.1	n/e
Selenium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.05	n/e
Thallium	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.002	n/e
Vanadium	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	n/e	n/e
Zinc	<0.001	0.411	0.002	<0.001	0.001	<0.001	0.002	0.021	0.001	0.035	n/e	n/e

Where necessary, the RIDEM standards have been converted from ppm to ppb, or vice-versa, to match the laboratory reporting method.

- n/e = No applicable objective has been established for this analyte
- <2 = In this sample the analyte was not detected at or above the laboratory quantitation limit (indicated in italic)
- t = In this sample the laboratory quantitation limit (indicated in italic) exceeds the RIDEM Method I GA Groundwater Objective
- 0.0193** = In this sample the analyte concentration (indicated in bold) exceeds the RIDEM Method I GA Groundwater Objective

\*\* All metals analyzed via EPA 200.8 (ICP-MS)

TABLE 3  
SOIL GAS AND INTERIOR AIR FIELD ANALYSIS DATA SUMMARY  
NORTH PROVIDENCE LANDFILL  
NORTH PROVIDENCE, RHODE ISLAND

Monitoring Location	Date	Time	CH <sub>4</sub>		CO <sub>2</sub> (%)	O <sub>2</sub> (%)	P <sub>air</sub> (inches Hg)	H <sub>2</sub> S (ppm)	PID (ppm)	Comments
			(% Gas)	(% LEL)						
Ambient	3/30/17	10:30	0	0	0	20.9	29.89	0	ND	
	5/4/17	9:10	0	0	0	20.9	30.02	0	ND	
	8/4/17	9:00	0	0	0	20.9	29.80	0	ND	
	11/16/17	10:10	0	0	0	20.9	29.64	0	ND	
	2/1/18	9:30	0	0	0	20.9	28.89	0	ND	
	5/4/18	9:30	0	0	0	20.9	29.65	0	ND	
	8/1/18	9:20	0	0	0	20.9	29.81	0	ND	
	11/7/18	10:29	0	0	0.1	20.9	29.68	0	ND	
	2/7/19	10:56	0	0	0	20.9	29.85	0	ND	
	5/8/19	12:30	0	0	0	20.9	29.85	0	ND	
