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Sent: Monday, October 12, 2026 2:43 PM
To: jcheng@aqmd.gov; sourcetesting@aqmd.gov; rdavis@aqmd.gov; bchen@aqmd.gov; ndickel@aqmd.gov; Christina Ojeda; MNguyen@aqmd.gov; JAspell@aqmd.gov; Rule1150Notifications@aqmd.gov
Cc: Kim, James; Jones, Art; Fong, Cornelius; Gerardo Vergara; Roddy Rauls; Pedro Sanjuan; Sullivan, Pat; Bill Haley; Kevin Green; Dylan Smith; John Peterson; Surya Adhikari; Stephens, Gabrielle; tessa.lenz@wasteconnections.com; Kristina Schafer
Subject: Fw: 2026 Chiquita Canyon Landfill Hero Thermal Oxidizer Hero Compliance Report
Attachments: W002AS-065112-RT-8872.pdf; st-222-xst-expedited-eval_Hero Source Test Report_Oct 2026.pdf

In addition, attached is the executed Expedited Evaluation Request Form to accompany the Hero Thermal Oxidizer (TOx) Source Test Report. I have added several additional recipients on this email submittal.

Please note that for tracking purposes, the Hero TOx unit is scheduled to leave the site in late fall or early winter.

Thank you,

Amanda Kuhl
Senior Project Professional
SCS Engineers
Long Beach, CA
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From: Roddy Rauls <rrauls@onterris.com>
Sent: Monday, October 12, 2026 10:58 AM
To: Rodney Davis <rdavis@aqmd.gov>; MNguyen@aqmd.gov <MNguyen@aqmd.gov>; Jason Aspell <JAspell@aqmd.gov>; Source Testing <sourcetesting@aqmd.gov>
Cc: Dylan Smith <Dylan.Smith@WasteConnections.com>; Stephens, Gabrielle <gstephens@scsengineers.com>; Kuhl, Amanda <AKuhl@scsengineers.com>; tessa.lenz@wasteconnections.com <tessa.lenz@wasteconnections.com>; Pedro Sanjuan <psanjuan@onterris.com>; Surya Adhikari <suadhikari@onterris.com>; John Peterson <jpeterson@onterris.com>; Kristina Schafer <kschafer@onterris.com>
Subject: 2026 Chiquita Canyon Landfill Hero Thermal Oxidizer Hero Compliance Report

This email originated from outside of SCS Engineers. Do not click links or open attachments unless you recognize the sender and know the content is safe.

All,
Please find attached the subject report.

Roddy Rauls (he/him)
Manager, Administrative • Source Testing
Mobile +1 714.936.3839
Cabot, AR, USA • Central Time Zone
rrauls@onterris.com • Onterris.com


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South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765
(909) 396-2000
(909) 396-2099 (fax)

Expedited Evaluation Request Form
Source Test Protocol/ Report/ CEMS/
LAP/ Product Certification
Form 222-XST

Section I - Facility Information

1. Business Name: Chiquita Canyon Landfill, LLC Facility ID: 119219

Equipment/ Device: Hero Thermal Oxidizer (TOx)

2. The requested evaluation is for:

- a. ☐ Source Test Protocol
- b. ☒ Source Test Report
- c. ☐ CEMS Application (New)
- d. ☐ CEMS Application (Modification)
- e. ☐ LAP Approval Evaluation
- f. ☐ Product Certification (i.e., Rules 1111, 1121, 1146.2, and 1174)

Expedited Evaluation will not be performed unless all remaining acknowledgements are checked-off:

- 3. ☒ I hereby request an Expedited Source Evaluation for this document.
- 4. ☒ I understand that this request may incur additional fees after completion of evaluation as allowed by District Reg. III.
- 5. ☒ I understand this request cannot be cancelled once an evaluation has been initiated.
- 6. ☒ I understand this request for expedited review neither guarantees action by any specific date nor does it guarantee approval.

Section II - Certification

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS DOCUMENT IS TRUE AND CORRECT.

SIGNATURE OF RESPONSIBLE OFFICER OF FIRM:

TITLE OF RESPONSIBLE OFFICER OF FIRM:

District Manager

TYPE OR PRINT NAME OF RESPONSIBLE OFFICER OF FIRM:

Kevin Green

TELEPHONE NUMBER:

(661) 812-5846

DATE SIGNED:

10/6/2026

**SOURCE TEST REPORT FOR
2026 CHIQUITA CANYON LANDFILL
HERO THERMAL OXIDIZER
SCAQMD FACILITY ID: 119219
SCAQMD A/N: 661284**

Prepared For:

Chiquita Canyon Landfill

29201 Henry Mayo Drive
Castaic, California 91384

For Submittal To:

South Coast Air Quality Management District

21865 Copley Dr.
Diamond Bar, California 91765-4178

Prepared By:

Montrose Air Quality Services, LLC

1631 E. St. Andrew Pl.
Santa Ana, California 92705
(714) 279-6777

Pete San Juan

Test Date: **May 13, 2026**
Production Date: **October 12, 2026**
Report Number: **W002AS-065112-RT-8872**



CONFIDENTIALITY STATEMENT

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REVIEW AND CERTIFICATION

All work, calculations, and other activities and tasks performed and presented in this document were carried out by me or under my direction and supervision. I hereby certify that, to the best of my knowledge, Montrose operated in conformance with the requirements of the Montrose Quality Management System and ASTM D7036-04 during this test project.

Signature:  _____ Date: 10/12/2026

Name: Pete San Juan Title: Client Project Manager

I have reviewed, technically and editorially, details, calculations, results, conclusions, and other appropriate written materials contained herein. I hereby certify that, to the best of my knowledge, the presented material is authentic, accurate, and conforms to the requirements of the Montrose Quality Management System and ASTM D7036-04.

Signature:  _____ Date: 10/12/2026

Name: Surya Adhikari Title: Senior Reporting QC Specialist

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1.0 INTRODUCTION AND SUMMARY

Montrose Air Quality Services, LLC (MAQS) was contracted to conduct source emissions testing on landfill gas-fired Hero Thermal Oxidizer (TOx) A/N: 661284 at the Chiquita Canyon Landfill (SCAQMD Facility ID: 119219) located in Castaic, California. Testing was conducted to satisfy the requirements of Notice to Comply (NTC) #E56457, issued by South Coast AQMD to Chiquita Canyon, LLC. 17 CCR § 95464(b)(3)(A)(1) requires gas control devices to achieve methane destruction efficiency (DRE) of at least 99 percent by weight.

Testing was conducted in accordance with the source test plan (MAQS Document Number W002AS-065112-PP-1498) submitted to SCAQMD on March 3, 2026. Measurements of the TOx emissions and operating parameters were conducted at the TOx exhaust and at the inlet (landfill gas) of the control device. Table 1-1 provides a test matrix of the parameters tested at each sample location. The test was conducted on May 13, 2026.

The MAQS test team consisted of Pete San Juan and Allen Dusky. Pete San Juan was the on-site qualified individual as defined in ASTM D7036-04. MAQS qualifies as an independent testing laboratory under SCAQMD Rule 304 (no conflict of interest) and is certified by the SCAQMD to conduct testing for criteria pollutants according to District Methods. Testing was coordinated by Mr. Dylan Smith of Waste Connections.

The results of the emission test are summarized in Table 1-2. The results demonstrate that the Hero TOx did not meet the requirement to achieve a methane DRE of at least 99 percent by weight specified in 17 CCR § 95464(b)(3)(A)(1). All raw data, laboratory results, calculations and QA/QC data can be found in the Appendices.

**TABLE 1-1
TEST MATRIX
CHIQUITA CANYON LANDFILL
HERO THERMAL OXIDIZER
MAY 13, 2026**

Parameter/Units	Inlet	Exhaust
Oxygen (O ₂)	X	X
Carbon Dioxide (CO ₂)	X	X
Moisture (H ₂ O)	X	--
Flow Rate (dscfm)	X	X
Temperature (°F)	X	X
Methane (CH ₄)	X	X
Calorific Value (Btu/scf)	X	

**TABLE 1-2
RESULTS SUMMARY
CHIQUITA CANYON LANDFILL
HERO THERMAL OXIDIZER
MAY 13, 2026**

Parameter/Units	Inlet	Exhaust	Limit
O₂ , %	5.1	11.3	--
CO₂ , %	48.0	16.3	--
N₂ , %	26.3	72.3	--
H₂O , %	6.4	--	--
Flow Rate , dscfm	1,533	7,141	--
Temperature , °F from RM probe	148	--	--
Temperature , °F from controlling TC	--	1,559	>1,400
Hydrocarbons			
Methane, ppm	140,000	5033.3	--
Methane, ppm @ 3% O ₂	158,279	9520.5	--
Methane, lb/hr	534.7	90.27	--
Methane, Destruction Efficiency, %	--	83.1	≥99%

Note:
The results in this table are the averages of all measurements.

2.0 UNIT DESCRIPTION

The Thermal Oxidizer is described as a Vapor Combustor and is Manufactured by Clean Cap Tech. It has a heat input capacity of 45 MMBtu/hr and a maximum inlet fuel flow rate of 3,300 scfm. The combustor uses approximately 50 standard cubic feet per hour of propane pilot assist gas. The reaction gas going into the unit is not expected to be greater than 22.46% methane. The TOx will be permitted to operate 24 hours per day, 7 days per week, and 52 weeks per year, except during periods of scheduled and unscheduled maintenance.

The vapor combustor will also combust vapor vented from the liquid storage tanks in the LFG condensate and leachate collection/storage system and LFG condensate and leachate treatment system.

The exhaust stack is rectangular in shape and approximately 46 feet in height above grade.

3.0 TEST DESCRIPTION

3.1 TEST CONDITIONS

The Thermal Oxidizer was operated at capacity for available landfill gas throughout each test period. Temperature and fuel flow rate were monitored and recorded by test personnel throughout each test period. The Thermal Oxidizer's middle thermocouple was used for control temperature settings. Temperature set point was 1,560°F. Process data can be found in Appendix B.

3.2 SAMPLE LOCATIONS

Samples were collected at the Thermal Oxidizer exhaust and at the inlet (landfill gas fuel) to the Thermal Oxidizer. The SCAQMD Method 1.1 sample point calculations and a schematic drawing of the sample locations are included in Appendix A.

At the Thermal Oxidizer exhaust, a telescopic aerial lift was used for access to a single sample port located at the center of the rectangular duct.

The Thermal Oxidizer inlet duct has an inner diameter of 8 inches.

3.3 TEST PROCEDURES

The test procedures used for the inlet and Thermal Oxidizer exhaust measurements are summarized below in Tables 3-1 and 3-2, respectively. The procedures selected are consistent with source test plan submitted to SCAQMD. Brief discussions of each procedure are given below in Sections 3.3.1 through 3.3.3.

**TABLE 3-1
INLET TEST PROCEDURES
CHIQUITA CANYON LANDFILL
HERO THERMAL OXIDIZER
MAY 13, 2026**

Parameter	Sample Medium	Analytical Technique	Reference Method	Number of Replicates
Flow Rate	On-Site Flow Meter	Flow Meter	Facility Meter	3
Moisture	Wet Bulb/Dry Bulb	Psychrometric Chart	SCAQMD 4.1	3
N ₂ , O ₂ , and CO ₂	Tedlar Bag	GC/FID/TCD	SCAQMD 10.1/ASTM D-1945	3
Methane	Tedlar Bag	GC/FID	EPA 18	3
Btu/CF and F Factor	Tedlar Bag	GC/FID/TCD	ASTM D-3588	3

**TABLE 3-2
EXHAUST TEST PROCEDURES
CHIQUITA CANYON LANDFILL
HERO THERMAL OXIDIZER
MAY 13, 2026**

Parameter	Sample Medium	Analytical Technique	Reference Method	Number of Replicates
Flow Rate	N/A	Calculated	EPA 19	3
N ₂ , O ₂ / CO ₂	Tedlar Bag	GC/FID/TCD	EPA 3C / SCAQMD 10.1	3
Methane	Tedlar Bag	GC/FID	EPA 18	3

3.3.1 SCAQMD Method 3.1 – Gas Analysis for Dry Molecular Weight and Excess Air

Integrated samples were collected into Tedlar bags from the stack and analyzed for oxygen (O₂) and carbon dioxide (CO₂) by gas chromatograph (GC). Exhaust N₂ was calculated by the difference from the concentration of the other major exhaust gas components such as O₂ and CO₂. Molecular weight of the stack gas is calculated from the percentages of carbon dioxide (CO₂), oxygen (O₂) and nitrogen (N₂). Thermal Oxidizer inlet landfill gas was analyzed by GC for O₂, CO₂, and N₂.

