## FINAL REPORT



## **GENERAL MOTORS, LLC**

LANSING, MICHIGAN

#### LANSING DELTA TOWNSHIP ASSEMBLY PLANT (LDT): ELPO RTO DESTRUCTION EFFICIENCY

RWDI #2206398 November 4, 2022

#### SUBMITTED TO

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RWDI#2206398 November 4, 2022



## **EXECUTIVE SUMMARY**

RWDI USA LLC (RWDI) has been retained by General Motors, LLC (GM) to complete the emission sampling program at the Lansing Delta Township (LDT) plant located at 8175 Millett Hwy, Lansing, Michigan. The purpose of the emissions test program was to evaluate the destruction efficiency of the ELPO Regenerative Thermal Oxidizer (RTO) after the completion of the RTO block replacement and addition of saddles. The ELPO RTO falls under EU-ELECTROCOAT emission unit within the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Permit No. MI-ROP-N6950-2020a.

This emissions testing program included evaluation of volatile organic compounds (VOC) prior to and after the ELPO RTO. The testing program provides destruction efficiency for the ELPO. The test program was completed on September 28, 2022.

Parameter	Test 1	Test 2	Test 3	Average	
		Results as THC			
THC Inlet Concentration (ppmvd)	184.82	223.28	205.05	204.38	
THC Inlet Emission Rate (lb/hr)	23.03	27.36	25.16	25.18	
THC Outlet Concentration (ppmvd)	7.47	7.64	6.88	7.33	
THC Outlet Emission Rate (lb/hr)	1.02	1.02	0.92	0.99	
THC Destruction Efficiency (%)	95.6 96.3		96.3	96.1	
	Re	esults as NMOC			
NMOC Inlet Concentration (ppmvd)	172.45	211.25	192.45	192.05	
NMOC Inlet Emission Rate (lb/hr)	21.49	25.89	23.61	23.66	
NMOC Outlet Concentration (ppmvd)	7.30	7.47	6.72	7.16	
NMOC Outlet Emission Rate (lb/hr)	0.99	1.00	0.90	0.97	
NMOC Destruction Efficiency (%)	95.4	96.1	96.2	95.9	

#### **Executive Table iii:** Destruction Efficiency Results

Executive ii: Test Results Comparison to ROP Limit

Barameter	Limit	Test	lest Data		
Faianietei	Linnit	Results as THC	Results as NMOC		
VOC Destruction Efficiency	>95%	96.1%	95.9%		

RWDI#2206398 November 4, 2022



## TABLE OF CONTENTS

1	INTRODUCTION	1
1.1	Location and Dates of Testing	1
1.2	Purpose of Testing	1
1.3	Description of Source	1
1.4	Personnel Involved in Testing	2
2	SUMMARY OF RESULTS	2
2.1	Operating Data	2
2.2	Applicable Permit Number	2
3	SOURCE DESCRIPTION	3
3.1	Description of Process and Emission Control Equipment	3
3.2	Process Flow Sheet or Diagram	3
3.3	Type and Quantity of Raw and Finished Materials	3
3.4	Normal Rated Capacity of Process	3
3.5	Process Instrumentation Monitored During the Test	3
4	SAMPLING AND ANALYTICAL PROCEDURES	4
4.1	Stack Velocity, Temperature, and Volumetric Flow Rate	4
4.2	Volatile Organic Compounds	4
4.3	Gas Dilution System	5
4.4	Description of Recovery and Analytical Procedures	6
4.5	Sampling Port Description	6
5	TEST RESULTS AND DISCUSSION	6
5.1	Detailed Results	6

<u>K</u>N

RWDI#2206398 November 4, 2022

5.2	Discussion of Results	7
5.3	Variations in Testing Procedures	7
5.4	Process Upset Conditions During Testing	7
5.5	Maintenance Performed in Last Three Months	7
5.6	Re-Test	7
5.7	Audit Samples	7
5.8	Flows and Moisture	7
5.9	Calibration Data	7
5.10	Process Data	7
5.11	Example Calculations	8
5.12	Laboratory Data	8

## LIST OF TABLES (IN REPORT)

Table 1.2.1:	EU-ELECTOCOAT Permit Limits1	
Table 1.4.1:	List of Testing Personnel	2
Table 5.1.1:	Destruction Efficiency ResultsExecutive Summary and 6	5
Table 5.1.2:	Test Results Comparison to ROP LimitExecutive Summary and 7	7

## LIST OF TABLES (TABLE SECTION)

Table 1:	Destruction Efficiency Testing
Table 2:	THC/NMOC Emission Table

RWDI#2206398 November 4, 2022



## LIST OF FIGURES

Figure 1:	ELPO RTO Inlet Traverse Points
Figure 2:	ELPO RTO Outlet Traverse Points
Figure 3:	USEPA Method 2 Sampling Train
Figure 4:	USEPA Method 4 Sampling Train
Figure 5:	USEPA Method 25A Sampling Train
Figure 6:	Process Overview

## LIST OF GRAPHS

Graph 1:	ELPO RTO VOC Data - Test 1
Graph 2:	ELPO RTO VOC Data - Test 2
Graph 3:	ELPO RTO VOC Data - Test 3

## LIST OF APPENDICES

Appendix A:	Process Data
Appendix B:	ELPO RTO CEMS Data
Appendix C:	ELPO RTO Flows and Moisture Data and Field Notes
Appendix D:	Calibration Data
Appendix E:	Example Calculations
Appendix F:	Source Testing Plan and Approval Letter

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RWDI#2206398 November 4, 2022

1



### INTRODUCTION

RWDI USA LLC (RWDI) has been retained by General Motors, LLC (GM) to complete the emission sampling program at the Lansing Delta Township (LDT) plant located at 8175 Millett Hwy, Lansing, Michigan. The purpose of the emissions test program was to evaluate the destruction efficiency of the ELPO Regenerative Thermal Oxidizer (RTO) after the completion of the RTO block replacement and addition of saddles. The ELPO RTO falls under EU-ELECTROCOAT emission unit within the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Permit No. MI-ROP-N6950-2020a.

This emissions testing program included evaluation of volatile organic compounds (VOC) prior to and after the ELPO RTO. The testing program provides destruction efficiency for the ELPO RTO. The test program was completed on September 28, 2022.

#### 1.1 Location and Dates of Testing

The test program was completed on September 28<sup>th</sup>, 2022 at the GM LDT facility.

#### 1.2 Purpose of Testing

The emissions test program is required by EGLE permit number MI-ROP-N6960-2020a. The facility SRN number is N6960.

As outlined in the ROP, the following limits are provided for ELPO RTO.

Table 1.2.1:	<b>EU-ELECTOCOAT</b>	<b>Permit Limits</b>
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Parameter	Limit	Time Period		
	67.9 lb/day	Per Calendar Day		
Voc	8.8 tons / year	12-month rolling timer period a determined at the end of each calendar month		
Destruction Efficiency	>95%	Equipment Performance Limit		

#### 1.3 Description of Source

The ELPO system includes an electrocoat dip tank followed by an electrocoat curing oven. The VOC emissions from both dip tank and curing oven are controlled by an ELPO Thermal Oxidizer.

The ELPO RTO receives the VOC emissions from the process gases and destroys the VOCs within the specified efficiency of the RTO (95% of greater).

RWDI#2206398 November 4, 2022



## **3 SOURCE DESCRIPTION**

#### 3.1 Description of Process and Emission Control Equipment

The dip tank and oven from the ELPO process is controlled via one (1) regenerative thermal oxidizer (RTO).

#### 3.2 Process Flow Sheet or Diagram

ELPO RTO has a single inlet and single outlet. The figures can be found in the **Figure Section**. A flow diagram of the EU-ELECTROCOAT system is also provided in the **Figure Section**.