	8/9/19	9:00	0	0	0	20.9	29.42	0	ND	
	11/8/19	12:00	0	0	0	20.9	29.73	0	ND	
	2/26/20	11:14	0	0	0	20.9	29.70	0	ND	
	5/11/20	9:46	0	0	0	20.9	29.51	0	ND	
	8/28/20	9:00	0	0	0	20.9	29.75	0	ND	
	11/11/20	8:15	0	0	0	20.9	30.01	0	ND	
	2/25/21	9:00	0	0	0	20.9	29.84	0	ND	
	5/11/21	8:30	0	0	0	20.9	29.91	0	ND	
	8/10/21	9:05	0	0	0	20.9	30.13	0	ND	
	11/4/21	10:40	0	0	0	20.9	30.29	0	ND	
	2/24/22	10:18	0	0	0	20.9	29.88	0	ND	
	5/5/22	7:28	0	0	0	20.9	29.62	0	ND	
	8/30/22	9:15	0	0	0	20.9	30.11	0	ND	
11/21/22	11:45	0	0	0	20.9	30.12	0	ND		
2/23/23	7:43	0	0	0	20.9	29.65	0	ND		
5/9/23	9:11	0	0	0	20.9	29.70	0	ND		
8/28/23	8:05	0	0	0	20.9	30.02	0	ND		
11/6/23	8:46	0	0	0	20.9	30.16	0	ND		
Animal Shelter	3/30/17	11:47	0	0	0	20.9	29.88	0	ND	
	5/4/17	9:20	0	0	0	20.9	30.02	0	ND	
	8/4/17	-	-	-	-	-	-	-	-	Closed
	11/16/17	11:09	0	0	0.1	20.9	29.64	0	ND	
	2/1/18	10:30	0	0	0	20.9	28.89	0	ND	
	5/4/18	9:40	0	0	0.1	20.7	29.65	0	ND	
	8/1/18	10:24	0	0	0	20.9	29.81	0	ND	
	11/7/18	10:36	0	0	0.1	20.8	29.68	0	ND	
	2/7/19	11:03	0	0	0.1	20.8	29.85	0	ND	
	5/8/19	13:13	0	0	0.1	20.7	29.85	0	ND	
	8/9/19	9:03	0	0	0	20.9	29.42	0	ND	
	11/8/19	14:08	0	0	0	20.9	29.73	0	ND	
	2/26/20	11:15	0	0	0	20.9	29.70	0	ND	
	5/11/20	9:50	0	0	0.1	20.8	29.51	0	ND	
	8/28/20	9:05	0	0	0	20.9	29.75	0	ND	
	11/11/20	9:04	0	0	0	20.9	30.01	0	ND	
	2/25/21	9:05	0	0	0	20.9	29.85	0	ND	
	5/11/21	8:35	0	0	0	20.9	29.91	0	ND	
	8/10/21	9:10	0	0	0	20.9	30.13	0	ND	
	11/4/21	-	-	-	-	-	-	-	-	Demolished
2/23/23	-	-	-	-	-	-	-	-	Under construction	
5/9/23	-	-	-	-	-	-	-	-	Under construction	
8/28/23	-	-	-	-	-	-	-	-	Under construction	
11/6/23	11:57	0	0	0	20.9	30.16	0	ND		