3.3.2 EPA Method 18 – Measurement of Methane Emissions by Gas Chromatography

The Method 18 sampling apparatus was used to collect methane in ten liters Tedlar bags. Triplicate integrated samples were collected simultaneously from a single point at the inlet and outlet of the Thermal Oxidizer to determine the Methane destruction efficiency (DRE) across the control device on a mass basis.

The apparatus consists of a stainless-steel probe connected by Teflon line to a Tedlar sample bag contained in an airtight canister. Evacuation of the air in the canister causes sample gas to be drawn into the bag. Only new Tedlar bags were used, and bags were purged before collecting the sample.

On completion of each run, the bag samples were sealed and transported to the laboratory. The contents of each bag sample were analyzed by gas chromatograph (GC) with a Flame Ionization Detector (FID) for the determination of methane content at the inlet and outlet, and emission rate was calculated as follows:

Equation:

$$\text{lb/hr} = \text{PPMv} * \text{DSCFM} * \text{C.F.} * \text{M.W.}$$

Where:

PPMv = Parts Per Million (Volume)

DSCFM = Dry Standard Cubic Feet Per Minute

M.W. = Molecular Weight of Methane (16-lb/lb-mole)

C.F. = Conversion Factor = 1.583×10^{-7} @ 60°F;

= 1.558×10^{-7} @ 68°F

Enthalpy Analytical, was used for the analysis. The following equation was used to determine the Methane DRE.

$$\text{METHANE DRE} = \left(\frac{\text{Methane}_{in} - \text{Methane}_{out}}{\text{Methane}_{in}} \right) (100\%) \text{ based on mass emission rates}$$

3.3.3 EPA Method 19 – Calculation of Exhaust Flow Rate from Known F-Factor

Fuel meter readings were recorded from the certified facility meter and provided during the test. Inlet landfill gas samples were collected in Tedlar bags and analyzed for F-Factor (dscf/MMBtu) and higher heating value (HHV) Btu/scf by ASTM D1945/D3588. Lab result values were used for the calculation of volumetric flow rate and were compared with the measured exhaust flow rate. The following equation was used to calculate the volumetric flow rate.

$$Q_{sd} = \left(\frac{F_d \times \text{GCV} \times \text{FF}}{1 \times 10^6} \right) \left(\frac{20.9 - O_2}{20.9} \right)$$

4.0 RESULTS AND OVERVIEW

4.1 TEST RESULTS

The results of the source tests of the Hero landfill gas Thermal Oxidizer at Chiquita Canyon Landfill demonstrate that Methane Destruction Efficiency (DRE) does not meet the requirement of $\geq 99\%$ by weight, as specified in 17 CCR § 95464(b)(3)(A)(1).

Detailed results can be found in the appendices. Table 1-2 presented the summarized test results and the allowed limit. Table 4-1 presents detailed test results of each parameter. The Thermal Oxidizer was operated at a landfill gas flow rate of 1,638 scfm as measured by the on-site flow meter. The Thermal Oxidizer temperature controller was set at 1,560°F at the middle thermocouple.

**TABLE 4-1
GENERAL RESULTS
CHIKUITA CANYON LANDFILL
HERO THERMAL OXIDIZER
MAY 13, 2026**

Parameter/Units	Inlet				Exhaust			
	First Run	Second Run	Third Run	Average	First Run	Second Run	Third Run	Average
O ₂ , %	5.2	5.0	5.0	5.1	11.0	12.0	11.0	11.3
CO ₂ , %	48.0	48.0	48.0	48.0	17.0	15.0	17.0	16.3
N ₂ , %	27.0	26.0	26.0	26.3	72.0	73.0	72.0	72.3
H ₂ O, %	6.4	6.4	6.4	6.4	--	--	--	--
Flow Rate, scfm	1642	1636	1635	1638	--	--	--	--
Flow Rate, dscfm	1,537	1,531	1,531	1,533	6,828	7,649	6,946	7,141
Temperature, °F	148	148	148	148	--	--	--	--
Temperature, °F ⁽¹⁾	--	--	--	--	1,561	1,557	1,559	1,559
Hydrocarbons								
Methane, ppm	140,000	140,000	140,000	140,000	4700.0	6200.0	4200.0	5033.33
Methane, ppm @ 3% O ₂	159,618	157,610	157,610	158,279	8497.98	12469.66	7593.94	9520.53
Methane, lb/hr	536.0	534.1	534.0	534.7	79.95	118.16	72.69	90.27
Methane, Destruction Efficiency, %	--	--	--	--	85.1	77.9	86.4	83.1

Note: The exhaust volume flow values are based on Method 19 calculated flow rate.

(1) Temperature from the controlling Thermocouple

4.2 TEST OVERVIEW

Landfill gas flow rate was measured by the certified facility meter. Notably, no propane usage was recorded by the propane flow meter during the test. The propane flow meter displayed 0.00 Nm₃/hr during the entire testing.

Tedlar bag samples of the inlet landfill gas were collected for analysis of HHV and F-Factor, in accordance with the protocol. Triplicate EPA Method 18 samples were taken on the inlet and exhaust.

APPENDIX A TEST DATA

Appendix A.1

Sample Location Data

METHOD 1 DATA SHEET

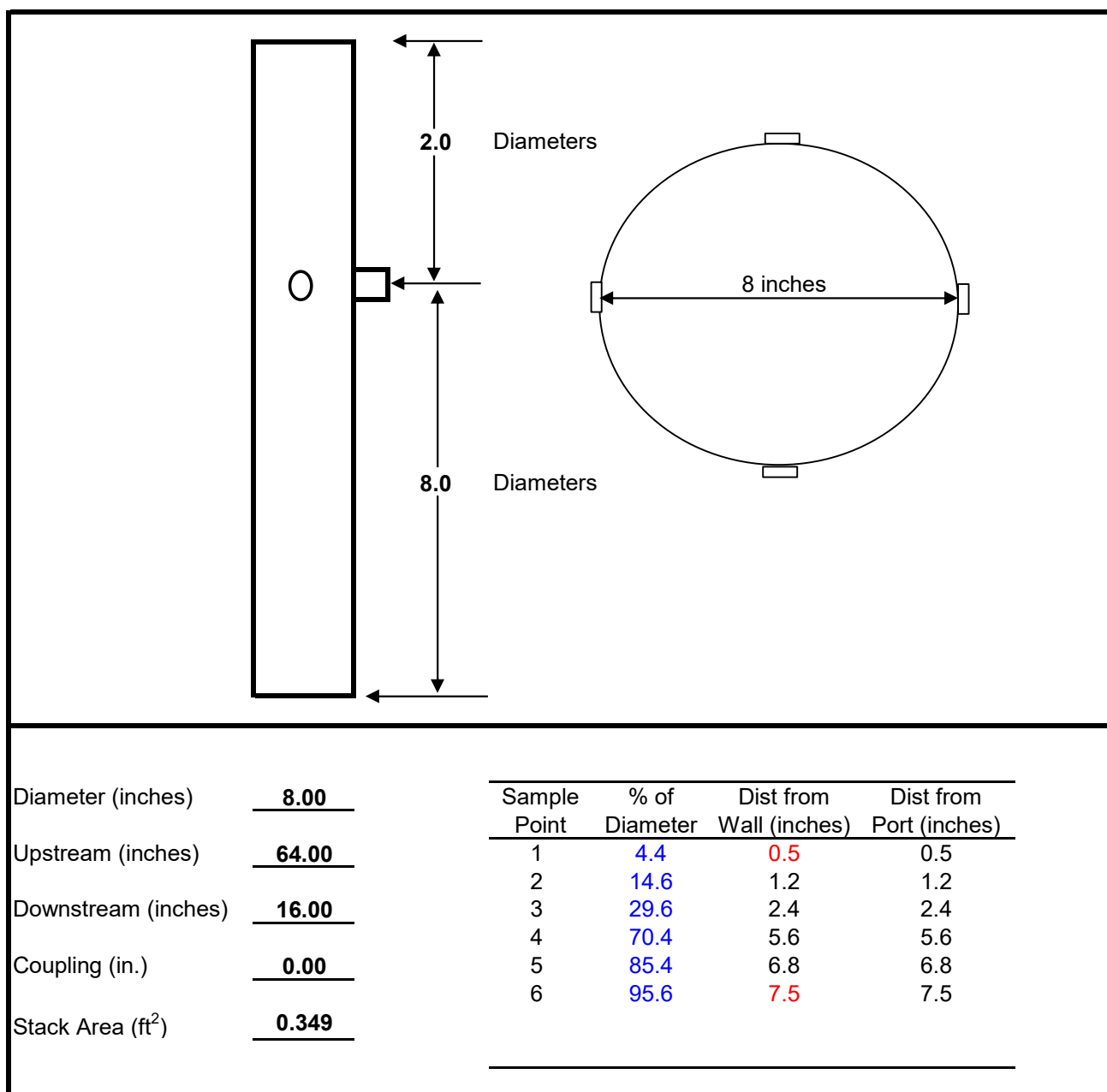
INLET SAMPLE LOCATION

Client: Chiquita Canyon Landfill

Date: 5/13/26

Location: Hero TOx

Performed By: PSJ, AD, RM



Appendix A.2

Exhaust Flow Rate Data

**Waste Connections
Hero TOx
May 13, 2026
SUMMARY OF EPA M-19 SOURCE TEST DATA AND CALCULATIONS**

PARAMETER	UNITS	RUN 1
DATE		5/13/2026
FUEL FLOW	SCFM	1,642
CALORIFIC VALUE	BTU/CF	172.0
F FACTOR (Fd)	DSCF/MMBTU	11,455
EXHAUST O2 CONCENTRATION	%VD	11.00
HEAT INPUT - LANDFILL GAS	MMBTU/HR	16.94
EXHAUST VOLUME FLOW RATE	DSCFM	6,828

PARAMETER	UNITS	RUN 2
DATE		5/13/2026
FUEL FLOW	SCFM	1,636
CALORIFIC VALUE	BTU/CF	174.0
F FACTOR (Fd)	DSCF/MMBTU	11,444
EXHAUST O2 CONCENTRATION	%VD	12.00
HEAT INPUT - LANDFILL GAS	MMBTU/HR	17.08
EXHAUST VOLUME FLOW RATE	DSCFM	7,649

PARAMETER	UNITS	RUN 3
DATE		5/13/2026
FUEL FLOW	SCFM	1,635
CALORIFIC VALUE	BTU/CF	176.0
F FACTOR (Fd)	DSCF/MMBTU	11,432
EXHAUST O2 CONCENTRATION	%VD	11.00
HEAT INPUT - LANDFILL GAS	MMBTU/HR	17.27
EXHAUST VOLUME FLOW RATE	DSCFM	6,946

Appendix A.3 Methane Data

INLET CH4 TEST RESULTS

Test Number		2-CH4-1
Reference Temperature, F		60
Test Date		5/13/2026
Test Method		EPA 18
Inlet O ₂ (%)		5.00
Inlet Flow Rate, dscfm		1,531
O ₂ Correction Factor (%)		3
F-Factor		11,444

Lab Results, ppm component		
Compound	Carbon Atoms	Run 1
Methane	1	140000

Methane	Run 2
ppm	140,000
ppm, C	157,610
lb/hr	534.1

INLET CH4 TEST RESULTS

Test Number		3-CH4-1
Reference Temperature, F		60
Test Date		5/13/2026
Test Method		EPA 18
Inlet O ₂ (%)		5.00
Inlet Flow Rate, dscfm		1,531
O ₂ Correction Factor (%)		3
F-Factor		11,432

Lab Results, ppm component		
	Carbon	
Compound	Atoms	Run 1
Methane	1	140000

Methane	Run 3
ppm	140,000
ppm, C	157,610
lb/hr	534.0

OUTLET CH4 TEST RESULTS

Test Number		1-CH4-1
Reference Temperature, F		60
Test Date		5/13/2026
Test Method		EPA 18
Exhaust O ₂ (%)		11.00
Exhaust Flow Rate, dscfm		6,828
O ₂ Correction Factor (%)		3
F-Factor		11,455