#### 3.3 Type and Quantity of Raw and Finished Materials

Various raw materials are used for the assembly of vehicles. For the ELPO process, the vehicles are dipped into baths for the electrocoating process. The baths contain various products for the ELPO process.

#### 3.4 Normal Rated Capacity of Process

The line rate is capable of achieving 60 jobs per hour. Typically, the line rate is between 45 and 55 jobs per hour depending on production needs. Process data is provided in **Appendix A**.

#### 3.5 Process Instrumentation Monitored During the Test

Vehicle counts and RTO combustion chamber temperatures were recorded and monitored during the testing event.

RWDI#2206398 November 4, 2022



Prior to testing, a 4-point analyzer calibration error check was conducted using USEPA protocol gases. The calibration error check was performed by introducing zero, low, mid, and high-level calibration gases up the heated line to the probe tip. The calibration error check was performed to confirm that the analyzer response is within  $\pm 5\%$  of the certified calibration gas introduced. At the conclusion of each test run a system-bias check was performed to evaluate the percent drift from pre- and post-test system bias checks. The system bias check was used to confirm that the analyzer did not drift greater than  $\pm 3\%$  throughout a test run.

Zero and mid gas calibration checks were conducted both before and after each test run to quantify measurement system calibration drift and sampling system bias. During these checks, the calibration gases were introduced into the sampling system at the probe tip so that the calibration gases were analyzed in the same manner as the flue gas samples.

A gas sample was continuously extracted from the stack and delivered to the gas analyzer, which measures the pollutant or diluent concentrations in the gas. The probe tip was equipped with a sintered stainless-steel filter or heated filter system for particulate removal. The end of the probe was connected to a heated Teflon sample line, which delivered the sample gases from the stack to the CEM system. The heated sample line was designed to maintain the gas temperature above 250°F to prevent condensation of stack gas moisture within the line.

To subtract methane from THC, the methane must be converted from methane as methane to methane as propane and then subtracted from the THC number. The methane response factor (RF) was determined each test by introducing a known methane concentration to the analyzer and dividing the methane channel response by the THC channel response. Dividing methane by the RF gives methane as propane and was then subtracted from the THC concentration.

A schematic of the USEPA Method 25A is provided in Figures Section.

Results were reported as THC and as Non-Methane Organic Compounds (NMOC).

#### 4.3 Gas Dilution System

Calibration gases were mixed using an Environics 4040 Gas Dilution System. The mass flow controllers are factory calibrated using a primary flow standard traceable to the United States National Institute of Standards and Technology (NIST). Each flow controller utilizes an 11-point calibration table with linear interpolation, to increase accuracy and reduce flow controller nonlinearity. The calibration is done yearly, and the records are included in the Source Testing Report. A multi-point EPA Method 205 check was executed in the field prior to testing to ensure accurate gas-mixtures.

The gas dilution system consists of calibrated orifices or mass flow controllers and dilutes a high-level calibration gas to within  $\pm 2\%$  of predicted values. The gas divider is capable of diluting gases at set increments and were evaluated for accuracy in the field in accordance with US EPA Method 205 "*Verification of Gas Dilution Systems for Field Instrument Calibrations*". The gas divider dilutions were measured to evaluate that the responses are within  $\pm 2\%$  of predicted values. In addition, a certified mid-level calibration gas within  $\pm 10\%$  of pne of the lested dilution gases was introduced into an analyzer to ensure the response of the gas calibration is within  $\pm 2\%$  of gas divider dilution concentration

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RWDI#2206398 November 4, 2022

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#### 5.2 Discussion of Results

The detailed results can be found in the following Graphs and Appendices:

- Graphs 1 to 3 Summary of VOC Results
- Appendix B Summary of VOC Results

#### **5.3 Variations in Testing Procedures**

There were no sampling variations.

#### 5.4 Process Upset Conditions During Testing

There were normal process breaks during production.

#### 5.5 Maintenance Performed in Last Three Months

The ELPO RTO underwent RTO block replacement and addition of saddles in April 2022. In the last three months, the site inspected the ELPO RTO gas train, gas train sealant, and the damper bearing. The site also lubricated the bearings and cleaned the air filters.

#### 5.6 Re-Test

This was not a retest.

#### 5.7 Audit Samples

This test did not require any audit samples.

#### 5.8 Flows and Moisture

Flow and moisture determination results can be found in Appendix C.

#### 5.9 Calibration Data

Calibration data can be found in **Appendix D**.

#### 5.10 Process Data

Process data can be found in Appendix A.



## TABLES



#### **Table 1: Destruction Efficiency Results**

**Source:** GM Lansing Delta - ELPO RTO RWDI Project # 2206398

Test ID	Date	Start	End	TO Combustion Chamber Temperature (°F)	ELPO Vehicle Counts	Inlet THC (lb/hr) (as propane)	Inlet CH4 (lb/hr) (as propane)	Inlet NMOC <sup>[2]</sup> (lb/hr) (as Propane)	Outlet THC <sup>(1)</sup> (lb/hr) (as Propane)	Outlet Methane (lb/hr) (as Propane)	Outlet NMOC <sup>[2]</sup> (lb/hr) (as Propane)	Destruction Efficiency (THC)	Destruction Efficiency (NMOC)
- 1	9/28/2022	12:05	13:04	1558	37	23.0	1.54	21.5	1.02	0.023	0.99	95.6%	95.4%
2	9/28/2022	13:35	14:34	1559	39	27.4	1.47	25.9	1.02	0.022	1.00	96.3%	96.1%
3	9/28/2022	15:00	15:59	1559	40	25.2	1.55	23.6	0.92	0.021	0.90	96.3%	96.2%
			Average	1559	39	25.2	1.52	23.7	0.99	0.022	0.97	96.1%	95.9%

Notes

[1] Total Hydrocarbons

[2] Non-Methane Organic Compounds

Concentrations and destruction efficiency calculated using dry results

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## Table 2: THC/NMOC EMISSIONS TABLE Source: GM Lansing Delta - ELPO RTO RWDI Project #2206398