TABLE 3  
SOIL GAS AND INTERIOR AIR FIELD ANALYSIS DATA SUMMARY  
NORTH PROVIDENCE LANDFILL  
NORTH PROVIDENCE, RHODE ISLAND

Monitoring Location	Date	Time	CH <sub>4</sub>		CO <sub>2</sub> (%)	O <sub>2</sub> (%)	P <sub>air</sub> (inches Hg)	H <sub>2</sub> S (ppm)	PID (ppm)	Comments
			(% Gas)	(% LEL)						
COM-1 *	3/30/17	11:22	0	0	0	20.7	29.89	0	ND	
	5/4/17	9:25	0	0	0	20.9	30.02	0	ND	
	8/4/17	9:47	0	0	0	20.9	29.80	0	ND	
	11/16/17	10:15	0	0	0	20.9	29.64	0	ND	
	2/1/18	10:23	0	0	0	20.9	28.89	0	ND	
	5/4/18	10:30	0	0	0	20.9	29.68	0	ND	
	8/1/18	10:15	0	0	0	20.9	29.81	0	ND	
	11/7/18	10:31	0	0	0.1	20.8	29.68	0	ND	
	2/7/19	11:05	0	0	0	20.9	29.85	0	ND	
	5/8/19	14:29	0	0	0	20.9	29.85	0	ND	
	8/9/19	9:07	0	0	0	20.9	29.42	0	ND	
	11/8/19	14:01	0	0	0	20.9	29.73	0	ND	
	2/26/20	11:23	0	0	0	20.9	29.70	0	ND	
	5/11/20	9:53	0	0	0.1	20.8	29.51	0	ND	
	8/28/20	9:15	0	0	0	20.9	29.75	0	ND	
	11/11/20	9:07	0	0	0	20.9	30.01	0	ND	
	2/25/21	9:11	0	0	0	20.9	29.85	0	ND	
	5/11/21	8:45	0	0	0	20.9	29.92	0	ND	
	8/10/21	9:17	0	0	0	20.9	30.13	0	ND	
	11/4/21	10:47	0	0	0	20.9	30.29	0	ND	
	2/24/22	10:20	0	0	0	20.9	29.88	0	ND	
	5/5/22	7:32	0	0	0	20.9	29.62	0	ND	
	8/30/22	9:18	0	0	0	20.9	30.11	0	ND	
11/21/22	12:32	0	0	0	20.9	30.12	0	ND		
2/23/23	7:52	0	0	0	20.9	29.65	0	ND		
5/9/23	9:15	0	0	0	20.9	29.70	0	ND		
8/28/23	8:08	0	0	0	20.9	30.02	0	ND		
11/6/23	12:07	0	0	0	20.9	30.16	0	ND		
COM-2 *	3/30/17	11:17	0	0	0	20.7	29.89	0	ND	
	5/4/17	9:27	0	0	0	20.9	30.02	0	ND	
	8/4/17	9:40	0	0	0	20.9	29.80	0	ND	
	11/16/17	10:18	0	0	0	20.9	29.64	0	ND	
	2/1/18	10:20	0	0	0	20.9	28.89	0	ND	
	5/4/18	10:35	0	0	0	20.9	29.63	0	ND	
	8/1/18	10:18	0	0	0	20.9	29.80	0	ND	
	11/7/18	10:33	0	0	0.1	20.8	29.68	0	ND	
	2/7/19	11:07	0	0	0	20.9	29.85	0	ND	
	5/8/19	14:27	0	0	0	20.9	29.85	0	ND	
	8/9/19	9:09	0	0	0	20.9	29.42	0	ND	
	11/8/19	14:03	0	0	0	20.9	29.73	0	ND	
	2/26/20	11:25	0	0	0	20.9	29.70	0	ND	
	5/11/20	9:56	0	0	0	20.9	29.51	0	ND	
	8/28/20	9:20	0	0	0	20.9	29.75	0	ND	
	11/11/20	9:09	0	0	0	20.9	30.01	0	ND	
	2/25/21	9:15	0	0	0	20.9	29.86	0	ND	
	5/11/21	8:48	0	0	0	20.9	29.92	0	ND	
	8/10/21	9:21	0	0	0	20.9	30.13	0	ND	
	11/4/21	10:49	0	0	0	20.9	30.29	0	ND	
	2/24/22	10:25	0	0	0	20.9	29.88	0	ND	
	5/5/22	7:36	0	0	0	20.9	29.62	0	ND	
	8/30/22	9:20	0	0	0	20.9	30.11	0	ND	
11/21/22	12:37	0	0	0	20.9	30.12	0	ND		
2/23/23	7:56	0	0	0	20.9	29.65	0	ND		
5/9/23	9:18	0	0	0	20.9	29.70	0	ND		
8/28/23	8:10	0	0	0	20.9	30.02	0	ND		
11/6/23	12:10	0	0	0	20.9	30.16	0	ND		