Lab Results, ppm component		
Compound	Carbon Atoms	Run 1
Methane	1	4700

Methane	Run 1
ppm	4700.00
ppm, C	8497.98
lb/hr	79.95

OUTLET CH4 TEST RESULTS

Test Number		2-CH4-1
Reference Temperature, F		60
Test Date		5/13/2026
Test Method		EPA 18
Exhaust O ₂ (%)		12.00
Exhaust Flow Rate, dscfm		7,649
O ₂ Correction Factor (%)		3
F-Factor		11,444

Lab Results, ppm component		
	Carbon	
Compound	Atoms	Run 1
Methane	1	6200

Methane	Run 2
ppm	6200.00
ppm, C	12469.66
lb/hr	118.16

OUTLET CH4 TEST RESULTS

Test Number		3-CH4-1
Reference Temperature, F		60
Test Date		5/13/2026
Test Method		EPA 18
Exhaust O ₂ (%)		11.00
Exhaust Flow Rate, dscfm		6,946
O ₂ Correction Factor (%)		3
F-Factor		11,432

Lab Results, ppm component		
	Carbon	
Compound	Atoms	Run 1
Methane	1	4200

Methane	Run 3
ppm	4200.00
ppm, C	7593.94
lb/hr	72.69

TEDLAR BAG SAMPLING DATA SHEET

CLIENT: Chaquita Flare PERFORMED BY: Ray

LOCATION: Flare UNIT: Hero

Test #	1	2	3		
Date	5-13-26	5-13-26	5-13-26		
Time (start/stop)	1028 1058	1100 1130	1132 1202		
Bag #	1	2	3		

Comments: _____

TEDLAR BAG SAMPLING DATA SHEET

CLIENT: Chiquita FLAME TOX ^{HEAD} PERFORMED BY: SJ/AO/RM
LOCATION: INLET UNIT: HEAD

Test #	1	2	3		
Date	5/13	5/13	5/13		
Time (start/stop)	1020/ 1050	1100/ 1130	1132/ 1202		
Bag #	IN-1	IN-2	IN-3		

Comments: _____



Onterris
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

onterris.com



Lab Job Number : 559510
Report Level : II
Report Date : 05/28/2026

Analytical Report *prepared for:*

Pete San Juan
Onterris Air Quality Services
1631 E. St Andrew Pl
Santa Ana, CA 92705

Location: Waste Connections, PROJ-065112

Authorized for release by:

A handwritten signature in black ink, appearing to read "Richard Villafania".

Richard Villafania, Senior Project Manager
+1 714.771.6900
richard.villafania@onterris.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, CA ELAP #1338-S1, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, ORELAP# 4197

Sample Summary

Pete San Juan Onterris Air Quality Services 1631 E. St Andrew Pl Santa Ana, CA 92705	Lab Job #: Location: Date Received:	559510 Waste Connections, PROJ-065112 05/13/26
--	---	--

Sample ID	Lab ID	Collected	Matrix
HERO TOX INLET -1	559510-001	05/13/26 10:58	Air
HERO TOX INLET -2	559510-002	05/13/26 11:30	Air
HERO TOX INLET -3	559510-003	05/13/26 12:02	Air
HERO TOX EXHAUST -1	559510-004	05/13/26 10:58	Air
HERO TOX EXHAUST -2	559510-005	05/13/26 11:30	Air
HERO TOX EXHAUST -3	559510-006	05/13/26 12:02	Air

Case Narrative

Onterris Air Quality Services
1631 E. St Andrew Pl
Santa Ana, CA 92705
Pete San Juan

Lab Job Number: 559510
Location: Waste Connections, PROJ-
065112
Date Received: 05/13/26

- This data package contains sample and QC results for six air samples, requested for the above referenced project on 05/13/26. The samples were received in good condition.
- Analyses were performed at 2532 E Cerritos Ave., Anaheim, CA, 92806.

Fixed Gases and Low Level Hydrocarbons (ASTM D1945M, ASTM D1946, and EPA 18M):

No analytical problems were encountered.

Volatile Organics in Air GC (ASTM D1946):

No analytical problems were encountered.

EPA 18 and EPA 18M (EPA 18M):

No analytical problems were encountered.

sa ENTHALPY ANALYTICAL

Lab Use Only

W002AS-065112-RT-8772

SAMPLE RECEIPT CHECKLIST

Section 1: General Info			
Date Received: <u>5/13/26</u> Job#: <u>559510</u> Client: <u>MAQS</u>			
Section 2: Shipping / Custody			
Are custody seals present? ☐ Yes ☒ No			
Custody seals intact on arrival? ☒ N/A ☐ Yes ☐ No ☐ On cooler / box ☐ On samples			
☐ Courier ☒ Walk-In ☐ Field Sampling ☐ Shipping Info: _____			
Section 3a: Condition / Packaging			
☐ Outside 0.0 - 6.0°C (0.0 - 10.0°C for microbiology) (PM notified)			
Date Opened <u>5/13/26</u> By (initials) <u>JXR</u> Type of ice used: ☐ Wet ☐ Blue/Gel ☒ None			
☐ Samples received on ice directly from the field; cooling process had begun. (if checked, skip temperatures)			
☒ Sample matrix doesn't require cooling (e.g. air, bulk PCB). (if checked, skip temperatures)			
If no cooler: Observed/Corrected Temp (°C): _____ / _____ Thermometer/IR Gun ID: _____ CF: _____			
Cooler Temp (obs/corr) (°C) #1: _____ / _____ #2: _____ / _____ #3: _____ / _____ #4: _____ / _____ #5: _____ / _____ #6: _____ / _____			
Section 3b: Microbiology Samples			
☒ No microbiology samples submitted (skip 3b)			
☐ Within temp range 0.0 - 10.0°C or received on ice directly from field.			
☐ Adequate headspace for microbiology analysis.			
Section 3c: Air Samples			
☐ No air samples submitted (skip 3c)			
☐ 1.4L Canisters ☐ 6L Canisters ☒ Tedlar Bags ☐ MCE Cassettes ☐ Sorbent Tubes ☐ Other _____			
Tedlar Bags received protected from light (ASTM D5504 Sulfur only)? ☐ N/A ☐ Yes ☐ No			
Section 4: Containers / Labels / Samples	YES	NO	N/A
1) Were custody papers present, filled properly, and legible?	☒		
2) Is the sampler's name present on the CoC?	☒		
3) Were containers received in good condition (unbroken / unopened / uncompromised)?	☒	☒	
4) Were the samples bagged? (required for microbiology samples; recommended for soil samples)			☒
5) Were all of, and only, the correct samples received?	☒		
6) Are sample labels present, legible, and in agreement with the CoC?		☒	
7) Does the container count match the CoC?	☒		
8) Was sufficient sample volume / mass received for the analyses requested?	☒		
9) Were samples received in proper containers for the analyses requested?	☒		
10) Were samples received with > 1/2 holding time remaining?	☒		
11) Are samples properly preserved as indicated by CoC / labels?	☒		
12) Unpreserved VOAs received - If necessary, was the hold time changed in LIMS?			☒
13) Are VOA vials free from headspace/bubbles > 6mm?			☒
Section 5: Explanations / Comments			
(If no comments are made, then no discrepancies noted.)			
4.3A: water vapor/water drops observed inside tedlar bags for samples -001 to -003 4.6A: no sample times on labels			
☐ No additional discrepancies			
Form Completed By (print): <u>NCM</u> (sign): _____			
Date Labeled: <u>5/13/26</u> By (print): <u>NCM</u> (sign): _____			

Q/NEH
5/13/26

Analysis Results for 559510

Pete San Juan
Onterris Air Quality Services
1631 E. St Andrew Pl
Santa Ana, CA 92705

Lab Job #: 559510
Location: Waste Connections, PROJ-065112
Date Received: 05/13/26

Sample ID: HERO TOX INLET -1

Lab ID: 559510-001

Collected: 05/13/26 10:58

Matrix: Air

559510-001 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: ASTM D1945M Prep Method: METHOD									
Hydrogen	5.8		%v/v	0.12	1.2	404645	05/26/26	05/26/26	KXM
Carbon Monoxide	ND		%v/v	0.12	1.2	404645	05/26/26	05/26/26	KXM
Carbon Dioxide	48		%v/v	0.12	1.2	404645	05/26/26	05/26/26	KXM
Oxygen	5.2		%v/v	0.12	1.2	404645	05/26/26	05/26/26	KXM
Methane	14		%v/v	0.12	1.2	404645	05/26/26	05/26/26	KXM
Method: ASTM D1946 Prep Method: METHOD									
Nitrogen	27		Mol %	0.12	1.2	404645	05/26/26	05/26/26	KXM
Nitrogen	270,000		ppmv	1,200	1.2	404645	05/26/26	05/26/26	KXM
Method: EPA 18M									
C2 as Ethane	150		ppmv	0.61	1.2	404645	05/26/26	05/26/26	KXM
C3 as Propane	70		ppmv	0.61	1.2	404645	05/26/26	05/26/26	KXM
C4 as Butane	37		ppmv	0.61	1.2	404645	05/26/26	05/26/26	KXM
C5 as Pentane	7.3		ppmv	0.61	1.2	404645	05/26/26	05/26/26	KXM
C6+ as n-Hexane	1,800		ppmv	2.5	4.9	404645	05/26/26	05/26/26	KXM

Sample ID: HERO TOX INLET -2

Lab ID: 559510-002

Collected: 05/13/26 11:30

Matrix: Air

559510-002 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: ASTM D1945M Prep Method: METHOD									
Hydrogen	5.9		%v/v	0.12	1.2	404645	05/26/26	05/26/26	KXM
Carbon Monoxide	ND		%v/v	0.12	1.2	404645	05/26/26	05/26/26	KXM
Carbon Dioxide	48		%v/v	0.12	1.2	404645	05/26/26	05/26/26	KXM
Oxygen	5.0		%v/v	0.12	1.2	404645	05/26/26	05/26/26	KXM
Methane	14		%v/v	0.12	1.2	404645	05/26/26	05/26/26	KXM
Method: ASTM D1946 Prep Method: METHOD									
Nitrogen	26		Mol %	0.12	1.2	404645	05/26/26	05/26/26	KXM
Nitrogen	260,000		ppmv	1,200	1.2	404645	05/26/26	05/26/26	KXM
Method: EPA 18M									
C2 as Ethane	150		ppmv	0.61	1.2	404645	05/26/26	05/26/26	KXM
C3 as Propane	70		ppmv	0.61	1.2	404645	05/26/26	05/26/26	KXM
C4 as Butane	38		ppmv	0.61	1.2	404645	05/26/26	05/26/26	KXM
C5 as Pentane	7.3		ppmv	0.61	1.2	404645	05/26/26	05/26/26	KXM
C6+ as n-Hexane	2,100		ppmv	2.4	4.9	404645	05/26/26	05/26/26	KXM

Analysis Results for 559510

Sample ID: HERO TOX INLET -3	Lab ID: 559510-003	Collected: 05/13/26 12:02
	Matrix: Air	

559510-003 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: ASTM D1945M Prep Method: METHOD									
Hydrogen	5.9		%v/v	0.12	1.2	404645	05/26/26	05/26/26	KXM
Carbon Monoxide	ND		%v/v	0.12	1.2	404645	05/26/26	05/26/26	KXM
Carbon Dioxide	48		%v/v	0.12	1.2	404645	05/26/26	05/26/26	KXM
Oxygen	5.0		%v/v	0.12	1.2	404645	05/26/26	05/26/26	KXM
Methane	14		%v/v	0.12	1.2	404645	05/26/26	05/26/26	KXM
Method: ASTM D1946 Prep Method: METHOD									
Nitrogen	26		Mol %	0.12	1.2	404645	05/26/26	05/26/26	KXM
Nitrogen	260,000		ppmv	1,200	1.2	404645	05/26/26	05/26/26	KXM
Method: EPA 18M									
C2 as Ethane	150		ppmv	0.61	1.2	404645	05/26/26	05/26/26	KXM
C3 as Propane	70		ppmv	0.61	1.2	404645	05/26/26	05/26/26	KXM
C4 as Butane	38		ppmv	0.61	1.2	404645	05/26/26	05/26/26	KXM
C5 as Pentane	7.3		ppmv	0.61	1.2	404645	05/26/26	05/26/26	KXM
C6+ as n-Hexane	2,200		ppmv	2.4	4.9	404645	05/26/26	05/26/26	KXM

