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October 30, 2023

#### NOTICE OF INTENT TO FILE 2023 Q3 Compliance Report for the Malburg Generating Station (01-AFC-25C)

Dear Dr. Ali:

Attached please find the Quarterly Compliance Report for the Malburg Generating Station (01-AFC-25C), covering the operational period of July 1, 2023 through September 30, 2023. This report addresses all quarterly requirements identified in the Final Commission Decision for the Malburg Generating Station (TN #28746), as most recently amended on June 20, 2019 by the Errata to Staff Analysis of Petition to Amend the Final Commission Decision (TN #228444).

If you have any questions or need more information, please contact Matt Richards, Utilities Operations Manager, at <u>MRichards@cityofvernon.org</u> or (323) 583-8811 x378.

Thank you

Tødd Dusenberry General Manager of Vernon Public Utilities

Copies: Lisa Umeda Matt Richards

Enclosure: MGS 2023 Q3 Compliance Report

Vernon Public Utilities 4305 Santa Fe Avenue, Vernon, CA, 90058 323.583.8811 | CityofVernon.org

# Malburg Generating Station Quarterly Compliance Report (Third Quarter 2023)

Submitted to California Energy Commission

Submitted by City of Vernon, Public Utilities Department

October 30, 2023

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## Acronyms and Abbreviations

CEC	California Energy Commission
CEMS	continuous emissions monitoring system
СО	carbon monoxide
COC	Conditions of Certification
CTGs	combustion turbine generators
DAHS	data acquisition and handling system
gr/scf	grain per standard cubic foot
HRSGs	heat recovery steam generators
lb/day	pounds per day
lb/hr	pounds per hour
MGS	Malburg Generating Station
NH₃	ammonia
NOx	nitrogen oxides
PM10	particulate matter with aerodynamic diameter less than or equal to 10 microns
PM <sub>2.5</sub>	particulate matter with aerodynamic diameter less than or equal to 2.5 microns
ppm	parts per million
ppmv	parts per million by volume
ppmw	parts per million by weight
QCR	Quarterly Compliance Report
SCAQMD	South Coast Air Quality Management District
SOx	sulfur oxides
STG	steam turbine generator
TDS	total dissolved solids
VOC	volatile organic compound

## 1. Introduction

This Quarterly Compliance Report (QCR) has been prepared to meet the California Energy Commission's (CEC) quarterly reporting requirements for the Malburg Generating Station (MGS). This QCR fulfills various Conditions of Certification (COC) described in the CEC's Final Commission Decision for the MGS (TN #28746), as most recently amended on June 20, 2019 by the Errata to Staff Analysis of Petition to Amend the Final Commission Decision (TN #228444).

### 1.1 Project Location and Description

The MGS is located at 4963 S Soto Street in Vernon, California. The property is approximately 3.4 acres in size, located in an industrial land use area near the geographic center of metropolitan Los Angeles County. MGS consists of two Siemens SGT-800 frame type natural gas combustion turbine generators (CTGs), two associated natural gas combustion duct burners, two heat recovery steam generators (HRSGs), a steam turbine generator (STG), a cooling tower, a diesel-fired emergency firewater pump, and support equipment.

The commissioning of MGS was completed in October 2005 and the power plant began commercial operation on October 17, 2005.

## 1.2 Organization of the Quarterly Compliance Report

A summary of the compliance demonstration for each applicable COC is provided in Section 2 and includes references to Appendices and Tables as appropriate.

## 2. Required Quarterly Compliance Report Documentation

COC requirements associated with this QCR are summarized in the table below.

Condition of Certification	Response
AQ-C6	The weekly total dissolved solids (TDS) results for the third quarter of 2023 are provided in Appendix A, Table 2; the weekly sample reports collected for the same period are provided in Appendix B.
AQ-C7	Daily particulate matter with aerodynamic diameter less than or equal to 10 microns (PM <sub>10</sub> ) emissions from cooling tower operation during the third quarter of 2023 are provided in Appendix A, Tables 3 through 5. As shown, emissions were below the specified limit of 6.2 pounds per day (lb/day).
AQ-C8	Testing times for the diesel-fired emergency firewater pump during the third quarter of 2023 are provided in Appendix C, Table 2. MGS refrained from testing the diesel-fired emergency firewater pump in the same hour the CTGs were either started or shutdown.
AQ-C9	The CTG startup and shutdown details for the third quarter of 2023, including the duration and date of occurrence, are provided in Appendix C, Table 1.
AQ-C11	All ammonia (NH <sub>3</sub> ), nitrogen oxides (NOx), sulfur oxides (SOx), carbon monoxide (CO), $PM_{10}$ , and volatile organic compound (VOC) emissions from MGS operation during the third quarter of 2023 are provided in Appendix A, Table 1.
AQ-2	Low sulfur diesel fuel was last purchased on July 28, 2023. The fuel purchase record is provided in Appendix D and demonstrates that the fuel does not contain sulfur compounds in excess of 15 parts per million by weight (ppmw).
AQ-3	See the response for COC AQ-2.