TABLE 3  
SOIL GAS AND INTERIOR AIR FIELD ANALYSIS DATA SUMMARY  
NORTH PROVIDENCE LANDFILL  
NORTH PROVIDENCE, RHODE ISLAND

Monitoring Location	Date	Time	CH <sub>4</sub>		CO <sub>2</sub> (%)	O <sub>2</sub> (%)	P <sub>air</sub> (inches Hg)	H <sub>2</sub> S (ppm)	PID (ppm)	Comments
			(% Gas)	(% LEL)						
GMW-1 **	3/30/17	11:11	0	0	0	20.9	29.88	0	ND	
	5/4/17	9:46	0	0	0.1	20.2	30.01	0	ND	
	8/4/17	9:58	0	0	0	20.9	29.80	0	ND	
	11/16/17	10:50	0	0	0.1	20.5	29.64	0	ND	
	2/1/18	10:34	0	0	0	20.9	28.89	0	ND	
	5/4/18	10:10	0	0	0	20.6	29.63	0	ND	
	8/1/18	9:25	0	0	0	20.9	29.80	0	ND	
	11/7/18	10:52	0	0	0.1	20.9	29.68	0	ND	
	2/7/19	11:40	0	0	0	20.9	29.85	0	ND	
	5/8/19	13:01	0	0	0	20.9	29.85	0	ND	
	8/9/19	9:52	0	0	0	20.9	29.36	0	ND	
	11/8/19	12:10	0	0	0	20.9	29.73	0	ND	
	2/26/20	11:59	0	0	0	20.9	29.70	0	ND	
	5/11/20	10:05	0	0	0	20.9	29.51	0	ND	
	8/28/20	10:10	0	0	0	20.9	29.75	0	ND	
	11/11/20	8:33	0	0	0	20.9	30.01	0	ND	
	2/25/21	9:26	0	0	0	20.9	29.86	0	ND	
	5/11/21	9:02	0	0	0	20.9	29.92	0	ND	
	8/10/21	10:28	0	0	0	20.9	30.12	0	ND	
	11/4/21	12:50	0	0	0	20.9	30.25	0	ND	
	2/24/22	10:42	0	0	0	20.9	29.88	0	ND	
	5/5/22	8:45	0	0	0	20.9	29.62	0	ND	
8/30/22	9:38	0	0	0	20.0	30.11	0	ND		
11/21/22	11:49	0	0	0	20.9	30.12	0	ND		
2/23/23	8:12	0	0	0	20.9	29.65	0	ND		
5/9/23	10:21	0	0	0	20.9	29.69	0	ND		
8/28/23	8:22	0	0	0	20.9	30.02	0	ND		
11/6/23	9:05	0	0	0	20.9	30.16	0	ND		
GMW-2	3/30/17	12:46	0	0	0.7	17.3	29.89	0	ND	
	5/4/17	9:57	0	0	1.0	17.0	30.01	0	ND	
	8/4/17	10:00	0	0	9.3	2.8	29.80	0	ND	
	11/16/17	11:02	0	0	5.3	7.4	29.64	0	ND	
	2/1/18	10:37	0	0	0.7	19.7	28.89	0	ND	
	5/4/18	10:23	0	0	2.8	12.9	29.63	0	ND	
	8/1/18	9:29	0	0	10.4	5.5	29.80	0	ND	
	11/7/18	11:05	0	0	2.9	9.9	29.68	0	ND	
	2/7/19	11:45	0	0	0.4	19.2	29.85	0	ND	
	5/8/19	13:06	0	0	1.8	15.6	29.85	0	ND	
	8/9/19	9:57	0	0	8.9	3.4	29.36	0	ND	
	11/8/19	11:54	0	0	3.2	14.1	29.73	0	ND	
	2/26/20	11:55	0	0	1.9	17.5	29.69	0	ND	
	5/11/20	10:23	0	0	1.7	15.4	29.51	0	ND	
	8/28/20	10:20	0	0	1.5	19.0	29.75	0	ND	
	11/11/20	8:33	0	0	5.1	14.0	30.01	0	ND	
	2/25/21	9:29	0	0	1.1	19.8	29.86	0	ND	
	5/11/21	9:08	0	0	7.7	12.5	29.92	0	ND	
	8/10/21	10:35	0	0	5.6	12.8	30.12	0	ND	
	11/4/21	13:01	0	0	0	20.9	30.24	0	ND	
	2/24/22	10:46	0	0	1.7	17.3	29.88	0	ND	
	5/5/22	7:48	0	0	1.5	15.2	29.62	0	ND	
8/30/22	9:44	0	0	5.1	12.8	30.11	0	ND		
11/21/22	11:59	0	0	0	20.9	30.12	0	ND		
2/23/23	8:15	0	0	1.8	16.0	29.65	0	ND		
5/9/23	10:25	0	0	1.6	15.4	29.69	0	ND		
8/28/23	8:26	0	0	2.0	17.2	30.02	0	ND		
11/6/23	9:11	0	0	4.5	14.2	30.16	0	ND		

TABLE 3  
SOIL GAS AND INTERIOR AIR FIELD ANALYSIS DATA SUMMARY  
NORTH PROVIDENCE LANDFILL  
NORTH PROVIDENCE, RHODE ISLAND

