

1.1 SUMMARY OF RESULTS

Facility: Bowerman Power LFG
Source: ICE #2
Load: Normal
Date: 6/6/2024

Parameter	Units	Full Load	Limits	Pass/Fail
Engine Load				
Outlet ROCs [Duplicate Avg]				
NMOC, as methane	ppmv	12.67	-	
NMOC @ 15% O ₂	ppmv	5.97	30	Pass
NMOC, as hexane	ppmv	2.11	-	
NMOC, as hexane @ 3% O ₂	ppmv	3.02	20	Pass
Emission Rate	lb/hr	0.24	1.21	Pass
Emission Rate	lb/MMBTU	0.0084	-	
Emission Rate	g/bhp-hr	0.024	-	
Inlet ROCs				
NMOC, as methane	ppmv	1142	-	
Emission Rate	lb/hr	2.84	-	
Outlet Methane				
Methane	ppmv	1797.00	-	
Methane @ 15% O ₂	ppmv	850.18	3000	Pass
Emission Rate	lb/hr	34.63	-	
Inlet Methane				
Methane	ppmv	489,840	-	
Emission Rate	lb/hr	1,219.15	-	
Destruction Efficiency				
ROC Destruction	%	91.41	-	
Methane Destruction	%	97.16	-	
Aldehydes [Triplicate Avg]				
Formaldehyde	ppmv	0.67	-	
Emission Rate	lb/hr	0.0242	-	
Acetaldehyde	ppmv	0.130	-	
Emission Rate	lb/hr	0.0069	-	
Acrolein	ppmv	0.039	-	
Emission Rate	lb/hr	0.0026	-	
Inlet Sulfur (6/6/24)	ppmv	111.70	85	Fail
Emission Rate	lb/hr	0.59	0.62	Pass
Inlet Sulfur (6/7/24)	ppmv	25.88	85	Pass
Emission Rate	lb/hr	0.14	0.62	Pass
Particulate Matter	gr/dscf	0.01499		
Emission Rate	lb/hr	1.017	0.676	Fail
Emission Rate	g/bhp-hr	0.0992	0.066	Fail
Ammonia (NH₃) [Duplicate Avg]	ppmv	1.27	-	
Ammonia (NH ₃) @15% O ₂	ppmv	0.60	5	Pass
Emission Rate	lb/hr	0.0260	-	
Emission Rate	g/bhp-hr	0.00253	-	

Eng #2



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CLIENT TOTAL AIR ANALYSIS, INC.
CLIENT PROJ NO: Bowerman Landfill
LABORATORY NO: 24-605
SAMPLING DATE: 06/06/24
RECEIVING DATE: 06/06/24
ANALYSIS DATE: 06/17/24
REPORT DATE: 06/20/24

Laboratory Analysis Report

Analysis Method	SCAQMD Method 5.1				
Sensitivity	0.1 mg				
Sample ID/Description	Sampling Date	Sample Vol. (mL)	Initial Wt gram	Final Wt gram	PM mg/sample
ICE #2 - Imp Catch Organic	06/06/24	250mL	112.3437	112.3438	0.10
ICE #2 - Imp Catch Aqueous	06/06/24	400mL	151.4345	151.4731	38.60
ICE #2 - PM Filter (1256)	06/06/24	-	0.3659	0.3680	2.10