Sample ID: HERO TOX EXHAUST -1	Lab ID: 559510-004	Collected: 05/13/26 10:58
	Matrix: Air	

559510-004 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: ASTM D1946 Prep Method: METHOD									
Carbon Dioxide	17		Mol %	0.15	1.5	404220	05/20/26	05/20/26	KXM
Carbon Dioxide	170,000		ppmv	1,500	1.5	404220	05/20/26	05/20/26	KXM
Oxygen	11		Mol %	0.15	1.5	404220	05/20/26	05/20/26	KXM
Oxygen	110,000		ppmv	1,500	1.5	404220	05/20/26	05/20/26	KXM
Method: EPA 18M									
Methane	4,700		ppmv	0.75	1.5	403990	05/18/26	05/18/26	KXM

Sample ID: HERO TOX EXHAUST -2	Lab ID: 559510-005	Collected: 05/13/26 11:30
	Matrix: Air	

559510-005 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: ASTM D1946 Prep Method: METHOD									
Carbon Dioxide	15		Mol %	0.15	1.5	404220	05/20/26	05/20/26	KXM
Carbon Dioxide	150,000		ppmv	1,500	1.5	404220	05/20/26	05/20/26	KXM
Oxygen	12		Mol %	0.15	1.5	404220	05/20/26	05/20/26	KXM
Oxygen	120,000		ppmv	1,500	1.5	404220	05/20/26	05/20/26	KXM
Method: EPA 18M									
Methane	6,200		ppmv	0.75	1.5	403990	05/18/26	05/18/26	KXM

Analysis Results for 559510

Sample ID: HERO TOX EXHAUST -3	Lab ID: 559510-006	Collected: 05/13/26 12:02
	Matrix: Air	

559510-006 Analyte	Result	Qual	Units	RL	DF	Batch	Prepared	Analyzed	Chemist
Method: ASTM D1946									
Prep Method: METHOD									
Carbon Dioxide	17		Mol %	0.15	1.5	404220	05/20/26	05/20/26	KXM
Carbon Dioxide	170,000		ppmv	1,500	1.5	404220	05/20/26	05/20/26	KXM
Oxygen	11		Mol %	0.15	1.5	404220	05/20/26	05/20/26	KXM
Oxygen	110,000		ppmv	1,500	1.5	404220	05/20/26	05/20/26	KXM
Method: EPA 18M									
Methane	4,200		ppmv	0.75	1.5	403990	05/18/26	05/18/26	KXM

ND Not Detected

Batch QC

Type: Lab Control Sample	Lab ID: QC1372419	Batch: 404220
Matrix: Air	Method: ASTM D1946	Prep Method: METHOD

QC1372419 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Carbon Dioxide	15.41	15.00	%v/v	103%		85-115
Oxygen	4.134	4.000	%v/v	103%		85-115

Type: Lab Control Sample Duplicate	Lab ID: QC1372420	Batch: 404220
Matrix: Air	Method: ASTM D1946	Prep Method: METHOD

QC1372420 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
Carbon Dioxide	15.41	15.00	%v/v	103%		85-115	0	10
Oxygen	4.129	4.000	%v/v	103%		85-115	0	10

Type: Blank	Lab ID: QC1372421	Batch: 404220
Matrix: Air	Method: ASTM D1946	Prep Method: METHOD

QC1372421 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Carbon Dioxide	ND		%v/v	0.10	05/20/26	05/20/26
Oxygen	ND		%v/v	0.10	05/20/26	05/20/26

Type: Sample Duplicate	Lab ID: QC1372422	Batch: 404220
Matrix (Source ID): Air (559510-004)	Method: ASTM D1946	Prep Method: METHOD

QC1372422 Analyte	Result	Source Sample Result	Units	Qual	RPD	RPD Lim	DF
Carbon Dioxide	16.73	16.75	%v/v		0	20	1.5
Oxygen	10.71	10.72	%v/v		0	20	1.5

Type: Sample Duplicate	Lab ID: QC1372423	Batch: 404220
Matrix (Source ID): Air (559510-005)	Method: ASTM D1946	Prep Method: METHOD

QC1372423 Analyte	Result	Source Sample Result	Units	Qual	RPD	RPD Lim	DF
Carbon Dioxide	15.44	15.45	%v/v		0	20	1.5
Oxygen	11.92	11.94	%v/v		0	20	1.5

Type: Lab Control Sample	Lab ID: QC1371631	Batch: 403990
Matrix: Air	Method: EPA 18M	

QC1371631 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Methane	100.7	100.0	ppmv	101%		85-115

Batch QC

Type: Blank	Lab ID: QC1371632	Batch: 403990
Matrix: Air	Method: EPA 18M	

QC1371632 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Methane	ND		ppmv	0.50	05/18/26	05/18/26

Type: Sample Duplicate	Lab ID: QC1371633	Batch: 403990
Matrix (Source ID): Air (559508-001)	Method: EPA 18M	

QC1371633 Analyte	Result	Source Sample Result	Units	Qual	RPD	RPD Lim	DF
Methane	7.850	7.700	ppmv		2	25	2

Type: Sample Duplicate	Lab ID: QC1371634	Batch: 403990
Matrix (Source ID): Air (559508-002)	Method: EPA 18M	

QC1371634 Analyte	Result	Source Sample Result	Units	Qual	RPD	RPD Lim	DF
Methane	11.28	11.32	ppmv		0	25	1.9

Type: Matrix Spike	Lab ID: QC1371635	Batch: 403990
Matrix (Source ID): Air (559510-006)	Method: EPA 18M	

QC1371635 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Methane	9,939	4185	6020	ppmv	96%		75-125	60

Type: Matrix Spike Duplicate	Lab ID: QC1371636	Batch: 403990
Matrix (Source ID): Air (559510-006)	Method: EPA 18M	

QC1371636 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Methane	9,956	4185	6020	ppmv	96%		75-125	0	25	60

Batch QC

Type: Lab Control Sample	Lab ID: QC1373986	Batch: 404645
Matrix: Air		

QC1373986 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Method: ASTM D1945M Prep Method: METHOD						
Hydrogen	5.160	5.000	%v/v	103%		85-115
Carbon Monoxide	7.014	7.000	%v/v	100%		85-115
Carbon Dioxide	15.38	15.00	%v/v	103%		85-115
Oxygen	4.124	4.000	%v/v	103%		85-115
Methane	4.560	4.000	%v/v	114%		85-115
Method: EPA 18M						
C2 as Ethane	98.66	100.0	ppmv	99%		85-115
C3 as Propane	98.56	100.0	ppmv	99%		85-115
C4 as Butane	98.23	100.0	ppmv	98%		85-115
C5 as Pentane	95.48	100.0	ppmv	95%		85-115
C6+ as n-Hexane	93.31	100.0	ppmv	93%		85-115

Type: Lab Control Sample Duplicate	Lab ID: QC1373987	Batch: 404645
Matrix: Air		

QC1373987 Analyte	Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim
Method: ASTM D1945M Prep Method: METHOD								
Hydrogen	5.129	5.000	%v/v	103%		85-115	1	10
Carbon Monoxide	7.007	7.000	%v/v	100%		85-115	0	10
Carbon Dioxide	15.41	15.00	%v/v	103%		85-115	0	10
Oxygen	4.122	4.000	%v/v	103%		85-115	0	10
Methane	4.555	4.000	%v/v	114%		85-115	0	10
Method: EPA 18M								
C2 as Ethane	98.50	100.0	ppmv	99%		85-115	0	10
C3 as Propane	98.29	100.0	ppmv	98%		85-115	0	10
C4 as Butane	98.05	100.0	ppmv	98%		85-115	0	10
C5 as Pentane	95.15	100.0	ppmv	95%		85-115	0	10
C6+ as n-Hexane	93.38	100.0	ppmv	93%		85-115	0	10

Batch QC

Type: Blank	Lab ID: QC1373988	Batch: 404645
Matrix: Air		

QC1373988 Analyte	Result	Qual	Units	RL	Prepared	Analyzed
Method: ASTM D1945M Prep Method: METHOD						
Hydrogen	ND		%v/v	0.10	05/26/26	05/26/26
Carbon Monoxide	ND		%v/v	0.10	05/26/26	05/26/26
Carbon Dioxide	ND		%v/v	0.10	05/26/26	05/26/26
Oxygen	ND		%v/v	0.10	05/26/26	05/26/26
Methane	ND		%v/v	0.10	05/26/26	05/26/26
Method: ASTM D1946 Prep Method: METHOD						
Nitrogen	ND		%v/v	0.10	05/26/26	05/26/26
Method: EPA 18M						
C2 as Ethane	ND		ppmv	0.50	05/26/26	05/26/26
C3 as Propane	ND		ppmv	0.50	05/26/26	05/26/26
C4 as Butane	ND		ppmv	0.50	05/26/26	05/26/26
C5 as Pentane	ND		ppmv	0.50	05/26/26	05/26/26
C6+ as n-Hexane	ND		ppmv	0.50	05/26/26	05/26/26

ND Not Detected

Fuel Gas Calculations by ASTM D-3588

Client ID#	HERO TOX INLET -1	Onterris ID #	559510-001		
CHONS (Atomic Characterization)					
Anayte	Carbon (C)	Hydrogen (H)	Oxygen (O)	Nitrogen (N)	Sulfur (S)
Result (scf/lb) / %	23.17	2.19	51.81	22.84	NM

NM - Not measured

Heating Values				
Unit	HHV Btu/lb	LHV Btu/lb	HHV Btu/dscf	LHV Btu/dscf
Result	1990	1782	172	154

Fuel Properties				
Type	F-Factor	Relative Density	MW (lb/lb-mole)	Methane Number
Result	11455	1.1309	32.75	-160.03

Note: All calculations standardized at 60° F and 1ATM

Note: Reported results have been normalized to 100% on a dry basis; % moisture was not measured.

Fuel Gas Calculations by ASTM D-3588

Client ID#	HERO TOX INLET -2	Onterris ID #	559510-002		
CHONS (Atomic Characterization)					
Anayte	Carbon (C)	Hydrogen (H)	Oxygen (O)	Nitrogen (N)	Sulfur (S)
Result (scf/lb) / %	23.38	2.22	51.96	22.45	NM

NM - Not measured

Heating Values				
Unit	HHV Btu/lb	LHV Btu/lb	HHV Btu/dscf	LHV Btu/dscf
Result	2018	1808	174	156

Fuel Properties				
Type	F-Factor	Relative Density	MW (lb/lb-mole)	Methane Number
Result	11444	1.1320	32.78	-158.84

Note: All calculations standardized at 60° F and 1ATM

Note: Reported results have been normalized to 100% on a dry basis; % moisture was not measured.

INLET CH4 TEST RESULTS

Test Number		1-CH4-1
Reference Temperature, F		60
Test Date		5/13/2026
Test Method		EPA 18
Inlet O ₂ (%)		5.20
Inlet Flow Rate, dscfm		1,537
O ₂ Correction Factor (%)		3
F-Factor		11,455

Lab Results, ppm component		
Compound	Carbon Atoms	Run 1
Methane	1	140000

Methane	Run 1
ppm	140,000
ppm, C	159,618
lb/hr	536.0

Fuel Gas Calculations by ASTM D-3588

Client ID#	HERO TOX INLET -3	Onterris ID #	559510-003		
CHONS (Atomic Characterization)					
Anayte	Carbon (C)	Hydrogen (H)	Oxygen (O)	Nitrogen (N)	Sulfur (S)
Result (scf/lb) / %	23.48	2.23	52.02	22.28	NM

NM - Not measured

Heating Values				
Unit	HHV Btu/lb	LHV Btu/lb	HHV Btu/dscf	LHV Btu/dscf
Result	2032	1820	176	157

Fuel Properties				
Type	F-Factor	Relative Density	MW (lb/lb-mole)	Methane Number
Result	11432	1.1328	32.80	-158.21

Note: All calculations standardized at 60° F and 1ATM

Note: Reported results have been normalized to 100% on a dry basis; % moisture was not measured.