Date         28-Sep-22         28-Sep-22         28-Sep-22         3           Start Time         12.05         13.35         15.00         -           Stop Time         13.04         14.34         15.59         -           Duration (rime)         60         60         69         -           Average Production Number (ELPO):         37         39         40         39           Average Temperature for RTO (°F):         1555         1559         1559         1559           Intel Flow Rate (darSch):         16.150         17.657         17.787         17.982           Intel THC Concentration (as propane) (ppm.,)         174.65         213.46         194.88         194.33           Intel THC Concentration (as propane) (ppm.,)         174.65         23.46         37.58         374.62           Intel Mehane Correction Factor         2.32         2.35         2.32         2.33         1164         25.18         374.62           Intel Mehane Concentration (as propane) (pmm,,)         28.70         2.82         2.32         2.33         1164         11.87         11.72           Intel Mehane Concentration (as propane) (pmm,,)         27.12         27.05         27.79         27.32           Intel Mehane Concentr	Parameter	1	2	3	Average
Shart Time:         12:05         13:35         15:00            Stop Time:         13:04         14:34         15:59            Duration (mins):         60         60         60            Average Temperature for R10 (°F):         15:58         15:59         15:59         15:59           Intel Flow Rate (dsr/h):         8:57         6:43         6:44         6:44           Moisture:         0.055         0.044         0.050         0.050           Intel THC Concentration (as propane) (ppm,):         174.65         213.46         194.89         194.33           Intel THC Concentration (as propane) (ppm,):         184.62         223.28         225.16         251.18           Intel THC Concentration (as propane) (ppm,):         23.03         27.36         252.19         23.14           Intel Methane Concentration (as propane) (ppm,):         2.37         12.05         27.79         27.32           Intel Methane Concentration (as propane) (ppm,):         2.37         12.03         12.60         12.33           Intel Methane Concentration (as propane) (ppm,):         2.37         12.03         12.60         12.33           Intel Methane Concentration (as propane) (ppm,):         17.24         27.16	Date	28-Sep-22	28-Sep-22	28-Sep-22	
Stop Time         13:04         14:34         15:59            Duration (min):         60         60         60            Average Temperature for RTO (*):         37         39         40         39           Average Temperature for RTO (*):         15:59         15:59         17:57         17:57           Intel Flow Rate (dm*):         18:150         17:877         17:878         17:982           Intel Flow Rate (dm*):         18:150         17:877         17:878         17:982           Intel THC Concentration (as propano) (ppm,):         174:85         213:44         194:88         194:33           Intel THC Concentration (as propano) (ppm,):         174:85         213:45         194:88         194:33           Intel THC Concentration (as propano) (ppm,):         12:80         27:36         27:78         27:32           Intel Methane Concentration (as methane) (ppm,):         21:2         27:05         27:79         27:32           Intel Methane Concentration (as propano) (ppm,):         11:37         11:37         11:37         11:37           Intel Methane Concentration (as propano) (ppm,):         12:37         12:03         12:28         22:26         23:09         22:60         12:30         12:39         12:49<	Start Time:	12:05	13:35	15:00	
Duration (mins):         66         60         60            Average Temperature for RTO (F):         1555         1559         1559         1559           Intel Flow Rate (dsr/h):         18,150         17,857         17,878         17,962           Intel Flow Rate (dsr/h):         8,57         8,43         8,44         8,44           Moisture         0.055         0.044         0.050         0.050           Intel THC Concentration (as propane) (ppm,):         174.65         213.46         194.38         194.33           Intel THC Concentration (as propane) (ppm,):         174.65         213.46         194.38         194.33           Intel THC Concentration (as propane) (ppm,):         174.65         213.46         194.38         174.22           Intel Methane Correction Factor         2.32         2.35         2.32         2.31         114.14         157         17.72         27.72           Intel Methane Concentration (as propane) (pm,):         2.12         27.05         2.77         2.73.2         11.12         11.12         11.12         11.12         11.12         11.23           Intel Methane Concentration (as propane) (pm,):         11.69         11.50         11.37         11.20         11.23	Stop Time:	13:04	14:34	15:59	
Average Production Number (ELPO):         37         39         40         39           Average Temperature for RTO (°F):         1559         1559         1559         1559         1559         1559           Inlet Flow Rate (dsc/m <sup>1</sup> /s):         8.57         8.43         8.44         8.48           Moisture:         0.055         0.044         0.050         0.050           Inlet THC Concentration (as propane) (ppm,):         114.82         223.28         205.05         204.33           Inlet THC Concentration (as propane) (mp/m30):         338.76         409.26         27.58         27.14           Inlet Methane Concentration (as propane) (ppm,):         21.03         27.66         25.16         25.17           Inlet Methane Concentration (as propane) (ppm,):         27.12         27.05         27.79         27.32           Inlet Methane Concentration (as methane) (ppm,):         28.70         28.29         28.24         28.74           Inlet Methane Concentration (as propane) (ppm,):         11.59         11.57         11.72           Inlet Methane Concentration (as propane) (ppm,):         11.59         11.52         11.24           Inlet Methane Concentration (as propane) (ppm,):         17.2.45         192.45         192.45           Inlet Methane Concentration	Duration (mins):	60	60	60	
Norsage Troduction (as propane) (ppm.):         1558         1559         1559         1559           Average Troduction (as propane) (ppm.):         18,150         17,857         17,878         17,982           Iniet Flow Rate (dm*/s):         8,57         8,43         8,44         8,48           Motioure:         0.055         0.044         0.050         0.050           Iniet THC Concentration (as propane) (ppm.):         174,857         213,46         194,38         194,33           Iniet THC Concentration (as propane) (ppm.):         184,82         223,28         205,05         204,38           Iniet THC Concentration (as propane) (ppm.):         184,82         237,36         25,16         25,16           Iniet Methane Concentration (as methane) (ppm.):         27,12         27,05         22,22         2.32         23,74           Iniet Methane Concentration (as propane) (ppm.):         11,89         11,50         11,97         11,72           Iniet Methane Concentration (as propane) (ppm.):         12,37         12,00         12,33         11,04         14,47         1,55         1,52           Iniet Methane Concentration (as propane) (ppm.):         1,74         1,74         1,55         1,52         192,05           Iniet Methane Concentration (as propane) (ppm.):	Average Production Number (FLPO):	37	39	40	39
Inter Filew Rate (dscfm):         17600         17600         17600         17600           Iniet Filow Rate (dscfm):         18,150         17,857         17,878         17,952           Iniet Filow Rate (dm <sup>2</sup> /g):         6,57         6,43         6,44         6,48           Moisture:         0.055         0.044         0.050         0.060           Iniet THC Concentration (as propane) (ppm):         174,65         213,46         194,88         194,33           Iniet THC Concentration (as propane) (mg/m3d):         338,76         409,26         275,83         374,62           Iniet THC Concentration (as propane) (ppm):         23,03         27,36         25,16         25,18           Iniet Methane Concentration (as propane) (ppm):         27,12         27,05         27,79         27,32           Iniet Methane Concentration (as propane) (ppm):         11,59         11,50         11,97         11,72           Iniet Methane Concentration (as propane) (ppm):         12,37         12,03         12,60         12,33           Iniet Methane Concentration (as propane) (ppm):         1,54         1,47         1,55         1,52           Iniet NMOC Concentration (as propane) (ppm):         1,74         1,684         19,552         19,554         196,657	Average Temperature for RTO (°F):	1558	1559	1559	1559