#### Table 2-1. Required Quarterly Compliance Report Documentation

Condition of Certification	Response
AQ-5	Monthly emissions of CO, $PM_{10}$ , particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ( $PM_{2.5}$ ), VOC, and SOx from CTG and duct burner operation during the third quarter of 2023 are presented in Appendix A, Tables 7 through 9. Fuel usage for each turbine-duct burner pair is provided in Appendix A, Table 6. As shown, emissions were below the monthly limits specified in Condition A63.4 of the site's Title V Permit.
AQ-6	See the response for COC AQ-C9.
AQ-9	See the response for COC AQ-C11. Additionally, quarterly NOx excess emission reports from the data acquisition and handling system (DAHS) are provided in Appendix E. As demonstrated in these reports, there were no incidents in which the maximum corrected NOx emissions concentration for both CTGs exceeded the emission concentration limit of 2.0 parts per million by volume (ppmv). All continuous emissions monitoring system (CEMS) data for MGS' CTGs are stored electronically onsite.
AQ-10	See the response for COC AQ-C11. Additionally, quarterly CO excess emission reports from the DAHS are provided in Appendix E. As demonstrated in these reports, there were no incidents in which the maximum corrected CO emissions concentration for both CTGs exceeded the emission concentration limit of 2.0 ppmv. All CEMS data for MGS' CTGs are stored electronically onsite.
AQ-11	See the response for COC AQ-C11. Additionally, quarterly VOC excess emission reports from the DAHS are provided in Appendix E. As demonstrated in these reports, there were no incidents in which the maximum corrected VOC emissions concentration for both CTGs exceeded the emission concentration limit of 2.0 ppmv. All CEMS data for MGS' CTGs are stored electronically onsite.
AQ-12	See the response for COC AQ-C11. Additionally, compliance with the specified limit of 5 parts per million (ppm) is primarily demonstrated through annual or quarterly source testing. The most recent NH <sub>3</sub> compliance source test, performed on May 16, 2023, with results submitted to the CEC on June 23, 2022, indicated compliance with the emission limits for both CTGs (0.8 ppm for CTG 1 and 0.6 ppm for CTG 2). NH <sub>3</sub> emissions are also calculated via the CEMS on an hourly basis and confirmed to comply with the NH <sub>3</sub> concentration limit of 5 ppm. Note that MGS did experience exceedances of this 5 ppm limit for three hours on August 21, 2023 and one hour on August 30, 2023. MGS submitted a Form 500-N for the first deviation event to the South Coast Air Quality Management District (SCAQMD) on August 31, 2023, following verbal notification on August 23, 2023. A Form 500-N for the second deviation event was submitted to SCAQMD on September 12, 2023, following verbal notification on September 1, 2023. The submitted Form 500-N's are included in Appendix F.
AQ-13	See the response for COC AQ-C11. Additionally, the most recent triennial compliance source test, performed in July 2022, indicated compliance with the Rule 475 particulate matter emission limits of 5 kilograms per hour (11 pounds per hour [lb/hr]) or 23 milligrams per cubic meter (0.01 grain per standard cubic foot [gr/scf]) for both CTGs (0.67 lb/hr and 0.0003 gr/scf for CTG 1 and 1.83 lb/hr and 0.0007 gr/scf for CTG 2).
AQ-14	See the response for COC AQ-2.
AQ-15	Year-to-date hours of operation for the diesel-fired emergency firewater pump are provided in Appendix A, Table 10. As shown, the year-to-date 2023 hours for maintenance and testing did not exceed 50 hours and the total operational hours did not exceed 200 hours.
AQ-27	See the response for COC AQ-5. As shown, fuel consumption per turbine-duct burner pair did not exceed the specified limit of 405 million cubic feet per month.
AQ-36	See the responses for COCs AQ-5 and AQ-6.

Malburg Generating Station Quarterly Compliance Report (Third Quarter 2023)

# Appendix A MGS Emission Calculations

## Reporting Period:Quarter 3 2023Table 1. Quarterly Emissions - July 1, 2023 through September 30, 2023

	Quarterly Emissions (lb/quarter)					
Source	NOx	СО	VOC	SOx	PM <sub>10</sub> /PM <sub>2.5</sub>	NH <sub>3</sub>
CTG 1 & Duct Burner	2,619	967	552	101	2,155	3,309
CTG 2 & Duct Burner	3,973	1,226	877	159	3,425	5,258
Cooling Tower					143	
Diesel Firewater Pump	34.1	1.0	0.2	0.0	0.2	0.1
Total	6,627	2,194	1,429	260	5,723	8,567

