

## Landfill Gas Composition

American Analytics Landfill Gas Analysis for Sample Collected On 01/06/16

Analyte	Method	Estimated Reporting Limit	Analytical Results
Hydrogen	EPA 3C (Mod)	0.1%	<0.1%
Carbon Dioxide	EPA 3C (Mod)	0.1%	<b>28%</b>
Oxygen/Argon	EPA 3C (Mod)	0.1%	<b>4.5%</b>
Nitrogen	EPA 3C (Mod)	0.1%	<b>36.0%</b>
Methane	EPA 3C (Mod)	0.1%	<b>32.0%</b>
Ethane	GC/FID	20 ppmV	<100000 ppmV
Propane	GC/FID	20 ppmV	<b>18 ppmV</b>
Pentane	GC/FID	20 ppmV	<10 ppmV
Hexane	GC/FID	20 ppmV	<10 ppmV
Benzene	EPA 8260B (Mod)	1 ppmV	<b>0.97 ppmV</b>
Toluene	EPA 8260B (Mod)	1 ppmV	<b>3.2 ppmV</b>
Ethylbenzene	EPA 8260B (Mod)	1 ppmV	<b>1.1 ppmV</b>
m,p-Xylene	EPA 8260B (Mod)	1 ppmV	<b>1.5 ppmV</b>
o-Xylene	EPA 8260B (Mod)	1 ppmV	0.48 ppmV
Styrene	EPA 8260B (Mod)	1 ppmV	<0.23 ppmV
C3 Benzenes	EPA 8260B (Mod)	1 ppmV	<0.4 ppmV
Naphthalene	EPA 8260B (Mod)	1 ppmV	<0.38 ppmV
C1 Naphthalene	EPA 8260B (Mod)	TIC*	not found
C2 Naphthalene	EPA 8260B (Mod)	TIC*	not found
Hydrogen Sulfide	ASTM D 5540-12	0.05 ppmV	<b>39 ppmV</b>
Carbonyl Sulfide	ASTM D 5540-12	0.05 ppmV	<b>0.053 ppmV</b>
Carbon Disulfide	ASTM D 5540-12	0.05 ppmV	<b>0.032 ppmV</b>
Methyl Mercaptan	ASTM D 5540-12	0.05 ppmV	<b>1.0 ppmV</b>
Dimethyl Sulfide	ASTM D 5540-12	0.05 ppmV	<b>1.5 ppmV</b>
Total Sulfur**	ASTM D 5540-12	0.05 ppmV	<b>42 ppmV</b>

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1,1,3,3-tetramethyldisiloxane	GC/MS (ALS AQL111)	TIC*	not found
pentamethyldisiloxane	GC/MS (ALS AQL111)	TIC*	not found
hexamethyldisilane	GC/MS (ALS AQL111)	TIC*	not found
hexamethyldisiloxane (L2)	GC/MS (ALS AQL111)	200 ug/m3	<b>580 ug/m3</b>
Octamethyltrisiloxane (L3)	GC/MS (ALS AQL111)	200 ug/m3	<0.27 ug/m3
Decamethyltetrasiloxane (L4)	GC/MS (ALS AQL111)	200 ug/m3	<0.28 ug/m3
Dodecamethylpentasiloxane (L5)	GC/MS (ALS AQL111)	200 ug/m3	<0.28 ug/m3
Hexamethylcyclotetrasiloxane (D3)	GC/MS (ALS AQL111)	200 ug/m3	<b>63 ug/m3</b>
Octamethylcyclotetrasiloxane (D4)	GC/MS (ALS AQL111)	200 ug/m3	<b>120 ug/m3</b>
Decamethylcyclopentasiloxane (D5)	GC/MS (ALS AQL111)	200 ug/m3	<b>52 ug/m3</b>
Dodecamethylcyclohexasiloxane (D6)	GC/MS (ALS AQL111)	200 ug/m3	<0.28 ug/m3
Trimethylsilanol	GC/MS (ALS AQL111)	200 ug/m3	<b>3500 ug/m3</b>
Total Silicon	GC/MS (ALS AQL111)	200 ug/m3	<b>1400 ug/m3</b>
Mercury	EPA 7471B (Mod)	0.5 ug/m3	<0.5 ug/m3
Arsenic	EPA 6020B (Mod)	2 ug/m3	<2 ug/m3
Beryllium	EPA 6020B (Mod)	2 ug/m3	<2 ug/m3
Cadmium	EPA 6020B (Mod)	2 ug/m3	<2 ug/m3
Copper	EPA 6020B (Mod)	2 ug/m3	<2 ug/m3
Molybdenum	EPA 6020B (Mod)	2 ug/m3	<2 ug/m3
Lead	EPA 6020B (Mod)	2 ug/m3	<2 ug/m3
Antimony	EPA 6020B (Mod)	2 ug/m3	<2 ug/m3
Selenium	EPA 6020B (Mod)	2 ug/m3	<2 ug/m3
Zinc	EPA 6020B (Mod)	2 ug/m3	<b>7.4 ug/m3</b>

\*: Tentatively Identified Compound

\*\* : Total Reduced Sulfur as Hydrogen Sulfide