Intel Flow Rate (dscm):         18.150         17.877         17.878         17.978           Intel Flow Rate (dscm):         6.57         6.43         8.44         6.48           Moisture:         0.055         0.044         0.050         0.050           Intel THC Concentration (as propane) (ppm.):         174.65         213.46         194.88         194.33           Intel THC Concentration (as propane) (mg/m3):         33.76         409.26         375.83         374.62           Intel THC Concentration (as methane) (ppm.):         23.03         27.36         2.32         2.33           Intel Methane Correction Factor         2.32         2.35         2.32         2.33           Intel Methane Concentration (as propane) (mg/m3):         2.8.70         2.8.29         2.9.24         2.8.74           Intel Methane Concentration (as propane) (ppm.):         1.1.59         11.50         11.97         11.72           Intel Methane Concentration (as propane) (mg/m3):         2.2.66         22.06         23.09         22.60           Intel MMCC Concentration (as propane) (mg/m3):         12.45         14.27         1.55         1.52           Intel Methane Concentration (as propane) (mg/m3):         22.66         22.08         23.09         22.60           Intel MMOC		1000	1000	1000	1000
Iniet Flow Rate (dm <sup>7</sup> /s):         8.57         8.43         8.44         8.48           Moisture:         0.055         0.044         0.050         0.050           Iniet THC Concentration (as propane) (ppm <sub>a</sub> ):         174.65         213.46         194.88         194.33           Iniet THC Concentration (as propane) (ppm <sub>a</sub> ):         184.82         223.28         205.05         204.38           Iniet THC Concentration (as propane) (bPm <sub>a</sub> ):         238.76         409.26         375.83         374.62           Iniet Methane Concentration (as methane) (ppm <sub>a</sub> ):         23.03         27.38         25.16         25.17           Iniet Methane Concentration (as methane) (ppm <sub>a</sub> ):         27.72         27.05         27.79         27.32           Iniet Methane Concentration (as propane) (ppm <sub>a</sub> ):         18.9         11.50         11.97         11.72           Iniet Methane Concentration (as propane) (ppm <sub>a</sub> ):         12.87         12.03         12.60         12.33           Iniet Methane Concentration (as propane) (ppm <sub>a</sub> ):         12.47         12.53         192.05         192.05           Iniet Methane Concentration (as propane) (ppm <sub>a</sub> ):         172.45         211.25         192.05         192.05           Iniet Methane Concentration (as propane) (ppm <sub>a</sub> ):         174.49         25.89         23.	Inlet Flow Rate (dscfm):	18,150	17,857	17,878	17,962
Moisture:         0.055         0.044         0.050           Inlet THC Concentration (as propane) (ppm,):         174.85         213.46         194.88         194.33           Inlet THC Concentration (as propane) (mg/m30):         338.76         409.26         375.83         374.62           Inlet THC Concentration (as propane) (mg/m30):         338.76         409.26         375.83         374.62           Inlet Methane Concentration (as mothane) (ppm,):         2.31         2.7.35         2.52         2.33           Inlet Methane Concentration (as mothane) (ppm,):         2.8.70         2.8.29         2.9.24         2.8.74           Inlet Methane Concentration (as propane) (ppm,):         11.69         11.50         11.97         11.72           Inlet Methane Concentration (as propane) (ppm,):         12.37         12.03         12.60         12.33           Inlet Methane Concentration (as propane) (mg/m3):         2.2.66         22.09         23.09         22.60           Inlet Methane Concentration (as propane) (mg/m3):         2.1.49         25.89         23.61         23.66           Unlet Mothane Concentration (as propane) (mg/m3):         2.1.49         25.99         23.61         23.66           Unlet MMOC Concentration (as propane) (mg/m3):         2.1.49         25.89         2.8.61	Inlet Flow Rate (dm <sup>3</sup> /s):	8.57	8.43	8.44	8.48
Inlet THC Concentration (as propane) (ppm.):         174.85         213.46         194.88         194.33           Inlet THC Concentration (as propane) (ppm.):         184.82         223.28         205.05         204.38           Inlet THC Concentration (as propane) (mg/m3d):         338.76         409.26         375.83         374.62           Inlet THC Concentration (as propane) (fb/m2):         23.03         27.36         25.16         25.18           Inlet Methane Concentration (as methane) (ppm.):         27.12         27.05         27.79         27.32           Inlet Methane Concentration (as propane) (ppm.):         28.70         28.29         29.24         28.74           Inlet Methane Concentration (as propane) (ppm.):         11.50         11.97         11.72           Inlet Methane Concentration (as propane) (ppm.):         12.37         12.03         12.60         12.33           Inlet Methane Concentration (as propane) (ppm.):         15.4         1.47         1.55         1.52           Inlet Methane Concentration (as propane) (ppm.):         172.45         211.25         192.45         192.05           Inlet Methane Concentration (as propane) (ppm.):         172.45         211.25         192.45         192.05           Inlet Methane Concentration (as propane) (ppm.):         172.45         192.55	Moisture:	0.055	0.044	0.050	0.050
Iniet Ind: Concentration (as propane) (ppm.):         174.55         213.45         194.86         194.33           Inlet THC Concentration (as propane) (mg/m3):         338.76         409.26         375.83         374.62           Inlet THC Concentration (as propane) (lb/hr.):         23.03         27.36         25.16         25.18           Inlet Methane Concentration (as methane) (ppm.):         2.32         2.35         2.32         2.33           Inlet Methane Concentration (as methane) (ppm.):         2.7.12         27.05         27.79         27.32           Inlet Methane Concentration (as propane) (ppm.):         2.8.70         28.29         29.24         28.74           Inlet Methane Concentration (as propane) (ppm.):         11.69         11.150         11.97         11.72           Inlet Methane Concentration (as propane) (ppm.):         12.87         12.03         12.80         12.80           Inlet Methane Concentration (as propane) (mg/m3):         22.66         22.06         23.09         22.60           Inlet Methane Concentration (as propane) (mg/m3):         22.65         22.16         23.61         23.66           Inlet Methane Concentration (as propane) (mg/m3):         21.49         25.89         23.61         23.66           Outlet Flow Rate (dscfm):         19.854         19.552<		174.05	010.10	104.00	404.00
Iniet HC Concentration (as propane) (ppm,):         184.82         222.38         205.05         204.38           Inlet THC Concentration (as propane) (lb/hr <sub>d</sub> ):         23.03         27.36         25.16         25.18           Inlet Methane Concentration (as methane) (ppm,):         27.12         27.05         27.79         27.32           Inlet Methane Concentration (as methane) (ppm,):         28.70         28.70         28.74         28.74           Inlet Methane Concentration (as propane) (ppm,):         28.70         11.69         11.50         11.97         11.72           Inlet Methane Concentration (as propane) (ppm,):         12.37         12.03         12.66         12.33           Inlet Methane Concentration (as propane) (ppm,):         15.4         1.47         1.55         1.52           Inlet Methane Concentration (as propane) (ppm,):         172.45         211.25         192.05         192.05           Inlet NMOC Concentration (as propane) (ppm,):         172.45         219.25         192.05         196.64         196.67           Outlet Flow Rate (dscfm):         19.854         19.552         19.564         19.657           Outlet Flow Rate (dscfm):         19.854         19.552         19.564         19.657           Outlet Flow Rate (dscfm):         19.854	Inlet THC Concentration (as propane) (ppm <sub>w</sub> ):	174.65	213.46	194.88	194.33