Dr. Andrew Kitto
President

1.1 SUMMARY OF RESULTS

Facility: Bowerman Power LFG
Source: ICE #5
Load: Normal
Date: 6/3/2024

Parameter	Units	Full Load	Limits	Pass/ Fail
Engine Load				
Outlet ROCs [Duplicate Avg]				
NMOC, as methane	ppmv	13.19	-	
NMOC @ 15% O ₂	ppmv	6.25	30	Pass
NMOC, as hexane	ppmv	2.20	-	
NMOC, as hexane @ 3% O ₂	ppmv	3.16	20	Pass
Emission Rate	lb/hr	0.25	1.21	Pass
Emission Rate	lb/MMBTU	0.0088	-	
Emission Rate	g/bhp-hr	0.024	-	
Inlet ROCs				
NMOC, as methane	ppmv	1454	-	
Emission Rate	lb/hr	3.50	-	
Outlet Methane				
Methane	ppmv	1839.50	-	
Methane @ 15% O ₂	ppmv	875.51	3000	Pass
Emission Rate	lb/hr	34.97	-	
Inlet Methane				
Methane	ppmv	492,830	-	
Emission Rate	lb/hr	1,187.04	-	
Destruction Efficiency				
ROC Destruction	%	92.84	-	
Methane Destruction	%	97.05	-	
Aldehydes [Triplicate Avg]				
Formaldehyde	ppmv	0.43	-	
Emission Rate	lb/hr	0.0153	-	
Acetaldehyde	ppmv	0.131	-	
Emission Rate	lb/hr	0.0068	-	
Acrolein	ppmv	0.037	-	
Emission Rate	lb/hr	0.0025	-	
Inlet Sulfur (6/3/24)				
Emission Rate	ppmv	84.95	85	Pass
	lb/hr	0.43	0.62	Pass
Inlet Sulfur (6/7/24)				
Emission Rate	ppmv	25.88	85	Pass
	lb/hr	0.13	0.62	Pass
Particulate Matter				
Emission Rate	gr/dscf	0.01732		
	lb/hr	1.143	0.676	Fail
Emission Rate	g/bhp-hr	0.1115	0.066	Fail
Ammonia (NH₃) [Duplicate Avg]				
Ammonia (NH ₃) @15% O ₂	ppmv	1.29	-	
Emission Rate	ppmv	0.61	5	Pass
	lb/hr	0.0261	-	
Emission Rate	g/bhp-hr	0.00254	-	

Eng. #5



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CLIENT TOTAL AIR ANALYSIS, INC.
CLIENT PROJ NO: Bowerman Landfill
LABORATORY NO: 24-582
SAMPLING DATE: 06/03/24
RECEIVING DATE: 06/03/24
ANALYSIS DATE: 06/17/24
REPORT DATE: 06/20/24

Laboratory Analysis Report

Analysis Method	SCAQMD Method 5.1				
Sensitivity	0.1 mg				
Sample ID/Description	Sampling Date	Sample Vol. (mL)	Initial Wt gram	Final Wt gram	PM mg/sample
ICE #5 - Imp Catch Organic	06/03/24	250mL	122.5992	122.5981	<0.10
ICE #5 - Imp Catch Aqueous	06/03/24	400mL	160.7544	160.7976	43.20
ICE #5 - PM Filter (1253)	06/03/24	-	0.3642	0.3661	1.90



 Dr. Andrew Kitto
 President

1.1 SUMMARY OF RESULTS

Facility: Bowerman Power LFG
Source: ICE #6
Load: Normal
Date: 5/31/2024

Parameter	Units	Full Load	Limits	Pass/ Fail
Engine Load				
Outlet ROCs [Duplicate Avg]				
NMOC, as methane	ppmv	16.65	-	
NMOC @ 15% O ₂	ppmv	8.03	30	Pass
NMOC, as hexane	ppmv	2.78	-	
NMOC, as hexane @ 3% O ₂	ppmv	4.06	20	Pass
Emission Rate	lb/hr	0.33	1.21	Pass
Emission Rate	lb/MMBTU	0.0113	-	
Emission Rate	g/bhp-hr	0.032	-	
Inlet ROCs				
NMOC, as methane	ppmv	1399	-	
Emission Rate	lb/hr	3.44	-	
Outlet Methane				
Methane	ppmv	1823.50	-	
Methane @ 15% O ₂	ppmv	883.25	3000	Pass
Emission Rate	lb/hr	36.10	-	
Inlet Methane				
Methane	ppmv	495,830	-	
Emission Rate	lb/hr	1,220.79	-	
Destruction Efficiency				
ROC Destruction	%	90.43	-	
Methane Destruction	%	97.04	-	
Aldehydes [Triplicate Avg]				
Formaldehyde	ppmv	0.34	-	
Emission Rate	lb/hr	0.0127	-	
Acetaldehyde	ppmv	0.085	-	
Emission Rate	lb/hr	0.0046	-	
Acrolein	ppmv	0.047	-	
Emission Rate	lb/hr	0.0032	-	
Inlet Sulfur (5/31/2024)	ppmv	109.70	85	Fail
Emission Rate	lb/hr	0.57	0.62	Pass
Inlet Sulfur (6/7/2024)	ppmv	25.88	85	Pass
Emission Rate	lb/hr	0.14	0.62	Pass
Particulate Matter	gr/dscf	0.01493		
Emission Rate	lb/hr	0.976	0.676	Fail
Emission Rate	g/bhp-hr	0.0952	0.066	Fail
Ammonia (NH₃) [Duplicate Avg]	ppmv	4.89	-	
Ammonia (NH ₃) @15% O ₂	ppmv	2.37	5	Pass
Emission Rate	lb/hr	0.1030	-	
Emission Rate	g/bhp-hr	0.01004	-	