Monitoring Location	Date	Time	CH <sub>4</sub>		CO <sub>2</sub> (%)	O <sub>2</sub> (%)	P <sub>air</sub> (inches Hg)	H <sub>2</sub> S (ppm)	PID (ppm)	Comments
			(% Gas)	(% LEL)						
GMW-3	3/30/17	10:35	0	0	1.9	15.7	29.89	0	ND	
	5/4/17	9:16	0	0	3.7	15.0	30.02	0	ND	
	8/4/17	9:50	0	0	3.3	17.4	29.80	0	ND	
	11/16/17	10:29	0	0	5.2	15.0	29.64	0	ND	
	2/1/18	9:48	0	0	5.4	12.8	28.89	0	ND	
	5/4/18	9:50	0	0	1.3	18.7	29.63	0	ND	
	8/1/18	9:36	0	0	7.6	11.5	29.80	0	ND	
	11/7/18	11:10	0	0	9.7	7.2	29.68	0	ND	
	2/7/19	11:30	0	0	3.9	14.9	29.85	0	ND	
	5/8/19	13:31	0	0	4.5	14.9	29.80	0	ND	
	8/9/19	9:14	0	0	5.1	13.9	29.42	0	ND	
	11/8/19	14:05	0	0	8.5	13.3	29.75	0	ND	
	2/26/20	11:20	0	0	3.9	14.8	29.70	0	ND	
	5/11/20	10:35	0	0	5.2	12.5	29.51	0	ND	
	8/28/20	9:10	0	0	4.0	17.0	29.75	0	ND	
	11/11/20	9:01	0	0	5.5	13.4	30.01	0	ND	
	2/25/21	9:40	0	0	3.4	16.2	29.87	0	ND	
	5/11/21	9:25	0	0	7.9	13.1	29.92	0	ND	
	8/10/21	9:30	0	0	5.1	13.8	30.14	0	ND	
	11/4/21	10:45	0	0	2.8	12.9	30.29	0	ND	
	2/24/22	10:30	0	0	3.8	15.0	29.88	0	ND	
	5/5/22	7:40	0	0	5.0	12.8	29.62	0	ND	
	8/30/22	10:00	0	0	4.4	15.8	30.11	0	ND	
11/21/22	12:05	0	0	0.0	20.9	30.12	0	ND		
2/23/23	8:26	0	0	3.1	17.8	29.65	0	ND		
5/9/23	9:34	0	0	4.0	16.5	29.69	0	ND		
8/28/23	8:31	0	0	3.6	16.9	30.02	0	ND		
11/6/23	9:17	0	0	4.8	13.2	30.16	0	ND		
GMW-4	3/30/17	11:55	0	0	0.5	20.5	29.88	0	ND	
	5/4/17	10:20	0	0	0.7	20.0	30.01	0	ND	
	8/4/17	9:14	0	0	0.7	20.2	29.80	0	ND	
	11/16/17	11:32	0	0	1.6	19.2	29.61	0	ND	
	2/1/18	9:56	0	0	0.7	20.3	28.89	0	ND	
	5/4/18	10:44	0	0	1.4	19.3	29.58	0	ND	
	8/1/18	9:44	0	0	2.5	18.7	29.80	0	ND	
	11/7/18	11:32	0	0	4.0	17.0	29.61	0	ND	
	2/7/19	11:11	0	0	0.5	20.3	29.85	0	ND	
	5/8/19	14:23	0	0	1.1	19.9	29.85	0	ND	
	8/9/19	9:23	0	0	1.4	19.5	29.38	0	ND	
	11/8/19	12:15	0	0	1.5	19.7	29.73	0	ND	
	2/26/20	11:28	0	0	0.4	20.5	29.70	0	ND	
	5/11/20	10:41	0	0	1.0	19.8	29.51	0	ND	
	8/28/20	9:25	0	0	0.4	19.2	29.75	0	ND	
	11/11/20	9:27	0	0	1.0	19.6	30.01	0	ND	
	2/25/21	9:46	0	0	0.5	20.4	29.88	0	ND	
	5/11/21	9:32	0	0	1.5	19.3	29.92	0	ND	
	8/10/21	9:48	0	0	1.4	18.9	30.14	0	ND	
	11/4/21	10:52	0	0	1.8	15.6	30.29	0	ND	
	2/24/22	10:58	0	0	0.3	20.6	29.88	0	ND	
	5/5/22	9:18	0	0	0.9	20.0	29.62	0	ND	
	8/30/22	10:06	0	0	1.2	19.6	30.11	0	ND	
11/21/22	12:09	0	0	1.7	15.4	30.12	0	ND		
2/23/23	8:34	0	0	0.8	20.3	29.65	0	ND		
5/9/23	9:40	0	0	1.0	19.9	29.69	0	ND		
8/28/23	8:38	0	0	0.4	19.0	30.02	0	ND		
11/6/23	9:24	0	0	1.1	19.5	30.16	0	ND		