Iniet THC Concentration (as propane) (Imp/m3):         338.76         409.26         378.83         378.82           Iniet THC Concentration (as methane) (ppm,):         23.03         27.36         25.16         25.16           Iniet Methane Concentration (as methane) (ppm,):         27.12         27.05         27.79         27.32           Iniet Methane Concentration (as methane) (ppm,):         28.70         28.29         29.24         28.74           Iniet Methane Concentration (as propane) (ppm,):         11.69         11.50         11.97         11.72           Inlet Methane Concentration (as propane) (ppm,):         12.37         12.03         12.60         12.33           Inlet Methane Concentration (as propane) (ppm,):         15.64         14.77         1.55         1.52           Inlet Methane Concentration (as propane) (ppm/v):         172.45         211.25         192.45         192.05           Inlet MMOC Concentration (as propane) (ppm/v):         21.49         25.89         23.61         23.66           Outlet Flow Rate (dm?/s):         9.37         9.23         9.28         9.28         9.23         9.28           Outlet FHC Concentration (as propane) (ppm,2):         7.15         7.22         6.53         6.97           Outlet THC Concentration (as propane) (ppm,2):         13	Inlet THC Concentration (as propane) (ppm <sub>d</sub> ):	184.82	223.28	205.05	204.38
Inter THC Concentration (as propane) (pm/g.)         23.03         21.38         23.16           Inlet Methane Correction Factor         2.32         2.35         2.32         2.33           Inlet Methane Concentration (as methane) (ppm_g):         27.12         27.05         27.79         27.32           Inlet Methane Concentration (as propane) (ppm_g):         11.69         11.50         11.97         11.72           Inlet Methane Concentration (as propane) (ppm_g):         12.37         12.03         12.60         12.33           Inlet Methane Concentration (as propane) (pm/g):         22.66         22.06         23.09         22.60           Inlet Methane Concentration (as propane) (pm/g):         172.45         11.47         1.55         1.52           Inlet Methane Concentration (as propane) (pm/g):         172.45         211.25         192.45         192.05           Inlet NMOC Concentration (as propane) (ppm/y):         174.49         25.89         23.61         23.66           Outlet Flow Rate (dscfm):         0.37         9.23         9.23         9.28         9.28           Outlet THC Concentration (as propane) (ppm_g):         7.15         7.22         6.53         6.97           Outlet THC Concentration (as propane) (ppm_g):         7.47         7.64         6.88	Inlet THC Concentration (as propane) (mg/m3d):	338.76	409.26	375.83	3/4.02
Inlet Methane Correction Factor         2.32         2.35         2.32         2.33           Inlet Methane Concentration (as methane) (ppm,):         27.12         27.05         27.79         27.32           Inlet Methane Concentration (as methane) (ppm,):         28.70         28.29         29.24         28.74           Inlet Methane Concentration (as propane) (ppm,):         11.69         11.50         11.97         11.72           Inlet Methane Concentration (as propane) (ppm,):         12.37         12.03         12.60         12.33           Inlet Methane Concentration (as propane) (ppm,):         172.45         21.05         11.52         1.52           Inlet MMOC Concentration (as propane) (bhrh):         172.45         211.25         192.45         192.05           Inlet MMOC Concentration (as propane) (bhrh):         21.49         25.89         23.61         23.66           Outlet Flow Rate (dscfm):         19.854         19.552         19.564         19.657           Outlet Flow Rate (dscfm):         19.854         19.552         19.564         19.657           Outlet THC Concentration (as propane) (ppm,):         7.15         7.22         6.53         6.97           Outlet THC Concentration (as propane) (ppm,):         7.47         7.64         6.88         7.33     <	Thet THC Concentration (as propane) (Ibrili <sub>d</sub> ).	23.03	21.30	25.16	25.10
Inlet Methane Concentration (as methane) (ppm,w):         27.12         27.05         27.79         27.32           Inlet Methane Concentration (as methane) (ppm,w):         28.70         28.29         29.24         28.74           Inlet Methane Concentration (as propane) (ppm,w):         11.69         11.50         11.97         11.72           Inlet Methane Concentration (as propane) (ppm,w):         12.37         12.03         12.60         12.33           Inlet Methane Concentration (as propane) (ppm,w):         15.41         1.47         1.55         1.52           Inlet Methane Concentration (as propane) (ppmv):         172.45         211.25         192.45         192.05           Inlet MMOC Concentration (as propane) (bs/hr):         21.49         25.89         23.61         23.66           Outlet Flow Rate (dscfm):         19.854         19.552         19.564         19.657           Outlet Flow Rate (dscfm):         0.37         9.23         9.23         9.28         0.049           Motistre:         0.041         0.050         0.049           Outlet Flow Rate (dscfm):         13.69         14.00         12.61         13.43           Outlet THC Concentration (as propane) (ppm,w):         7.15         7.22         6.53         6.97	Inlet Methane Correction Factor	2.32	2.35	2.32	2.33
Inlet Methane Concentration (as methane) (ppm <sub>a</sub> ):         28.70         28.29         29.24         28.74           Inlet Methane Concentration (as propane) (ppm <sub>a</sub> ):         11.69         11.50         11.97         11.72           Inlet Methane Concentration (as propane) (ppm <sub>a</sub> ):         12.37         12.03         12.60         12.33           Inlet Methane Concentration (as propane) (mg/n3):         22.66         22.06         23.09         22.60           Inlet Methane Concentration (as propane) (lb/hr):         1.54         1.47         1.55         1.52           Inlet NMOC Concentration (as propane) (lb/hr):         172.45         211.25         192.45         192.05           Inlet NMOC Concentration (as propane) (lb/hr):         21.49         25.89         23.61         23.66           Outlet Flow Rate (dacfm):         19.854         19.552         19.564         19.657           Outlet Flow Rate (dacfm):         0.937         9.23         9.23         9.28           Outlet Flow Rate (dacfm):         19.854         19.552         19.64         19.657           Outlet THC Concentration (as propane) (ppm <sub>a</sub> ):         7.15         7.22         6.53         6.97           Outlet THC Concentration (as propane) (mg/m <sup>3</sup> <sub>a</sub> ):         13.69         14.00         12.61         13.4	Inlet Methane Concentration (as methane) (ppm <sub>w</sub> ):	27.12	27.05	27.79	27.32
Inlet Methane Concentration (as propane) (ppm <sub>a</sub> ):         11.69         11.50         11.97         11.72           Inlet Methane Concentration (as propane) (ppm <sub>a</sub> ):         12.37         12.03         12.60         12.33           Inlet Methane Concentration (as propane) (ppm <sub>a</sub> ):         12.37         12.03         12.60         12.33           Inlet Methane Concentration (as propane) (b/hr):         1.54         1.47         1.55         1.52           Inlet MMOC Concentration (as propane) (b/hr):         172.45         211.25         192.45         192.05           Inlet NMOC Concentration (as propane) (b/hr):         21.49         25.89         23.61         23.66           Outlet Flow Rate (dscfm):         19.854         19.552         19.564         19.657           Outlet Flow Rate (dscfm):         0.937         9.23         9.23         9.23           Outlet Flow Rate (dscfm):         19.854         19.552         19.564         19.657           Outlet Flow Rate (dscfm):         19.854         19.552         19.264         19.657           Outlet THC Concentration (as propane) (ppm <sub>a</sub> ):         7.15         7.22         6.53         6.97           Outlet THC Concentration (as propane) (mg/m <sup>3</sup> <sub>a</sub> ):         13.69         14.00         12.61         13.43      <	Inlet Methane Concentration (as methane) (ppm <sub>d</sub> ):	28,70	28.29	29.24	28.74
Inlet Methane Concentration (as propane) (ppm.):         12.37         12.03         12.60         12.33           Inlet Methane Concentration (as propane) (mg/m3):         22.66         22.06         23.09         22.60           Inlet Methane Concentration (as propane) (mg/m3):         22.66         22.06         23.09         22.60           Inlet Methane Concentration (as propane) (tb/hr):         1.54         1.47         1.55         1.52           Inlet NMOC Concentration (as propane) (tb/hr):         21.49         25.89         23.61         23.06           Outlet Flow Rate (dscfm):         19.854         19.552         19.564         19.657           Outlet Flow Rate (dscfm):         0.9854         0.054         0.050         0.049           Outlet THC Concentration (as propane) (ppm):         7.15         7.22         6.53         6.97           Outlet THC Concentration (as propane) (ppm):         7.47         7.64         6.88         7.33           Outlet THC Concentration (as propane) (b/hr):         1.02         1.02         0.92         0.99           Outlet Methane Concentration (as propane) (ppm):         0.40         0.39         0.38         0.39           Outlet Methane Concentration (as propane) (ppm):         0.40         0.39         0.38	Inlet Methane Concentration (as propane) (ppm,):	11.69	11.50	11.97	11.72