Eng # 6



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CLIENT TOTAL AIR ANALYSIS, INC.
CLIENT PROJ NO: Bowerman Landfill
LABORATORY NO: 24-573
SAMPLING DATE: 05/31/24
RECEIVING DATE: 05/31/24
ANALYSIS DATE: 06/17/24
REPORT DATE: 07/01/24

Laboratory Analysis Report

Analysis Method	SCAQMD Method 5.1				
Sensitivity	0.1 mg				
Sample ID/Description	Sampling Date	Sample Vol. (mL)	Initial Wt gram	Final Wt gram	PM mg/sample
ICE #6 - Imp Catch Organic	05/31/24	250mL	117.0306	117.0305	<0.10
ICE #6 - Imp Catch Aqueous	05/31/24	400mL	166.0538	166.0907	36.90
ICE #6 - PM Filter (1252)	05/31/24	-	0.3660	0.3682	2.20

Dr. Andrew Kitto
President

1.1 SUMMARY OF RESULTS

Facility: Bowerman Power LFG
Source: ICE #7
Load: Normal
Date: 5/30/2024

Parameter	Units	Full Load	Limits	Pass/ Fail
Engine Load				
Outlet ROCs [Duplicate Avg]				
NMOC, as methane	ppmv	18.67	-	
NMOC @ 15% O ₂	ppmv	9.23	30	Pass
NMOC, as hexane	ppmv	3.11	-	
NMOC, as hexane @ 3% O ₂	ppmv	4.67	20	Pass
Emission Rate	lb/hr	0.38	1.21	Pass
Emission Rate	lb/MMBTU	0.0131	-	
Emission Rate	g/bhp-hr	0.037	-	
Inlet ROCs				
NMOC, as methane	ppmv	724	-	
Emission Rate	lb/hr	1.84	-	
Outlet Methane				
Methane	ppmv	1793.00	-	
Methane @ 15% O ₂	ppmv	890.18	3000	Pass
Emission Rate	lb/hr	36.78	-	
Inlet Methane				
Methane	ppmv	480,380	-	
Emission Rate	lb/hr	1,218.00	-	
Destruction Efficiency				
ROC Destruction	%	79.14	-	
Methane Destruction	%	96.98	-	
Aldehydes [Triplicate Avg]				
Formaldehyde	ppmv	0.29	-	
Emission Rate	lb/hr	0.0112	-	
Acetaldehyde	ppmv	0.122	-	
Emission Rate	lb/hr	0.0069	-	
Acrolein	ppmv	0.050	-	
Emission Rate	lb/hr	0.0019	-	
Inlet Sulfur (5/30/24)	ppmv	91.15	85	Fail
Emission Rate	lb/hr	0.49	0.62	Pass
Inlet Sulfur (6/7/24)	ppmv	25.88	85	Pass
Emission Rate	lb/hr	0.14	0.62	Pass
Particulate Matter	gr/dscf	0.01441		
Emission Rate	lb/hr	1.068	0.676	Fail
Emission Rate	g/bhp-hr	0.1042	0.066	Fail
Ammonia (NH₃) [Duplicate Avg]	ppmv	1.33	-	
Ammonia (NH ₃) @15% O ₂	ppmv	0.66	5	Pass
Emission Rate	lb/hr	0.0289	-	
Emission Rate	g/bhp-hr	0.00282	-	