Appendix A.4 Inlet Moisture Data

MONTROSE AQS
Duct Moisture by Wet bulb/Dry bulb Measurements

Facility: Chiquita Canyon Landfill
 CEM I.D. : T4

TEST DATE: May 13, 2026

BY: PSJ

$$B_{ws} = \frac{e''}{P_a}$$

$$e_a = e'' - \frac{(P_a - e'')[T_{dry} - T_{wet}]}{2800 - 1.3 \times T_{wet}}$$

	P _{bar}	Static Pressure (in. of H ₂ O)	P _a	T _{dry}	T _{wet}	e _a	B _{ws}	e''
Run 1:	28.66	-6.50	28.1821	148	105	1.800	6.39	2.21953
Run 2:	28.66	-6.50	28.1821	148	105	1.800	6.39	2.21953
Run 3:	28.66	-6.50	28.1821	148	105	1.800	6.39	2.21953

APPENDIX B PROCESS DATA

FACILITY DATA

FACILITY DATA Run 1			
Time	Temperature Stack	Fuel Flow LFG scfm	Propane Totalizer
1028	1567	1652	142.8
1038	1566	1664	142.8
1048	1553	1626	142.8
1058	1557	1624	142.8
Average	1,561	1,642	

FACILITY DATA Run 2			
Time	Temperature Stack	Fuel Flow LFG scfm	Propane Totalizer
1100	1554	1627	142.8
1110	1559	1623	142.8
1120	1561	1660	142.8
1130	1552	1633	142.8
Average	1,557	1,636	

FACILITY DATA Run 3			
Time	Temperature Stack	Fuel Flow LFG scfm	Propane Totalizer
1132	1555	1639	142.8
1142	1558	1644	142.8
1152	1562	1631	142.8
1202	1560	1627	142.8
Average	1,559	1,635	

NOTES:

Three Run Averages
Average Flow 1,638 scfm
Average Temp 1,559 oF
Total Propane 0 Nm3/hr

Client: WASTE CONNECTIONS
Location: CHIRUITA LE
Source: HERO TOX
Test Date: 5/13/26

NOTES: PROPANE 1038-2850 ~~ST~~ 25 psi NO PROPANE usage was measured

-6.5 SP

CUSTOMER COPY

TAG NAME: LFG-FLOW

KURZ INSTRUMENTS, INC.
 KZCOMM VERSION: 3.18
 KZCOMMDLL VERSION: 4.0.24045.3
 CONFIGURATION FILENAME: FD47962A.cf
 FIRMWARE VERSION: MFT-B VER 2.17
 CONFIGURATION DATE: 06/05/2025 07:26
 ELECTRONIC BOARD BAR CODE: R36595
 ELECTRONIC BOARD ASSY: 420348
 ELECTRONIC BOARD BUILD: 04 S

*****ORDER INFORMATION*****

ITEM NUMBER:
 MODEL NUMBER: 454FTB-WGF
 PART NUMBER:

*****FLOW CALIBRATION DATA*****

SENSOR S/N: FD47962A
 GAS: 18%CH4+38%CO2+8%O2+2%H2+34%N2
 MOL. WT: 31.736

	FACTORY (FSTP)		USER (USTP)	
TEMP:	25.00	DEGC	77.00	DEGF
PRESSURE:	101.325	KPA	14.696	PSIA
DENSITY:	1.2979	KG/M3	0.0810	LB/CF

VELOCITY MAPPING REFERENCE: GAS TEMPERATURE
 DATA SET #1 VM DATA AT 20.00 DEGC

DATA PT #	Rp POWER (W)	FACTORY VELOCITY (SMPS @FSTP)	USER* VELOCITY (SFPM @USTP)	USER* FLOW RATE (SCFM @USTP)	AO #1 FLOW RATE (mA)
1	1.3125	0.0000	0.0000	0.0000	4.00
2	1.5614	0.4615	74.0384	52.2593	4.21
3	1.8290	0.7454	119.596	84.4156	4.34
4	2.1429	1.2041	193.199	136.368	4.55
5	2.5104	1.9453	312.125	220.310	4.88
6	2.9415	3.1431	504.297	355.953	5.42
7	3.4820	5.0786	814.854	575.157	6.30
8	4.1461	8.2068	1316.77	929.427	7.72
9	5.0044	13.2629	2128.00	1502.03	10.01
10	6.0967	21.4358	3439.32	2427.61	13.71
11	7.4276	34.6481	5559.20	3923.91	19.70
12	9.1330	56.0086	8986.43	6342.99	20.50
13	11.2269	90.5459	14527.9	10254.3	20.50

DATA SET #2 VM DATA AT 130.00 DEGC

DATA PT #	Rp POWER (W)	FACTORY VELOCITY (SMPS @FSTP)	USER* VELOCITY (SFPM @USTP)	USER* FLOW RATE (SCFM @USTP)	AO #1 FLOW RATE (mA)
1	1.3992	0.0000	0.0000	0.0000	4.00
2	1.4786	0.2866	45.9874	32.4598	4.13
3	1.7037	0.4615	74.0384	52.2593	4.21
4	1.9689	0.7454	119.596	84.4156	4.34
5	2.2810	1.2041	193.199	136.368	4.55
6	2.6474	1.9453	312.125	220.310	4.88
7	3.0768	3.1431	504.297	355.953	5.42
8	3.6413	5.0786	814.854	575.157	6.30
9	4.3094	8.2068	1316.77	929.427	7.72

10	5.2178	13.2629	2128.00	1502.03	10.01
11	6.3177	21.4358	3439.32	2427.61	13.71
12	7.7090	34.6481	5559.20	3923.91	19.70
13	9.4045	56.0086	8986.43	6342.99	20.50
14	11.4687	90.5459	14527.9	10254.3	20.50

$$* V_{user} = V_{fac} * FCCF * SBCF * VCF * \frac{(T_{user} + T_{conv})}{(T_{fac} + T_{conv})} * \frac{P_{fac}}{P_{user}}$$

Where V_{user} = Velocity at the User's Temperature (T_{user}) and Pressure (P_{user}) defined as USTP.
 V_{fac} = Velocity at the Factory's Temperature (T_{fac}) and Pressure (P_{fac}) defined as FSTP.
 T_{conv} = 273.15 Kelvin or 459.67 Rankine.

DRY FLOW WATER VAPOR CORRECTION is NOT reflected in the above table.

*****FLOW METER SETUP*****

METER ID: LFG-FLOW
 METER UNIT: SCFM
 FLOW AREA = 0.705841 ft²
 PROFILE: ROUND
 DIAMETER = 11.376 in
 SENSOR BLOCKAGE CORRECTION FACTOR (SBCF):
 PROBE SIZE: 0.750 in
 INSERTION DEPTH = 0.582333 ft
 SBCF = 0.958909
 FIELD CALIBRATION CORRECTION FACTOR (FCCF) = 0.850
 VARIABLE CORRECTION FACTOR (VCF):
 NUMBER OF CORRECTION PTS. = 1
 D1 = 0.0000 SFPM C.F. #1 = 1.000000
 R1 = 0.0000 SFPM AT 0.0000 SFPM
 LOW FLOW CUT-OFF STATUS: ON
 LOW FLOW CUT-OFF AT: 0.0000 SCFM

*****DRY FLOW WATER VAPOR CORRECTION*****

CORRECTION STATUS: DISABLED

*****TEMPERATURE METER SETUP*****

METER ID: TEMPERATURE METER UNIT: DEGF

*****METER FILTER SETUP*****

FLOW METER TIME CONSTANT (TC): 2.000000 s
 TEMPERATURE METER TIME CONSTANT (TC): 0.500000 s

*****ANALOG OUTPUT SETUP*****

ANALOG OUTPUT #1
 LOW SCALE (4.00 mA) AT 0.0000 SCFM
 HIGH SCALE (20.00 mA) AT 4000.0000 SCFM

ANALOG OUTPUT #2
 LOW SCALE (4.00 mA) AT 0.0000 DEGF
 HIGH SCALE (20.00 mA) AT 500.0000 DEGF

NE-43 ALARM AT: LOW OUTPUT

*****RELAY ASSIGNMENT SETUP*****

RELAY #1
RELAY ASSIGNED TO: ALARM 1

RELAY #2
RELAY ASSIGNED TO: ALARM 2

*****ALARM SETUP*****

ALARM #1 STATUS: ON RELAY CONTACT: N.O.
ALARM FOR: FLOWRATE
ALARM TRIGGER TO: HIGH OR LOW (HOL)
SETPOINT:
LOW: -10.0000 SCFM
HIGH: 3000.0000 SCFM
ASSIGNED RELAY: 1

ALARM #2 STATUS: ON RELAY CONTACT: N.O.
ALARM FOR: TEMPERATURE
ALARM TRIGGER TO: HIGH OR LOW (HOL)
SETPOINT:
LOW: -10.0000 DEGF
HIGH: 530.0000 DEGF
ASSIGNED RELAY: 2

*****TOTALIZER SETUP*****

TOTALIZER RESET: MANUAL

*****TOTALIZER PULSE OUTPUT SETUP*****

PULSE OUTPUT #1
PULSE OUTPUT STATUS: OFF
ASSIGNED RELAY: UNASSIGNED
VOLUME/MASS PER PULSE: 100000.0000 SCF
PULSE WIDTH: 50 ms

PULSE OUTPUT #2
PULSE OUTPUT STATUS: OFF
ASSIGNED RELAY: UNASSIGNED
VOLUME/MASS PER PULSE: 100000.0000 SCF
PULSE WIDTH: 50 ms

*****PURGE TIMER SETUP*****

PURGE TIMER: ENABLED
PURGE STATUS: OFF
ASSIGNED RELAY: UNASSIGNED
PURGE ON TIME: 500 ms
PURGE FLOW UPDATE HOLD TIME: 2.000 s
PURGE INTERVAL TIME: 60 min

*****RUN MODE DISPLAY SETUP*****

RUN MODE DISPLAY TYPE: SCROLL
SCROLL INTERVAL: 2 s
DISPLAYED VARIABLES:
TAG ID
FLOW RATE
DAILY FLOW RATE
VELOCITY
TOTAL FLOW
TEMPERATURE

*****COMMUNICATION SETUP*****

COMMUNICATION CONFIGURATION OPTIONS:
USB COMMUNICATION PORT
 TERMINAL ECHO: ENABLED (Default)
 COMMUNICATION BAUDRATE: 9600 BAUD
DATA LOGGING: DISABLED

RS-485 COMMUNICATION PORT
MODBUS PROTOCOL: ON
TRANSMISSION MODE: MODBUS RTU
ADDRESS: 1
FLOATING POINT NUMBER REGISTER ORDER: BYTE # 1 2 3 4
COMMUNICATION BAUDRATE: 38400 BAUD

*****EXTERNAL INPUT SETUP*****

USAGE: Calibration Data Select Switch

*****PID SETUP*****

PID STATE: OFF
PID MODE: MANUAL
PID CONTROL TO: VELOCITY
PID REFERENCE: INTERNAL
PID SETPOINT: 2000.0000 SFPM

*****ZERO MID SPAN DRIFT CHECK SETUP*****

DRIFT CHECK STATUS: OFF
ZERO CHECK VALUE: 10.000 % Full scale
ZERO CHECK DURATION: 60 s
MID-SPAN CHECK VALUE: 50.000 % Full scale
MID-SPAN CHECK DURATION: 60 s
SPAN CHECK VALUE: 90.000 % Full scale
SPAN CHECK DURATION: 60 s
CYCLE INTERVAL TIME: 16 hr

*****SENSOR DATA SETUP*****

Rp RESISTANCE AT 0 DEGC = 9.0953 OHMS
Rtc RESISTANCE AT 0 DEGC = 27.0023 OHMS

*****END OF MFT B-SERIES CONFIGURATION*****

KURZ INSTRUMENTS, INC.
2411 GARDEN ROAD
MONTEREY, CA 93940
1 (800) 424-7356 (831) 646-5911 FAX (831) 646-8901
www.kurzstruments.com

CALIBRATION CERTIFICATE

VTM Data Derived from the following Measurement Components
FLOW ELEMENT CALIBRATION REFERENCE DATA ACQUISITION SYSTEM
Model No: 410FTB-12 Serial No: CD20516A Model No: 914MB-0900
NIST Calibration Due Date: 08-14-2025 Serial No: 073532G

Sensor Calibration Data

Filename: FD47962A_18%CH4+38%CO2+8%O2+2%H2+34%
Date: N2.vtm
Customer Code/Name: 6/5/2025
Purchase Order No: 650-495/SCS Engineers
Model No: 07-LBCF00039
Part No: 454FTB-WGF
MAPICS Item No:
Serial No:
Flow Units: FD47962A
Standard Conditions: SMPS
Gas: 25 Degrees C and _101.325 kPa
18%CH4+38%CO2+8%O2+2%H2+34%N2

FLOW SMPS	FLOW SFPM	20.0 °C PRP Wdc	130.0 °C PRP Wdc
0.000000	0.000000	1.312450	1.399150
0.286620	56.42125		1.478620
0.461450	90.83661	1.561390	1.703660
0.745390	146.7303	1.829020	1.968910
1.204130	237.0334	2.142890	2.280970
1.945340	382.9409	2.510370	2.647410
3.143070	618.7145	2.941490	3.076850
5.078640	999.7323	3.482000	3.641300
8.206840	1615.519	4.146140	4.309420
13.26290	2610.807	5.004430	5.217750
21.43580	4219.645	6.096700	6.317740
34.64810	6820.492	7.427620	7.708960
56.00859	11025.31	9.132970	9.404470
90.54589	17823.99	11.22690	11.46870

This instrument was calibrated with measuring and test equipment with certified NIST traceability. (Copies with applicable NIST numbers are available upon request.) The calibration of this instrument was performed in accordance with the requirements of ISO-9001, ANSI/NCSS Z540 and ISO/IEC GUIDE 25.