Intel Methane Concentration (as propane) (mg/m3):         22.66         22.06         23.09         22.60           Inlet Methane Concentration (as propane) (lb/hr):         1.54         1.47         1.55         1.52           Inlet NMOC Concentration (as propane) (mg/m3):         22.66         22.06         23.09         22.60           Inlet NMOC Concentration (as propane) (lb/hr):         1.54         1.47         1.55         1.52           Outlet NMOC Concentration (as propane) (lb/hr):         21.49         25.89         23.61         23.66           Outlet Flow Rate (dm7/s):         9.37         9.23         9.23         9.23         9.28           Moisture:         0.042         0.054         0.050         0.049           Outlet THC Concentration (as propane) (ppm <sub>w</sub> ):         7.15         7.22         6.53         6.97           Outlet THC Concentration (as propane) (ppm <sub>w</sub> ):         7.47         7.64         6.88         7.33           Outlet THC Concentration (as propane) (mg/m <sup>3</sup> <sub>d</sub> ):         1.02         1.02         0.92         0.99           Outlet Methane Concentration (as propane) (ppm <sub>w</sub> ):         0.40         0.39         0.38         0.39           Outlet THC Concentration (as propane) (ppm <sub>w</sub> ):         0.16         0.16         0.16         0.16	Inlet Methane Concentration (as propane) (ppm_):	12.37	12 03	12.60	12.33
Inter Methane Concentration (as propane) (lb/hr/):         22.00 <th2< td=""><td>Inlet Methane Concentration (as propage) (mg/m3):</td><td>22.66</td><td>22.06</td><td>23.09</td><td>22.60</td></th2<>	Inlet Methane Concentration (as propage) (mg/m3):	22.66	22.06	23.09	22.60
Inter Mediate Collectification (as propane) (tp/m/):         1.34         1.47         1.33         1.32           Inter Mediate Collectification (as propane) (tps/m/):         172.45         211.25         192.45         192.05           Inter NMOC Concentration (as propane) (tbs/hr):         21.49         25.89         23.61         23.66           Outlet Flow Rate (dscfm):         19.854         19.552         19.564         19.657           Outlet Flow Rate (dscfm):         0.42         0.054         0.050         0.049           Outlet THC Concentration (as propane) (ppm_d):         7.15         7.22         6.53         6.97           Outlet THC Concentration (as propane) (ppm_d):         7.47         7.64         6.88         7.33           Outlet THC Concentration (as propane) (mpm_d):         1.02         1.02         0.92         0.99           Outlet THC Concentration (as propane) (mpm_d):         1.02         1.02         0.92         0.99           Outlet THC Concentration (as propane) (mpm_d):         1.02         1.02         0.92         0.99           Outlet Methane Concentration (as propane) (mpm_d):         0.40         0.38         0.38         0.39           Outlet Methane Concentration (as propane) (ppm_d):         0.42         0.41         0.40         0.41	Inlet Methane Concentration (as propane) (In(hr)):	1.54	1.47	1.55	1.52
Iniet NMOC Concentration (as propane) (ppmy):         172.45         211.25         192.45         192.05           Iniet NMOC Concentration (as propane) (lbs/hr):         21.49         25.89         23.61         23.66           Outlet Flow Rate (dscfm):         19,854         19,552         19,564         19,657           Outlet Flow Rate (dm <sup>3</sup> /s):         9.37         9.23         9.23         9.28           Moisture:         0.042         0.054         0.050         0.049           Outlet The Concentration (as propane) (ppm <sub>w</sub> ):           7.15         7.22         6.53         6.97           Outlet THC Concentration (as propane) (ppm <sub>w</sub> ):         7.47         7.64         6.88         7.33           Outlet THC Concentration (as propane) (ppm <sub>w</sub> ):         1.02         1.02         0.92         0.99           Outlet Methane Correction Factor           Outlet Methane Concentration (as methane) (ppm <sub>w</sub> ):         0.40         0.39         0.38         0.39           Outlet Methane Concentration (as propane) (ppm <sub>w</sub> ):         0.42         0.41         0.40         0.41           Outlet Methane Concentration (as propane) (ppm <sub>w</sub> ):         0.42         0.41         0.40         0.41           Outlet Methane Concentration (as propane) (ppm <sub>w</sub> ): </td <td></td> <td>1.54</td> <td>1.47</td> <td>1.55</td> <td>1.52</td>		1.54	1.47	1.55	1.52
Inter NMOC Concentration (as propane) (lps/hr);         112.43         211.23         112.43         112.43           Inlet NMOC Concentration (as propane) (lbs/hr);         21.49         25.89         23.61         23.66           Outlet Flow Rate (dscfm);         19.854         19.552         19.564         19.657           Outlet Flow Rate (dscfm);         9.37         9.23         9.23         9.28           Moisture;         0.054         0.050         0.049           Outlet THC Concentration (as propane) (ppm_g);         7.15         7.22         6.53         6.97           Outlet THC Concentration (as propane) (mpm_g);         7.47         7.64         6.88         7.33           Outlet THC Concentration (as propane) (mpm_g);         1.02         1.02         0.92         0.99           Outlet THC Concentration (as propane) (mpm_g);         1.02         1.02         0.92         0.99           Outlet THC Concentration (as propane) (mpm_g);         0.40         0.39         0.38         0.39           Outlet Methane Correction Factor         2.50         2.49         2.51         2.50           Outlet Methane Concentration (as methane) (ppm_g);         0.42         0.41         0.40         0.41           Outlet Methane Concentration (as propane) (pmg/g);	lalet NMOC Concentration (as propage) (ppmy):	172 45	211.25	102.45	192.05
Outlet Flow Rate (dscfm):         19,854         19,552         19,564         19,657           Outlet Flow Rate (dscfm):         0.87         9.23         9.23         9.28           Moisture:         0.042         0.054         0.050         0.049           Outlet THC Concentration (as propane) (ppm <sub>w</sub> ):         7.15         7.22         6.53         6.97           Outlet THC Concentration (as propane) (ppm <sub>d</sub> ):         7.47         7.64         6.88         7.33           Outlet THC Concentration (as propane) (mg/m <sup>3</sup> <sub>d</sub> ):         13.69         14.00         12.61         13.43           Outlet THC Concentration (as propane) (mg/m <sup>3</sup> <sub>d</sub> ):         1.02         0.92         0.99           Outlet THC Concentration (as propane) (mg/m <sup>3</sup> <sub>d</sub> ):         1.02         1.02         0.92         0.99           Outlet THC Concentration (as propane) (mg/m <sup>3</sup> <sub>d</sub> ):         0.40         0.39         0.38         0.39           Outlet Methane Concentration (as methane) (ppm <sub>w</sub> ):         0.40         0.41         0.40         0.41           Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.16         0.16         0.16         0.16           Outlet Methane Concentration (as propane) (ppm <sub>d</sub> ):         0.42         0.41         0.40         0.41           Outlet Methane Con	Inlet NMOC Concentration (as propane) (bp/hv).	21.40	211.25	192.45	192.05
Outlet Flow Rate (dscfm):         19,854         19,552         19,564         19,657           Outlet Flow Rate (dm <sup>3</sup> /s):         9,37         9,23         9,23         9,28           Moisture:         0.042         0.054         0.050         0.049           Outlet THC Concentration (as propane) (ppm_w):         7.15         7.22         6.53         6.97           Outlet THC Concentration (as propane) (mg/m <sup>3</sup> <sub>d</sub> ):         13.69         14.00         12.61         13.43           Outlet THC Concentration (as propane) (mg/m <sup>3</sup> <sub>d</sub> ):         1.02         1.02         0.92         0.99           Outlet THC Concentration (as propane) (ppm_w):         0.40         0.39         0.38         0.39           Outlet Methane Correction Factor         2.50         2.49         2.51         2.50           Outlet Methane Concentration (as methane) (ppm_w):         0.42         0.41         0.40         0.41           Outlet Methane Concentration (as propane) (ppm_d):         0.16         0.16         0.16         0.16           Outlet Methane Concentration (as propane) (ppm_d):         0.31         0.30         0.29         0.30           Outlet Methane Concentration (as propane) (ppm_d):         0.17         0.16         0.16         0.16           Outlet Methane Conce	met NMOC Concentration (as propane) (ibs/m).	21.49	25.09	23.01	23.00