TABLE 3  
SOIL GAS AND INTERIOR AIR FIELD ANALYSIS DATA SUMMARY  
NORTH PROVIDENCE LANDFILL  
NORTH PROVIDENCE, RHODE ISLAND

Monitoring Location	Date	Time	CH <sub>4</sub>		CO <sub>2</sub> (%)	O <sub>2</sub> (%)	P <sub>air</sub> (inches Hg)	H <sub>2</sub> S (ppm)	PID (ppm)	Comments
			(% Gas)	(% LEL)						
GMW-5	3/30/17	12:02	0	0	0.5	20.5	29.88	0	ND	
	5/4/17	10:23	0	0	1.5	19.0	30.01	0	ND	
	8/4/17	9:18	0	0	2.1	19.1	29.80	0	ND	
	11/16/17	11:35	0	0	0.9	20.1	29.61	0	ND	
	2/1/18	10:00	0	0	0.8	20.3	28.89	0	ND	
	5/4/18	10:51	0	0	1.1	19.9	29.58	0	ND	
	8/1/18	9:48	0	0	1.3	20.0	29.80	0	ND	
	11/7/18	11:35	0	0	2.4	19.0	29.61	0	ND	
	2/7/19	11:14	0	0	0.6	20.5	29.85	0	ND	
	5/8/19	14:20	0	0	1.4	19.7	29.85	0	ND	
	8/9/19	9:38	0	0	1.7	19.3	29.38	0	ND	
	11/8/19	12:18	0	0	1.0	20.5	29.73	0	ND	
	2/26/20	11:30	0	0	0.5	20.5	29.70	0	ND	
	5/11/20	10:44	0	0	1.0	19.8	29.51	0	ND	
	8/28/20	9:30	0	0	0.4	19.9	29.75	0	ND	
	11/11/20	9:32	0	0	2.0	18.6	30.01	0	ND	
	2/25/21	9:51	0	0	0.5	20.5	29.88	0	ND	
	5/11/21	9:41	0	0	1.6	18.9	29.92	0	ND	
	8/10/21	9:53	0	0	1.5	19.1	30.13	0	ND	
	11/4/21	10:56	0	0	2.4	19.0	30.29	0	ND	
	2/24/22	11:03	0	0	0.4	20.5	29.88	0	ND	
	5/5/22	9:20	0	0	0.9	19.9	29.62	0	ND	
	8/30/22	10:10	0	0	1.3	19.5	30.11	0	ND	
11/21/22	12:15	0	0	2.2	18.1	30.12	0	ND		
2/23/23	8:41	0	0	0.5	20.3	29.65	0	ND		
5/9/23	9:48	0	0	1	20.3	29.69	0	ND		
8/28/23	8:47	0	0	1.7	19.4	30.02	0	ND		
11/6/23	9:33	0	0	2.1	18.8	30.14	0	ND		
GMW-6	3/30/17	12:06	0	0	0.1	20.1	29.88	0	ND	
	5/4/17	10:38	0	0	6.2	12.4	30.01	0	ND	
	8/4/17	9:25	0	0	11.5	9.7	29.80	0	ND	
	11/16/17	11:48	0	0	9.5	10.3	29.61	0	ND	
	2/1/18	10:05	0	0	2.9	17.9	28.89	0	ND	
	5/4/18	11:03	0	0	8.0	13.4	29.58	0	ND	
	8/1/18	10:03	0	0	12.8	10.2	29.80	0	ND	
	11/7/18	11:47	0	0	11.6	6.7	29.61	0	ND	
	2/7/19	11:18	0	0	7.1	11.2	29.85	0	ND	
	5/8/19	14:17	0	0	7.8	12.7	29.85	0	ND	
	8/9/19	9:28	0	0	7.5	13.4	29.38	0	ND	
	11/8/19	12:27	0	0	4.8	17.4	29.73	0	ND	
	2/26/20	11:33	0	0	7.2	13.9	29.70	0	ND	
	5/11/20	10:49	0	0	6.8	11.6	29.51	0	ND	
	8/28/20	9:35	0	0	3.7	15.0	29.75	0	ND	
	11/11/20	9:43	0	0	9.7	8.8	30.01	0	ND	
	2/25/21	9:57	0	0	6.9	11.4	29.88	0	ND	
	5/11/21	9:50	0	0	5.1	14	29.92	0	ND	
	8/10/21	10:01	0	0	8.9	9.1	30.13	0	ND	
	11/4/21	11:03	0	0	7.6	11.5	30.28	0	ND	
	2/24/22	11:08	0	0	6.9	15.0	29.88	0	ND	
	5/5/22	9:42	0	0	6.5	12.0	29.62	0	ND	
	8/30/22	10:17	0	0	7.6	13.8	30.11	0	ND	
11/21/22	12:21	0	0	11.1	6.2	30.12	0	ND		
2/23/23	8:50	0	0	7.1	11.5	29.65	0	ND		
5/9/23	9:58	0	0	6.8	11.7	29.69	0	ND		
8/28/23	8:55	0	0	3.5	14.7	30.02	0	ND		
11/6/23	9:41	0	0	8.2	10.6	30.14	0	ND		