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CLIENT TOTAL AIR ANALYSIS, INC.
CLIENT PROJ NO: Bowerman Landfill
LABORATORY NO: 24-567
SAMPLING DATE: 05/30/24
RECEIVING DATE: 05/30/24
ANALYSIS DATE: 06/17/24
REPORT DATE: 06/10/24

Laboratory Analysis Report

Analysis Method	SCAQMD Method 5.1				
Sensitivity	0.1 mg				
Sample ID/Description	Sampling Date	Sample Vol. (mL)	Initial Wt gram	Final Wt gram	PM mg/sample
ICE #7 - Imp Catch Organic	05/30/24	250mL	114.8251	114.8265	1.40
ICE #7 - Imp Catch Aqueous	05/30/24	400mL	161.1223	161.1603	38.00
ICE #7 - PM Filter (1251)	05/30/24	-	0.3648	0.3669	2.10

Dr. Andrew Kitto
President

1.1 SUMMARY OF RESULTS

Facility: Bowerman Power LFG
Source: ICE #1
Load: Normal
Date: 6/7/2024

Parameter	Units	Full Load	Limits	Pass/ Fail
Engine Load		Full Load		Pass/ Fail
Outlet ROCs [Duplicate Avg]				
NMOC, as methane	ppmv	13.54	-	
NMOC @ 15% O ₂	ppmv	6.40	30	Pass
NMOC, as hexane	ppmv	2.26	-	
NMOC, as hexane @ 3% O ₂	ppmv	3.23	20	Pass
Emission Rate	lb/hr	0.26	1.21	Pass
Emission Rate	lb/MMBTU	0.0090	-	
Emission Rate	g/bhp-hr	0.025	-	
NMOC, as methane	ppmv	3213	-	
Emission Rate	lb/hr	8.12	-	
Outlet Methane				
Methane	ppmv	1781.50	-	
Methane @ 15% O ₂	ppmv	845.51	3000	Pass
Emission Rate	lb/hr	33.89	-	
Inlet Methane				
Methane	ppmv	471,790	-	
Emission Rate	lb/hr	1,192.58	-	
Destruction Efficiency				
ROC Destruction	%	96.83	-	
Methane Destruction	%	97.16	-	
Aldehydes [Triplicate Avg]				
Formaldehyde	ppmv	0.63	-	
Emission Rate	lb/hr	0.0226	-	
Acetaldehyde	ppmv	0.107	-	
Emission Rate	lb/hr	0.0056	-	
Acrolein	ppmv	0.044	-	
Emission Rate	lb/hr	0.0029	-	
Inlet Sulfur (6/7/24)	ppmv	25.88	85	Pass
Emission Rate	lb/hr	0.14	0.62	Pass
Particulate Matter	gr/dscf	0.00393		
Emission Rate	lb/hr	0.262	0.676	Pass
Emission Rate	g/bhp-hr	0.0256	0.066	Pass
Ammonia (NH₃) [Duplicate Avg]	ppmv	4.54	-	
Ammonia (NH ₃) @15% O ₂	ppmv	2.16	5	Pass
Emission Rate	lb/hr	0.0920	-	
Emission Rate	g/bhp-hr	0.00897	-	

Eng. # 1



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CLIENT TOTAL AIR ANALYSIS, INC.
CLIENT PROJ NO: Bowerman Landfill
LABORATORY NO: 24-613
SAMPLING DATE: 06/07/24
RECEIVING DATE: 06/07/24
ANALYSIS DATE: 06/17/24
REPORT DATE: 06/20/24

Laboratory Analysis Report

Analysis Method	SCAQMD Method 5.1				
Sensitivity	0.1 mg				
Sample ID/Description	Sampling Date	Sample Vol. (mL)	Initial Wt gram	Final Wt gram	PM mg/sample
ICE #1 - Imp Catch Organic	06/07/24	250mL	99.2522	99.2520	<0.10
ICE #1 - Imp Catch Aqueous	06/07/24	400mL	161.5791	161.5880	8.90
ICE #1 - PM Filter (1257)	06/07/24	-	0.3629	0.3643	1.40

A handwritten signature in black ink, appearing to read "Andrew Kitto", written over a horizontal line.

Dr. Andrew Kitto
President