Outlet Flow Rate (dm <sup>2</sup> /s):         9.37         9.23         9.23         9.23           Outlet Flow Rate (dm <sup>2</sup> /s):         0.042         0.054         0.050         0.049           Outlet THC Concentration (as propane) (ppm <sub>w</sub> ):         7.15         7.22         6.53         6.97           Outlet THC Concentration (as propane) (ppm <sub>w</sub> ):         7.47         7.64         6.88         7.33           Outlet THC Concentration (as propane) (mg/m <sup>3</sup> <sub>d</sub> ):         13.69         14.00         12.61         13.43           Outlet THC Concentration (as propane) (lb/hr <sub>d</sub> ):         1.02         1.02         0.92         0.99           Outlet Methane Correction Factor         2.50         2.49         2.51         2.50           Outlet Methane Concentration (as methane) (ppm <sub>w</sub> ):         0.42         0.41         0.40         0.41           Outlet Methane Concentration (as propane) (ppm <sub>w</sub> ):         0.16         0.16         0.16         0.16           Outlet Methane Concentration (as propane) (ppm <sub>w</sub> ):         0.17         0.16         0.16         0.16           Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.31         0.30         0.29         0.30           Outlet Methane Concentration (as propane) (ppm <sub>y</sub> ):         0.17         0.16         0.16         0.16	Outlet Flow Rate (decfm):	19 854	19 552	19 564	19 657
Outlet No. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10	Outlet Flow Rate (dm <sup>3</sup> /s):	9.37	9.23	9.23	9.28
Outlet THC Concentration (as propane) (ppm_w):         7.15         7.22         6.53         6.97           Outlet THC Concentration (as propane) (ppm_d):         7.47         7.64         6.88         7.33           Outlet THC Concentration (as propane) (mg/m_d):         13.69         14.00         12.61         13.43           Outlet THC Concentration (as propane) (lb/hr_d):         1.02         0.92         0.99           Outlet THC Concentration (as propane) (lb/hr_d):         1.02         0.92         0.99           Outlet Methane Correction Factor         2.50         2.49         2.51         2.50           Outlet Methane Concentration (as methane) (ppm_w):         0.40         0.39         0.38         0.39           Outlet Methane Concentration (as propane) (ppm_d):         0.42         0.41         0.40         0.41           Outlet Methane Concentration (as propane) (ppm_d):         0.16         0.16         0.16         0.16           Outlet Methane Concentration (as propane) (ppm_d):         0.17         0.16         0.16         0.16           Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.31         0.30         0.29         0.30           Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.31         0.30         0.29         0.32	Moisture:	0.042	0.054	0.050	0.049
Outlet THC Concentration (as propane) (ppm_w):         7.15         7.22         6.53         6.97           Outlet THC Concentration (as propane) (ppm_d):         7.47         7.64         6.88         7.33           Outlet THC Concentration (as propane) (mg/m <sup>3</sup> <sub>d</sub> ):         13.69         14.00         12.61         13.43           Outlet THC Concentration (as propane) (lb/hr <sub>d</sub> ):         1.02         1.02         0.92         0.99           Outlet THC Concentration (as propane) (lb/hr <sub>d</sub> ):         1.02         1.02         0.92         0.99           Outlet THC Concentration (as propane) (lb/hr <sub>d</sub> ):         1.02         1.02         0.92         0.99           Outlet Methane Correction Factor         2.50         2.49         2.51         2.50           Outlet Methane Concentration (as methane) (ppm_w):         0.40         0.39         0.38         0.39           Outlet Methane Concentration (as propane) (ppm_w):         0.42         0.41         0.40         0.41           Outlet Methane Concentration (as propane) (ppm_w):         0.16         0.16         0.16         0.16           Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.31         0.30         0.29         0.30           Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.31         0.30         0.29 </td <td></td> <td></td> <td></td> <td></td> <td></td>					
Outlet THC Concentration (as propane) (ppm <sub>d</sub> ):         7.47         7.64         6.88         7.33           Outlet THC Concentration (as propane) (mg/m <sup>3</sup> <sub>d</sub> ):         13.69         14.00         12.61         13.43           Outlet THC Concentration (as propane) (lb/h <sub>d</sub> ):         1.02         1.02         0.92         0.99           Outlet MEC Concentration (as propane) (lb/h <sub>d</sub> ):         1.02         1.02         0.92         0.99           Outlet Methane Concentration (as methane) (ppm <sub>w</sub> ):         0.40         0.39         0.38         0.39           Outlet Methane Concentration (as methane) (ppm <sub>w</sub> ):         0.42         0.41         0.40         0.41           Outlet Methane Concentration (as propane) (ppm <sub>w</sub> ):         0.16         0.16         0.15         0.16           Outlet Methane Concentration (as propane) (ppm <sub>w</sub> ):         0.16         0.16         0.16         0.16           Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.31         0.30         0.29         0.30           Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.31         0.30         0.29         0.30           Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.31         0.30         0.29         0.30           Outlet Methane Concentration (as propane) (bs/hr):         0.99	Outlet THC Concentration (as propane) (ppm <sub>w</sub> ):	7.15	7.22	6.53	6.97
Outlet THC Concentration (as propane) (mg/m³d):         13.69         14.00         12.61         13.43           Outlet THC Concentration (as propane) (lb/hrd):         1.02         1.02         0.92         0.99           Outlet Methane Correction Factor         2.50         2.49         2.51         2.50           Outlet Methane Concentration (as methane) (ppmw):         0.40         0.39         0.38         0.39           Outlet Methane Concentration (as methane) (ppmw):         0.42         0.41         0.40         0.41           Outlet Methane Concentration (as propane) (ppmw):         0.16         0.16         0.15         0.16           Outlet Methane Concentration (as propane) (ppmd):         0.17         0.16         0.16         0.16           Outlet Methane Concentration (as propane) (mg/m³):         0.31         0.30         0.29         0.30           Outlet Methane Concentration (as propane) (lb/hr):         0.023         0.022         0.021         0.022           Outlet Methane Concentration (as propane) (lb/hr):         0.023         0.022         0.021         0.022           Outlet Methane Concentration (as propane) (lb/hr):         0.99         1.00         0.90         0.97           Outlet Methane Concentration (as propane) (ppmv):         7.30         7.47         6.7	Outlet THC Concentration (as propane) (ppm <sub>d</sub> ):	7.47	7.64	6.88	7.33
Outlet THC Concentration (as propane) (lb/hr_d):         1.02         1.02         0.92         0.99           Outlet Methane Concentration (as methane) (ppm_w):         0.40         0.39         0.38         0.39           Outlet Methane Concentration (as methane) (ppm_w):         0.40         0.39         0.38         0.39           Outlet Methane Concentration (as methane) (ppm_w):         0.42         0.41         0.40         0.41           Outlet Methane Concentration (as propane) (ppm_w):         0.16         0.16         0.15         0.16           Outlet Methane Concentration (as propane) (ppm_w):         0.17         0.16         0.16         0.16           Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.31         0.30         0.29         0.30           Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.31         0.30         0.29         0.30           Outlet Methane Concentration (as propane) (lb/hr):         0.023         0.022         0.021         0.022           Outlet Methane Concentration (as propane) (ppmv):         7.30         7.47         6.72         7.16           Outlet NMOC Concentration (as propane) (lb/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lb/hr):         0.99         1.00	Outlet THC Concentration (as propane) (mg/m <sup>3</sup> <sub>d</sub> ):	13.69	14.00	12.61	13.43
Outlet Methane Correction Factor         2.50         2.49         2.51         2.50           Outlet Methane Concentration (as methane) (ppm_w):         0.40         0.39         0.38         0.39           Outlet Methane Concentration (as methane) (ppm_d):         0.42         0.41         0.40         0.41           Outlet Methane Concentration (as propane) (ppm_d):         0.42         0.41         0.40         0.41           Outlet Methane Concentration (as propane) (ppm_d):         0.16         0.16         0.15         0.16           Outlet Methane Concentration (as propane) (ppm_d):         0.17         0.16         0.16         0.16           Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.31         0.30         0.29         0.30           Outlet Methane Concentration (as propane) (lb/hr):         0.023         0.022         0.021         0.022           Outlet Methane Concentration (as propane) (lb/hr):         0.09         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90	Outlet THC Concentration (as propane) (lb/hr <sub>d</sub> ):	1.02	1.02	0.92	0.99