TABLE 3  
SOIL GAS AND INTERIOR AIR FIELD ANALYSIS DATA SUMMARY  
NORTH PROVIDENCE LANDFILL  
NORTH PROVIDENCE, RHODE ISLAND

Monitoring Location	Date	Time	CH <sub>4</sub>		CO <sub>2</sub> (%)	O <sub>2</sub> (%)	P <sub>air</sub> (inches Hg)	H <sub>2</sub> S (ppm)	PID (ppm)	Comments
			(% Gas)	(% LEL)						
GMW-7	3/30/17	12:11	0	0	0	21.1	29.88	0	ND	
	5/4/17	10:42	0	0	0	21.0	30.01	0	ND	
	8/4/17	9:29	0	0	14.2	8.7	29.80	0	ND	
	11/16/17	11:52	0	0	9.7	10.1	29.61	0	ND	
	2/1/18	10:11	0	0	2.1	19.2	28.89	0	ND	
	5/4/18	11:08	0	0	0	20.9	29.58	0	ND	
	8/1/18	9:58	0	0	16.3	7.6	29.80	0	ND	
	11/7/18	11:50	0	0	0.1	20.9	29.61	0	ND	
	2/7/19	11:23	0	0	0	20.9	29.85	0	ND	
	5/8/19	14:13	0	0	0	20.9	29.85	0	ND	
	8/9/19	9:34	0	0	13.3	9.6	29.38	0	ND	
	11/8/19	12:32	0	0	9.2	9.4	29.73	0	ND	
	2/26/20	11:36	0	0	1.7	18.9	29.70	0	ND	
	5/11/20	10:53	0	0	0.2	20.7	29.51	0	ND	
	8/28/20	9:40	0	0	0.2	20.7	29.75	0	ND	
	11/11/20	9:50	0	0	9.4	9.2	30.01	0	ND	
	2/25/21	10:04	0	0	0.2	20.6	29.89	0	ND	
	5/11/21	10:05	0	0	1.3	19.4	29.91	0	ND	
	8/10/21	10:10	0	0	10.9	6.2	30.13	0	ND	
	11/4/21	11:07	0	0	6.4	12	30.28	0	ND	
	2/24/22	11:15	0	0	1.5	19.5	29.88	0	ND	
	5/5/22	10:30	0	0	0.2	20.7	29.62	0	ND	
	8/30/22	10:22	0	0	0.4	20.6	30.11	0	ND	
11/21/22	12:26	0	0	0	20.9	30.12	0	ND		
2/23/23	8:57	0	0	0	20.9	29.65	0	ND		
5/9/23	10:05	0	0	0.4	20.6	29.69	0	ND		
8/28/23	9:03	0	0	0.4	20.3	30.02	0	ND		
11/6/23	9:50	0	0	9.3	11.2	30.14	0	ND		