WIND TUNNEL OPERATOR: RIDGLEY G

QUALITY CONTROL: Chapman

Form 180119 Revision F

DATE: 06/05/2025

DATE: JUN 05 2025

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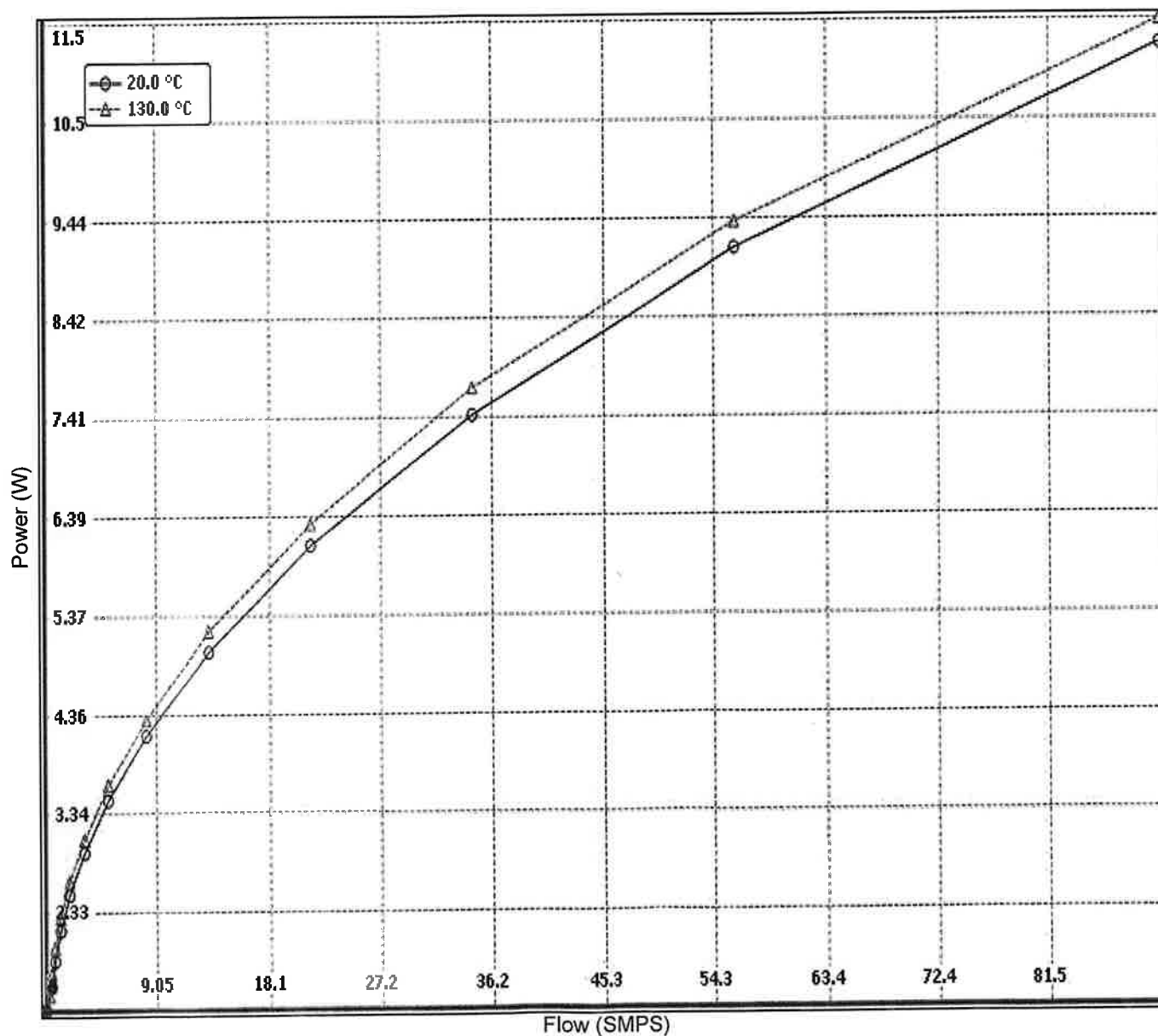
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www.kurzstruments.com

FLOW ELEMENT CALIBRATION CURVE

Flow Element Serial No: FD47962A

Customer Code/Name: 650-495/SCS Engineers
Purchase Order No: 07-LBCF00039
Model No: 454FTB-WGF
Part No:
STD Conditions: 25 Degrees C and _101.325 kPa

Filename: FD47962A_18%CH4+38%CO2+8%O2+2%
H2+34%N2.vtm
Calibration Date: 6/5/2025
MAPICS Item No:
Gas: 18%CH4+38%CO2+8%O2+2%H2+34%N2



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CALIBRATION CERTIFICATE

Data Derived from the following Measurement Components

FLOW ELEMENT CALIBRATION REFERENCE	DATA ACQUISITION SYSTEM
Model No: 410FTB-12 Serial No: CD20516A	Model No: 914MB-0900
NIST Calibration Due Date: 08-14-2025	Serial No: 073532G

Sensor Calibration Data

Filename:	FD47962A_final.pca
Date:	6/4/2025
Customer Code/Name:	650-495/SCS Engineers
Purchase Order No:	07-LBCF00039
Model No:	454FTB-WGF
Part No:	
MAPICS Item No:	
Serial No:	FD47962A
Flow Units:	SMPS
Standard Conditions:	25 Degrees C and _101.325 kPa
Gas:	Air

FLOW SMPS	FLOW SFPM	25.0 °C PRP Wdc
0.000000	0.000000	1.173220
0.501140	98.64960	1.459470
1.502090	295.6870	2.145960
3.027850	596.0334	2.654630
5.012230	986.6594	3.164370
10.08130	1984.507	4.075680
15.19160	2990.472	4.768140
20.29290	3994.665	5.361100
25.71120	5061.259	5.909890
31.50680	6202.125	6.472490
38.60870	7600.137	7.080600
47.31160	9313.306	7.737890
57.97610	11412.61	8.448330
71.04460	13985.15	9.216240
87.05880	17137.55	10.04620

This instrument was calibrated with measuring and test equipment with certified NIST traceability. (Copies with applicable NIST numbers are available upon request.) The calibration of this instrument was performed in accordance with the requirements of ISO-9001, ANSI/NCSL Z540 and ISO/IEC GUIDE 25.

WIND TUNNEL OPERATOR:

TONY M

QUALITY CONTROL:

Charles

DATE: 06/05/2025

DATE: JUN 05 2025

Form 180119 Revision F

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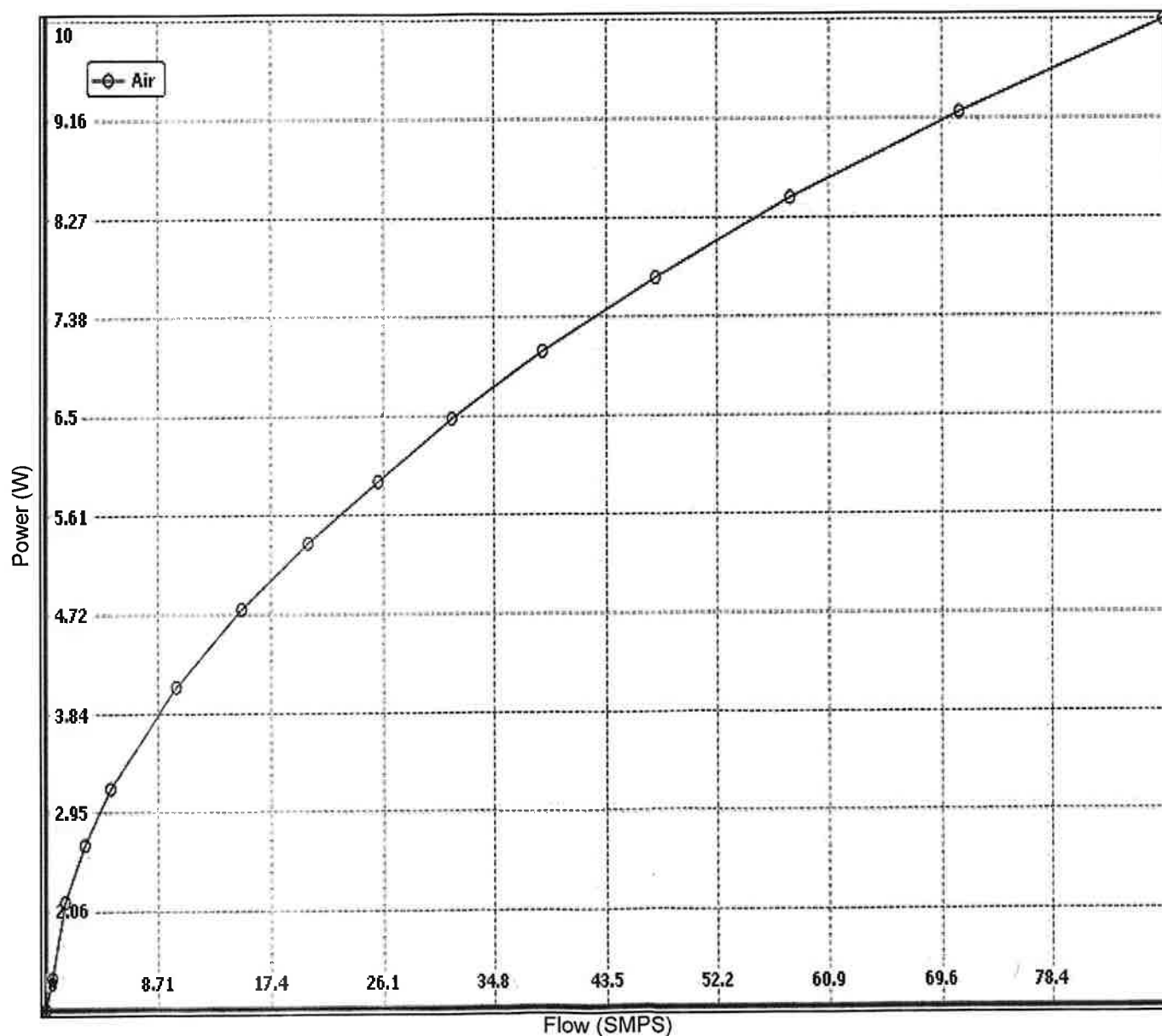
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www.kurzinstruments.com

FLOW ELEMENT CALIBRATION CURVE

Flow Element Serial No: FD47962A

Customer Code/Name: 650-495/SCS Engineers
Purchase Order No: 07-LBCF00039
Model No: 454FTB-WGF
Part No:
STD Conditions: 25 Degrees C and 101.325 kPa