Outlet Methane Correction Factor         2.50         2.49         2.51         2.50           Outlet Methane Concentration (as methane) (ppm <sub>w</sub> ):         0.40         0.39         0.38         0.39           Outlet Methane Concentration (as methane) (ppm <sub>w</sub> ):         0.40         0.41         0.40         0.41           Outlet Methane Concentration (as methane) (ppm <sub>w</sub> ):         0.16         0.16         0.15         0.16           Outlet Methane Concentration (as propane) (ppm <sub>w</sub> ):         0.16         0.16         0.16         0.16           Outlet Methane Concentration (as propane) (ppm <sub>w</sub> ):         0.17         0.16         0.16         0.16           Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.31         0.30         0.29         0.30           Outlet Methane Concentration (as propane) (lb/hr):         0.023         0.022         0.021         0.022           Outlet Methane Concentration (as propane) (lb/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00 <td< td=""><td></td><td></td><td></td><td></td><td></td></td<>					
Outlet Methane Concentration (as methane) (ppm <sub>w</sub> ):         0.40         0.39         0.38         0.39           Outlet Methane Concentration (as methane) (ppm <sub>d</sub> ):         0.42         0.41         0.40         0.41           Outlet Methane Concentration (as propane) (ppm <sub>w</sub> ):         0.16         0.16         0.15         0.16           Outlet Methane Concentration (as propane) (ppm <sub>w</sub> ):         0.16         0.16         0.16         0.16           Outlet Methane Concentration (as propane) (ppm <sub>d</sub> ):         0.17         0.16         0.16         0.16           Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.31         0.30         0.29         0.30           Outlet Methane Concentration (as propane) (lb/r):         0.023         0.022         0.021         0.022           Outlet Methane Concentration (as propane) (lb/r):         0.099         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.95.6%         96.3%         96.1%         96.1%           Destruction Efficiency (THC) (%):         95.6%         96.3%	Outlet Methane Correction Factor	2.50	2.49	2.51	2.50
Outlet Methane Concentration (as methane) (ppm_d):         0.42         0.41         0.40         0.41           Outlet Methane Concentration (as propane) (ppm_d):         0.16         0.16         0.15         0.16           Outlet Methane Concentration (as propane) (ppm_d):         0.17         0.16         0.16         0.16           Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.31         0.30         0.29         0.30           Outlet Methane Concentration (as propane) (lb/hr):         0.023         0.022         0.021         0.022           Outlet Methane Concentration (as propane) (lb/hr):         0.023         0.022         0.021         0.022           Outlet Methane Concentration (as propane) (lb/hr):         0.099         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.95.6%         96.3%         96.1%         96.1%           Destruction Efficiency (THC) (%):         95.6%         96.3%         96.1%         95.9%	Outlet Methane Concentration (as methane) (ppm <sub>w</sub> ):	0.40	0.39	0.38	0.39
Outlet Methane Concentration (as propane) (ppm <sub>w</sub> ):         0.16         0.16         0.15         0.16           Outlet Methane Concentration (as propane) (ppm <sub>d</sub> ):         0.17         0.16         0.16         0.16           Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.31         0.30         0.29         0.30           Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.023         0.022         0.021         0.022           Outlet Methane Concentration (as propane) (lb/hr):         0.023         0.022         0.021         0.022           Outlet NMOC Concentration (as propane) (ppmv):         7.30         7.47         6.72         7.16           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.95.6%         96.3%         96.1%         96.1%           Destruction Efficiency (THC) (%):         95.6%         96.3%         96.9%         95.9%	Outlet Methane Concentration (as methane) (ppm <sub>d</sub> ):	0.42	0.41	0.40	0.41
Outlet Methane Concentration (as propane) (ppm <sub>d</sub> ):         0.17         0.16         0.16         0.16           Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.31         0.30         0.29         0.30           Outlet Methane Concentration (as propane) (lb/hr):         0.023         0.022         0.021         0.022           Outlet Methane Concentration (as propane) (lb/hr):         0.023         0.022         0.021         0.022           Outlet NMOC Concentration (as propane) (ppmv):         7.30         7.47         6.72         7.16           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         9.63%         96.1%           Destruction Efficiency (THC) (%):         95.6%         96.3%         96.3%         96.1%	Outlet Methane Concentration (as propane) (ppm <sub>w</sub> ):	0.16	0.16	0.15	0.16
Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):         0.31         0.30         0.29         0.30           Outlet Methane Concentration (as propane) (lb/hr):         0.023         0.022         0.021         0.022           Outlet NMOC Concentration (as propane) (ppmv):         7.30         7.47         6.72         7.16           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         9.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         9.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         95.6%         96.3%         96.1%         96.1%           Destruction Efficiency (THC) (%):         95.4%         96.1%         95.9%         95.9%	Outlet Methane Concentration (as propane) (ppm <sub>d</sub> ):	0.17	0.16	0.16	0.16
Outlet Methane Concentration (as propane) (lb/hr):         0.023         0.022         0.021         0.022           Outlet NMOC Concentration (as propane) (ppmv):         7.30         7.47         6.72         7.16           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Outlet NMOC Concentration (as propane) (lbs/hr):         0.95.6%         96.3%         96.1%           Destruction Efficiency (THC) (%):         95.6%         96.3%         96.3%         95.9%	Outlet Methane Concentration (as propane) (mg/m <sup>3</sup> ):	0.31	0.30	0.29	0.30
Outlet NMOC Concentration (as propane) (ppmv):         7.30         7.47         6.72         7.16           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Destruction Efficiency (THC) (%):         95.6%         96.3%         96.3%         96.1%           Destruction Efficiency (NMOC) (%):         95.4%         96.1%         95.9%	Outlet Methane Concentration (as propane) (lb/hr):	0.023	0.022	0.021	0.022
Outlet NMOC Concentration (as propane) (ppmv):         7.30         7.47         6.72         7.16           Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Destruction Efficiency (THC) (%):         95.6%         96.3%         96.3%         96.1%           Destruction Efficiency (NMOC) (%):         95.4%         96.1%         95.9%					
Outlet NMOC Concentration (as propane) (lbs/hr):         0.99         1.00         0.90         0.97           Destruction Efficiency (THC) (%):         95.6%         96.3%         96.3%         96.1%           Destruction Efficiency (NMOC) (%):         95.4%         96.1%         95.9%	Outlet NMOC Concentration (as propane) (ppmv):	7.30	7.47	6.72	7.16
Destruction Efficiency (THC) (%):         95.6%         96.3%         96.3%         96.1%           Destruction Efficiency (NMOC) (%):         95.4%         96.1%         95.9%	Outlet NMOC Concentration (as propane) (lbs/hr):	0.99	1.00	0.90	0.97
Destruction Efficiency (THC) (%):         95.6%         96.3%         96.3%         96.1%           Destruction Efficiency (NMOC) (%):         95.4%         96.1%         96.2%         95.9%					
Destruction Efficiency (NMOC) (%): 95.4% 96.1% 96.2% 95.9%	Destruction Efficiency (THC) (%):	95.6%	96.3%	96.3%	96.1%
	Destruction Efficiency (NMOC) (%):	95.4%	96.1%	96.2%	95.9%

Note: "d" indicated based on dry conditions



## GRAPHS











## FIGURES



NOV 29 2022

AIR QUALITY DIVISION



Figure No. 1: ELPO Inlet



**General Motors** GM Lansing Delta Lansing, Michigan 28-Sep-22

2239 Star Court Rochester Hills, MI 48309