**NOTES:**

- Methane (CH<sub>4</sub>), carbon dioxide (CO<sub>2</sub>) and oxygen (O<sub>2</sub>) concentrations, and lower explosive limit (LEL), were analyzed using a Landtec GEM2000 landfill gas analyzer.
- Hydrogen sulfide (H<sub>2</sub>S) concentration were screened using a RAE Systems QRAE II multi-gas meter.
- Total VOCs were screened using a MiniRae2000 PGM-7600 photo-ionization detector (PID) equipped with a 10.6 eV lamp and calibrated to "read as" benzene.

\* The interior portions of monitoring locations COM-1 and COM-2 were inaccessible, thus ducts protruding from those structures were used as monitoring points.

\*\* GMW-1 is broken off at approximately 5 feet below grade level at the bottom of a manhole, thus the ambient air in the manhole was sampled in place of soil gas.

**WEATHER OBSERVATIONS:**

	Date	Time	Wind Direction	Wind Speed (mph)		Air Temp (°F)	Dew Point (°F)	Barometer		Conditions
				Avg	Gust			(inches Hg)	Rise/Fall	
KPVD	3/30/17	11:51	NNW	12.7	17.3	46	19	30.21	Falling	Partly Cloudy
	5/4/17	9:51	E	6.9	–	57	35	30.30	Rising	Mostly Cloudy
	8/4/17	9:51	S	9.2	–	77	70	30.11	Falling	Scattered Clouds
	11/16/17	10:51	SE	15	21.9	51	48	29.83	Falling	Light Rain
	2/1/18	9:30	Variable	6	–	36	26	29.89	Steady	Cloudy
	5/4/18	9:30	NNW	5	–	68	63	29.65	Falling	Cloudy
	8/1/18	11:03	SSE	10	–	75	68	30.16	Steady	Cloudy
	11/7/18	10:51	SW	13	–	60	41	29.90	Steady	Fair
	2/7/19	10:51	NNE	9	–	40	39	30.10	Steady	Fog
	5/8/19	12:30	S	15	23	58	43	30.10	Rising	Partly Cloudy
	8/9/19	9:51	W	10	–	77	62	29.70	Steady	Fair
	11/8/19	11:51	NW	17	31	35	13	29.98	Rising	Partly Cloudy
	2/26/20	11:59	NE	7	–	50	41	29.96	Fallnig	Cloudy
	5/11/20	12:51	S	13	–	53	49	29.72	Falling	Light Rain
	8/28/20	10:01	NNW	6	–	75	66	29.75	Steady	Mostly Cloudy
	11/11/20	11:51	SSW	13	–	73	64	29.97	Falling	Mostly Cloudy
	2/25/21	9:51	WNW	21	29	44	22	29.88	Rising	Fair / Windy
	5/11/21	11:51	W	14	24	62	29	29.90	Falling	Fair
	8/10/21	9:51	–	0	–	73	67	30.14	Falling	Cloudy
	11/4/21	10:51	ENE	3	–	48	29	30.29	Falling	Partly Cloudy
	2/24/22	10:51	ENE	7	–	29	6	30.45	Steady	Cloudy
	5/22/22	7:51	SSW	12	–	77	66	29.87	Rising	Fair
	8/30/22	7:51	S	10	–	79	70	29.88	Falling	Fair
11/21/22	10:51	W	14	–	34	12	30.39	Falling	Fair	
2/23/23	8:37	NNE	14	–	35	34	29.84	Steady	Cloudy	
5/9/23	9:51	E	8	–	59	29	29.91	Rising	Mostly Cloudy	
8/28/23	8:51	E	6	–	64	61	30.05	Steady	Cloudy	
11/6/23	9:51	NNE	8	–	48	36	30.15	Falling	Mostly Cloudy	

• Weather observations are from the TF Green State Airport (KPVD).