Filename: FD47962A_final.pca
Calibration Date: 6/4/2025
MAPICS Item No:
Gas: Air



Precession vortex flowmeter calibration record

Manufacturer:	WEIHAI KUNKE FLOW INSTRUMENT CO., LTD			Instrument Name:	Precession vortex flowmeter			Specifications and Models:	DN50			Instrument type:	Room 110, Flow Detection Center		
Model:	10			Testing agency:	150			Testing location:			Testing conditions				
Accuracy level	±			Detection signal:	pulse			Air			Standard test methods:				
Instrument number:	X2690015L			Testing basis:	JJG1121-2015			Ambient temperature:			102.22 kPa				
The metrological standards and main measuring instruments used in this verification are as follows:															
name				serial number				Model specifications or measurement range				Device uncertainty or accuracy			
Acoustic jet gas flow standard device				ZEX-05/3000				(1~1000 m³/h)				U=0.33%, k=2			
Serial Number				Standard instantaneous flow (m³/h)				Standard device (m³/h)				Standard inspection data of the inspected form			
Flow point (m³/h)				Standard total (m³/h)				Standard device (m³/h)				Instrument average frequency (Hz)			
1				0.0845				101.148				57.7788			
2				0.0845				101.140				57.7709			
3				0.0845				101.140				57.7892			
1				0.2531				100.822				172.7454			
2				0.2531				100.828				172.7862			
3				0.2531				100.828				172.8218			
1				0.7596				98.116				518.4879			
2				0.7596				98.116				518.8792			
3				0.7596				98.116				518.6212			
1				0.0109				96.136				688.7333			
2				0.0109				96.136				688.6333			
3				0.0109				96.136				688.6000			
1				0.2606				93.318				860.0466			
2				0.2606				93.318				859.8799			
3				0.2606				93.318				859.7276			
Qt ≤ Qmax				0.114				0.2473				20401 (1/m³)			
Qmin ≤ Q ≤ Qt				0.2473				0.2473				20401 (1/m³)			
Standard inspection results				linearity EL				linearity EL				Repeatability (Er)			
				20461 (1/m³)				0.0393 %				0.0393			

Repeatability Er =

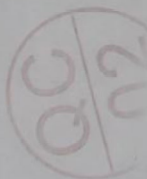
0.0393 %

Test date 2026/4/14

Inspector

admin

Verification



APPENDIX C

GENERAL EMISSIONS CALCULATIONS

GENERAL EMISSIONS CALCULATIONS

I. Stack Gas Velocity

A. Stack gas molecular weight, lb/lb-mole

$$MW_{dry} = 0.44 * \% CO_2 + 0.32 * \% O_2 + 0.28 * \% N_2$$

$$MW_{wet} = MW_{dry} * (1 - B_{wo}) + 18 * B_{wo}$$

B. Absolute stack pressure, iwg

$$P_s = P_{bar} + \frac{P_{sg}}{13.6}$$

C. Stack gas velocity, ft/sec

$$V_s = 2.9 * C_p * \sqrt{\Delta P} * \sqrt{T_s} * \sqrt{\frac{29.92 * 28.95}{P_s * MW_{wet}}}$$

II. Moisture

A. Sample gas volume, dscf

$$V_{mstd} = 0.03342 * V_m * \left(P_{bar} + \frac{\Delta H}{13.6} \right) * \frac{T_{ref}}{T_m} * Y_d$$

B. Water vapor volume, scf

$$V_{wstd} = 0.0472 * V_{ic} * \frac{T_{ref}}{528^\circ R}$$

C. Moisture content, dimensionless

$$B_{wo} = \frac{V_{wstd}}{(V_{mstd} + V_{wstd})}$$

III. Stack Gas Volumetric Flow Rate

A. Actual stack gas volumetric flow rate, wacfm

$$Q = V_s * A_s * 60$$

B. Standard stack gas flow rate, dscfm

$$Q_{sd} = Q * (1 - B_{wo}) * \frac{T_{ref}}{T_s} * \frac{P_s}{29.92}$$

Chiquita Canyon Landfill
2026 Hero TOx Methane DRE Source Test

IV. Gaseous Mass Emission Rates, lb/hr

$$M = \frac{\text{ppm} * MW_i * Q_{sd} * 60}{SV * 10^6}$$

V. Emission Rates, lb/MMBtu

$$\frac{\text{lb}}{\text{MMBtu}} = \frac{\text{ppm} * MW_i * F}{SV * 10^6} * \frac{20.9}{20.9 - \% O_2}$$

VI. Percent Isokinetic

$$I = \frac{17.32 * T_s (V_{mstd})}{(1 - B_{w0}) * V_s * P_s * Dn^2} * \frac{528^\circ R}{T_{ref}}$$

VII. Particulate Emissions

(a) Grain loading, gr/dscf
 $C = 0.01543 (M_n/V_{m \text{ std}})$

(b) Grain loading at 12% CO₂, gr/dscf
 $C_{12\% \text{ CO}_2} = C (12\% \text{ CO}_2)$

(c) Mass emissions, lb/hr
 $M = C * Q_{sd} * (60 \text{ min/hr}) / (7000 \text{ gr/lb})$

(d) Particulate emission factor

$$\text{lb}/10^6 \text{ Btu} = Cx \frac{1 \text{ lb}}{7000 \text{ gr}} * F * \frac{20.9}{20.9 - \% O_2}$$

Chiquita Canyon Landfill
2026 Hero TOx Methane DRE Source Test

Nomenclature:

A_s	=	stack area, ft ²
B_{wo}	=	flue gas moisture content, dimensionless
$C_{12\%CO_2}$	=	particulate grain loading, gr/dscf corrected to 12% CO ₂
C	=	particulate grain loading, gr/dscf
C_p	=	pitot calibration factor, dimensionless
D_n	=	nozzle diameter, inches
F	=	fuel F-Factor, dscf/MMBtu @ 0% O ₂
H	=	orifice differential pressure, iwg
I	=	% isokinetics
M_n	=	mass of collected particulate, mg
M_i	=	mass emission rate of specie i, lb/hr
MW	=	molecular weight of flue gas, lb/lb-mole
M_{wi}	=	molecular weight of specie i:
		SO ₂ : 64
		NO _x : 46
		CO: 28
		HC: 16
t	=	sample time, minutes
ΔP	=	average velocity head, iwg = $(\sqrt{\Delta P})^2$
P_{bar}	=	barometric pressure, inches Hg
P_s	=	stack absolute pressure, inches Hg
P_{sg}	=	stack static pressure, iwbg
Q	=	wet stack flow rate at actual conditions, wacfm
Q_{sd}	=	dry standard stack flow rate, dscfm
SV	=	specific molar volume of an ideal gas at standard conditions, ft ³ /lb-mole
T_m	=	meter temperature, °R
T_{ref}	=	reference temperature, °R
T_s	=	stack temperature, °R
V_s	=	stack gas velocity, ft/sec
V_{lc}	=	volume of liquid collected in impingers, ml
V_m	=	uncorrected dry meter volume, dcf
V_{mstd}	=	dry meter volume at standard conditions, dscf
V_{wstd}	=	volume of water vapor at standard conditions, scf
Y_d	=	meter calibration coefficient

APPENDIX D QUALITY ASSURANCE

Appendix D.1

Quality Assurance Program Summary

QUALITY ASSURANCE PROGRAM SUMMARY

As part of Montrose Air Quality Services, LLC (Montrose) ASTM D7036-04 certification, Montrose is committed to providing emission related data which is complete, precise, accurate, representative, and comparable. Montrose quality assurance program and procedures are designed to ensure that the data meet or exceed the requirements of each test method for each of these items. The quality assurance program consists of the following items:

- Assignment of an Internal QA Officer
- Development and use of an internal QA Manual
- Personnel training
- Equipment maintenance and calibration
- Knowledge of current test methods
- Chain-of-custody
- QA reviews of test programs

Assignment of an Internal QA Officer: Montrose has assigned an internal QA Officer who is responsible for administering all aspects of the QA program.

Internal Quality Assurance Manual: Montrose has prepared a QA Manual according to the requirements of ASTM D7036-04 and guidelines issued by EPA. The manual documents and formalizes all of Montrose's QA efforts. The manual is revised upon periodic review and as Montrose adds capabilities. The QA manual provides details on the items provided in this summary.

Personnel Testing and Training: Personnel testing and training is essential to the production of high quality test results. Montrose training programs include:

- A requirement for all technical personnel to read and understand the test methods performed
- A requirement for all technical personnel to read and understand the Montrose QA manual
- In-house testing and training
- Quality Assurance meetings
- Third party testing where available
- Maintenance of training records.

Equipment Maintenance and Calibration: All laboratory and field equipment used as a part of Montrose's emission measurement programs is maintained according to manufacturer's recommendations. A summary of the major equipment maintenance schedules is summarized in Table 1. In addition to routine maintenance, calibrations are performed on all sampling equipment according to the procedures outlined in the applicable test method. The calibration intervals and techniques for major equipment components is summarized in Table 2. The calibration technique may vary to meet regulatory agency requirements.

Knowledge of Current Test Methods: Montrose maintains current copies of EPA, ARB, and SCAQMD Source Test Manuals and Rules and Regulations.

Chain-of-Custody: Montrose maintains chain-of-custody documentation on all data sheets and samples. Samples are stored in a locked area accessible only to Montrose source test personnel. Data sheets are kept in the custody of the originator, program manager, or in locked storage until return to Montrose office. Electronic field data is duplicated for backup on secure storage media. The original data sheets are used for report preparation and any additions are initialed and dated.

QA Reviews: Periodic field, laboratory, and report reviews are performed by the in-house QA coordinator. Periodically, test plans are reviewed to ensure proper test methods are selected and reports are reviewed to ensure that the methods were followed and any deviations from the methods are justified and documented.

ASTM D7036-04 Required Information

Uncertainty Statement

Montrose is qualified to conduct this test program and has established a quality management system that led to accreditation with ASTM Standard D7036-04 (Standard Practice for Competence of Air Emission Testing Bodies). Montrose participates in annual functional assessments for conformance with D7036-04 which are conducted by the American Association for Laboratory Accreditation (A2LA). All testing performed by Montrose is supervised on site by at least one Qualified Individual (QI) as defined in D7036-04 Section 8.3.2. Data quality objectives for estimating measurement uncertainty within the documented limits in the test methods are met by using approved test protocols for each project as defined in D7036-04 Sections 7.2.1 and 12.10. Additional quality assurance information is presented in the report appendices.

Performance Data

Performance data are available for review.

Qualified Personnel

A qualified individual (QI), defined by performance on a third party or internal test on the test methods, is present on each test event.

Plant Entry and Safety Requirements

Plant Entry

All test personnel are required to check in with the guard at the entrance gate or other designated area. Specific details are provided by the facility and project manager.

Safety Requirements

All personnel shall have the following personal protective equipment (PPE) and wear them where designated:

- Hard Hat
- Safety Glasses
- Steel Toe Boots
- Hearing Protection
- Gloves
- High Temperature Gloves (if required)
- Flame Resistant Clothing (if required)

The following safety measures are followed:

- Good housekeeping
- SDS for all on-site hazardous materials
- Confine selves to necessary areas (stack platform, mobile laboratory, CEMS data acquisition system, control room, administrative areas)
- Knowledge of evacuation procedures

Each facility will provide plant specific safety training.

TABLE 1
EQUIPMENT MAINTENANCE SCHEDULE

Equipment	Acceptance Limits	Frequency of Service	Methods of Service
Pumps	1. Absence of leaks 2. Ability to draw manufacturers required vacuum and flow	As recommended by manufacturer	1. Visual inspection 2. Clean 3. Replace parts 4. Leak check
Flow Meters	1. Free mechanical movement	As recommended by manufacturer	1. Visual inspection 2. Clean 3. Calibrate
Sampling Instruments	1. Absence of malfunction 2. Proper response to zero span gas	As recommended by manufacturer	As recommended by manufacturer
Integrated Sampling Tanks	1. Absence of leaks	Depends on nature of use	1. Steam clean 2. Leak check
Mobile Van Sampling System	1. Absence of leaks	Depends on nature of use	1. Change filters 2. Change gas dryer 3. Leak check 4. Check for system contamination
Sampling Lines	1. Sample degradation less than 2%	After each test series	1. Blow dry, inert gas through line until dry

TABLE 2
MAJOR SAMPLING EQUIPMENT CALIBRATION REQUIREMENTS

Sampling Equipment	Calibration Frequency	Calibration Procedure	Acceptable Calibration Criteria
Continuous Analyzers	Before and After Each Test Day	3-point calibration error test	< 2% of analyzer range
Continuous Analyzers	Before and After Each Test Run	2-point sample system bias check	< 5% of analyzer range
Continuous Analyzers	After Each Test Run	2-point analyzer drift determination	< 3% of analyzer range
CEMS System	Beginning of Each Day	leak check	< 1 in. Hg decrease in 5 min. at > 20 in. Hg
Continuous Analyzers	Semi-Annually	3-point linearity	< 1% of analyzer range
NO _x Analyzer	Daily	NO ₂ -> NO converter efficiency	> 90%
Differential Pressure Gauges (except for manometers)	Semi-Annually	Correction factor based on 5-point comparison to standard	± 5%
Differential Pressure Gauges (except for manometers)	Bi-Monthly	3-point comparison to standard, no correction factor	± 5%
Barometer	Semi-Annually	Adjusted to mercury-in-glass or National Weather Service Station	± 0.1 inches Hg
Dry Gas Meter	Semi-Annually	Calibration check at 4 flow rates using a NIST traceable standard	± 2%
Dry Gas Meter	Bi-Monthly	Calibration check at 2 flow rates using a NIST traceable standard	± 2% of semi-annual factor
Dry Gas Meter Orifice	Annually	4-point calibration for ΔH@	--
Temperature Sensors	Semi-Annually	3-point calibration vs. NIST traceable standard	± 1.5%

Note: Calibration requirements that meet applicable regulatory agency requirements are used.

Appendix D.2

SCAQMD, CARB, and STAC Certifications

Chiquita Canyon Landfill
2026 Hero TOx Methane DRE Source Test



**South Coast
Air Quality Management District**

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

September 18, 2025

Mr. John Peterson
Montrose Air Quality Services, LLC
1631 E. Saint Andrew Place
Santa Ana, CA 92705

Subject: LAP Approval Notice
Reference # 96LA1220

Dear Mr. Peterson:

We have completed our review of Montrose Air Quality Services' renewal application under the South Coast AQMD Laboratory Approval Program (LAP). We are pleased to inform you that your firm is approved for the period beginning September 30, 2025, and ending September 30, 2026, for the following methods, subject to the requirements in the LAP Conditions For Approval Agreement and conditions listed in the attachment to this letter:

South Coast AQMD Methods 1-4
South Coast AQMD Methods 10.1 and 100.1
South Coast AQMD Methods 5.1, 5.2, 5.3, 6.1 (Sampling and Analysis)
South Coast AQMD Methods 25.1 and 25.3 (Sampling)
Rule 1121/ 1146.2 Protocol
Rule 1420/1420.1/1420.2 – (Lead) Source and Ambient Sampling
USEPA CTM-030 and ASTM D6522-00

Your LAP approval to perform nitrogen oxide emissions compliance testing for Rule 1121/ 1146.2 Protocols includes satellite facilities located at:

McKenna Boiler
1510 North Spring Street
Los Angeles, CA 90012

Noritz America Corp.
11160 Grace Avenue
Fountain Valley, CA 92708

Ajax Boiler, Inc.
2701 S. Harbor Blvd.
Santa Ana, CA 92704

VA Laundry Bldg., Greater LA Healthcare Sys.
508 Constitution Avenue
Los Angeles, CA 90049

So Cal Gas – Engr Analysis Ctr, Bldg H
8101 Rosemead Blvd
Pico Rivera, CA 90660

Thank you for participating in the LAP. Your cooperation helps us to achieve the goal of the LAP: to maintain high standards of quality in the sampling and analysis of source emissions. You may direct any questions or information to me by telephone at (909) 396-2476, or via e-mail at ceckerle@aqmd.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Colin Eckerle".

Colin Eckerle
Program Supervisor
Source Test Engineering

CE/ce
Attachment

250918 LapRenewal.doc

Chiquita Canyon Landfill
2026 Hero TOx Methane DRE Source Test



Gavin Newsom, Governor
Yana Garcia, CalEPA Secretary
Liane M. Randolph, Chair

June 13, 2024

Matt McCune
Regional Vice President - West
Montrose Air Quality Services, LLC
1631 East Saint Andrew Place
Santa Ana, California 92705
mmccune@montrose-env.com

Dear Matt McCune:

I am pleased to inform you that the California Air Resources Board (CARB) has renewed Montrose Air Quality Services, LLC as an Independent Contractor, by means of the enclosed Executive Order I-24-008. This approval will allow Montrose Air Quality Services, LLC. to perform CARB Methods 1, 2, 3, 4, 5, 6, 8, 17, 20, and 100 (CO, CO₂, NO_x, O₂, SO₂, THC), Visible Emission Evaluation, and U.S. Environmental Protection Agency Test Methods 201A, 202, and 205. The approval is valid through June 30, 2026, during which time additional audits of Montrose Air Quality Services, LLC's testing ability may be performed.

If you have questions or need further assistance, please contact the [Independent Contractor Program](#)¹.

Sincerely,

Walter Ham

Digitally signed by Walter Ham
Date: 2024.06.14 09:08:28
+07'00'

Walter Ham, Ph.D., Chief, Monitoring and Laboratory Division

Enclosure

¹ icp@arb.ca.gov



American Association for Laboratory Accreditation

Accredited Air Emission Testing Body

A2LA has accredited

MONTROSE AIR QUALITY SERVICES

In recognition of the successful completion of the joint A2LA and Source Evaluation Society (SES) evaluation process, this laboratory is accredited to perform testing activities in compliance with ASTM D7036:2004 - Standard Practice for Competence of Air Emission Testing Bodies.

Presented this 23rd day of January 2026.

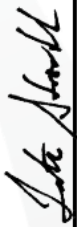


Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 3925.01
Valid to February 29, 2028

This accreditation program is not included under the A2LA ILAC Mutual Recognition Arrangement.

Appendix D.3

Individual QI Certificates

CERTIFICATE OF COMPLETION	
Pedro SanJuan	
This document certifies that this individual has passed a comprehensive examination and is now a Qualified Individual (QI) as defined in Section 8.3 of ASTM D7036-04 for the following method(s):	
Source Evaluation Society Group 1: EPA Manual Gas Volume and Flow Measurements and Isokinetic Particulate Sampling Methods	
Certificate Number: <u>002-2025-18</u>	
 Tate Strickler, VP – Quality Systems	EFFECTIVE DATE: <u>3/28/2025</u>
	EXPIRATION DATE: <u>3/27/2030</u>
	

CERTIFICATE OF COMPLETION	
Pedro SanJuan	
This document certifies that this individual has passed a comprehensive examination and is now a Qualified Individual (QI) as defined in Section 8.3 of ASTM D7036-04 for the following method(s):	
SCAQMD Methods 1.1, 1.2, 2.1, 2.2, 2.3, 3.1, & 4.1	
Certificate Number: <u>002-2022-50</u>	
 Tate Strickler, VP – Quality Systems	DATE OF ISSUE: <u>02/28/2022</u>
	DATE OF EXPIRATION: <u>02/27/2027</u>
 MONTROSE ENVIRONMENTAL	

CERTIFICATE OF COMPLETION	
Pedro SanJuan	
This document certifies that this individual has passed a comprehensive examination and is now a Qualified Individual (QI) as defined in Section 8.3 of ASTM D7036-04 for the following method(s):	
SCAQMD Methods 25.1, 25.3 & 307-91	
Certificate Number: <u>002-2022-52</u>	
	DATE OF ISSUE: 02/28/2022
Tate Strickler, VP – Quality Systems	DATE OF EXPIRATION: 02/27/2027
	

Appendix D.4

Statement of No Conflict of Interest

**STATEMENT OF NO CONFLICT OF INTEREST AS AN INDEPENDENT TESTING
LABORATORY**

(To be completed by authorized source testing firm representative and included in source test report)

The following facility and equipment were tested by my source testing firm and are the subjects of this statement:

Facility ID:	119219
Date(s) Tested:	May 13, 2026
Facility Name:	Chiquita Canyon Landfill
Equipment Address:	29201 Henry Mayo Drive Castaic, California 91384
Equipment Tested:	Hero Thermal Oxidizer
Device ID, A/N, P/N:	A/N 661284

I state, as its legally authorized representative, that the source testing firm of:

Source Test Firm: Montrose Air Quality Services, LLC

Business Address: 1631 E. St. Andrew Pl.
Santa Ana, California 92705

is an "Independent Testing Laboratory" as defined in **District Rule 304(k)**:

For the purposes of this Rule, when an independent testing laboratory is used for the purposes of establishing compliance with District rules or to obtain a District permit to operate, it must meet all of the following criteria:

- (1) The testing laboratory shall have no financial interest in the company or facility being tested, or in the parent company, or any subsidiary thereof -*
- (2) The company or facility being tested, or parent company or any subsidiary thereof, shall have no financial interest in the testing laboratory;*
- (3) Any company or facility responsible for the emission of significant quantities of pollutants to the atmosphere, or parent company or any subsidiary thereof shall have no financial interest in the testing laboratory; and*
- (4) The testing laboratory shall not be in partnership with, own or be owned by, in part or in full, the contractor who has provided or installed equipment (basic or control), or monitoring systems, or is providing maintenance for installed equipment or monitoring systems, for the company being tested.*

Furthermore, I state that any contracts or agreements entered into by my source testing firm and the facility referenced above, or its designated contractor(s), either verbal or written, are not contingent upon the outcome of the source testing, or the source testing information provided to the SCAQMD.

Signature: _____

Date: 10/12/2026

Pete SanJuan

Client Project Manager

(714) 279-6777

10/12/2026

(Name)

(Title)

(Phone)

(Date)

APPENDIX E SCAQMD NTC



NOTICE TO COMPLY

Facility Name:	Chiquita Canyon Landfill	Facility ID#:	119219	Sector:	VB
Location Address:	29201 Henry Mayo Dr.	City:	Castaic	Zip:	91384
Mailing Address:	29201 Henry Mayo Dr.	City:	Castaic	Zip:	91384

This Notice to Comply is being issued to:

- ☒ Request additional information needed to determine compliance with clean air requirements.
☐ Correct a minor violation found during an inspection.

Failure to respond or take corrective action, or providing false statements in response to this Notice to Comply can lead to issuance of a Notice of Violation pursuant to the California Health and Safety Code. The facility cited above is subject to re-inspection at any time to ensure compliance.

YOU ARE HEREBY DIRECTED TO COMPLY WITH:

#	South Coast AQMD Rule / Cal H&S Code	Requirement	Compliance Due Date	Compliance Achieved Date
1	17 CCR Sec. 95464(b)(4)	Submit source test protocols for approval to conduct source tests on the HERO, Zeeco and Parnel Thermal Oxidizers to demonstrate the landfill gas control devices are meeting the requirements of sections 95464(b)(2)(A), or 95464(b)(3)(A), using the test methods identified in 95471(f). Submit an Expedited Evaluation Request Form for each protocol requesting an expedited review [Reference: HERO Application No. 661284; Parnel Application No. 663634; Zeeco Application No. 664969]	2/17/26	
2				
3				

Served To:	Kevin Green	Served By:	Christina Ojeda				
Title:	District Manager	Date Served:	2/10/26	Phone:	909-396-2475	Fax:	
Email Address:	Kevin.green@wasteconnections.com	Phone:	661-812-5846	Email Address:	cojeda@aqmd.gov	Forms/ Applications/Info available at:	www.aqmd.gov

Instructions:

- For each minor violation cited above, compliance shall be achieved by the compliance deadline specified for that particular violation.
- Within 5 working days of achieving compliance for each respective violation, the owner/responsible officer of the cited facility must complete and return a signed copy of this Notice to Comply to the South Coast Air Quality Management District at the address listed above.
- Please copy and return this Notice to Comply as many times as necessary to provide the required information. On each copy, include the date on which compliance was achieved. Date, sign, and send all completed copies to the attention of the inspector named above.

I hereby certify that the facility cited in this Notice to Comply has achieved compliance with the requirements listed above.

NAME OF OWNER/ RESPONSIBLE OFFICIAL

TITLE

SIGNATURE

DATE

NOTICE#: E56457

FILE COPY (Blue)

FACILITY COPY (Gold)

INSPECTOR COPY (White)

THIS IS THE LAST PAGE OF THIS DOCUMENT

If you have any questions, please contact one of the following individuals by email or phone.

Name: Mr. Pete San Juan
Title: Client Project Manager
Region: West
Email: Psanjuan@onterris.com
Phone: (714) 279-6777

Name: Mr. Matt McCune
Title: Principal
Region: West
Email: MMccune@onterris.com
Phone: (714) 279-6777