Reporting Period: Quarter 3 2023

Table 2 Cooling	Tower Total Dissolved	Solids (TDS) Sam	nling Results <sup>1</sup>
Tuble 2. cooling	Tower Total Dissourca	30003 (103) 30m	pung nesuus

Sampling Period		
Start Date	End Date	TDS (ppm)
6/25/2023	7/1/2023	4,880
7/2/2023	7/8/2023	4,250
7/9/2023	7/15/2023	4,400
7/16/2023	7/22/2023	4,780
7/23/2023	7/29/2023	4,670
7/30/2023	8/5/2023	5,660
8/6/2023	8/12/2023	5,190
8/13/2023	8/19/2023	4,860
8/20/2023	8/26/2023	4,560
8/27/2023	9/2/2023	5,580
9/3/2023	9/9/2023	4,500
9/10/2023	9/16/2023	4,260
9/17/2023	9/23/2023	4,690
9/24/2023	9/30/2023	4,800

<sup>1</sup> Sampling results taken from Positive Lab's Weekly Cooling Tower Blowdown Reports, as provided in Appendix B of the QCR.

Reporting Period: July 2023

#### **Cooling Tower Total Dissolved Solids (TDS) Sampling Results**

Data Source: Positive Lab's Weekly Cooling Tower Blowdown Reports, as provided in Appendix B of the QCR

	Period		
Sample Date <sup>1</sup>	Start Date	End Date	TDS (ppm)
6/26/2023	6/25/2023	7/1/2023	4,880
7/7/2023	7/2/2023	7/8/2023	4,250
7/10/2023	7/9/2023	7/15/2023	4,400
7/18/2023	7/16/2023	7/22/2023	4,780
7/25/2023	7/23/2023	7/29/2023	4,670
8/2/2023	7/30/2023	8/5/2023	5,660

#### Methodology (per Condition of Certification [COC] AQ-C7)

PM<sub>10</sub> Emissions (lb/day) = Circulation Rate (gal/day) x Density of Water (lb/gal) x Total Dissolved Solids (ppm) / 1,000,000 x Drift Factor (%) / 100 x Correction Factor

Constants			
Parameter	Value		
Circulation Rate per	12 500		
Pump (gal/min) <sup>1</sup>	15,500		
Number of Pumps	2		
<b>Total Circulation Rate</b>	27,000 8.334		
(gal/min)			
Water Density			
(lb/gal)			
Drift Factor (%) <sup>2</sup>	0.0005		
Correction Factor	0.3		
(unitless) <sup>3</sup>	0.2		

<sup>1</sup> Source: M3-10 Main Circulating Water System P&ID.

<sup>2</sup> Per COC AQ-C4.

<sup>3</sup> Source: SPX Cooling Technologies' Cooling

Tower Drift Mass Distribution.

Cooling <sup>-</sup>	Tower	Daily	<b>PM</b> <sub>10</sub>	Emissions
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	Circulation Rate		PM <sub>10</sub> Emissions	Above 6.2 lb/day
Date	(gal/day) <sup>1</sup>	TDS (ppm)	(lb/day)	PM <sub>10</sub> Limit? <sup>2</sup>
7/1/2023	38,880,000	4,880	1.58	No
7/2/2023	38,880,000	4,250	1.38	No
7/3/2023	38,880,000	4,250	1.38	No
7/4/2023	38,880,000	4,250	1.38	No
7/5/2023	38,880,000	4,250	1.38	No
7/6/2023	38,880,000	4,250	1.38	No
7/7/2023	38,880,000	4,250	1.38	No
7/8/2023	38,880,000	4,250	1.38	No
7/9/2023	38,880,000	4,400	1.43	No
7/10/2023	38,880,000	4,400	1.43	No
7/11/2023	38,880,000	4,400	1.43	No
7/12/2023	38,880,000	4,400	1.43	No
7/13/2023	38,880,000	4,400	1.43	No
7/14/2023	38,880,000	4,400	1.43	No
7/15/2023	38,880,000	4,400	1.43	No
7/16/2023	38,880,000	4,780	1.55	No
7/17/2023	38,880,000	4,780	1.55	No
7/18/2023	38,880,000	4,780	1.55	No
7/19/2023	38,880,000	4,780	1.55	No
7/20/2023	38,880,000	4,780	1.55	No
7/21/2023	38,880,000	4,780	1.55	No
7/22/2023	38,880,000	4,780	1.55	No
7/23/2023	38,880,000	4,670	1.51	No
7/24/2023	38,880,000	4,670	1.51	No
7/25/2023	38,880,000	4,670	1.51	No
7/26/2023	38,880,000	4,670	1.51	No
7/27/2023	38,880,000	4,670	1.51	No
7/28/2023	38,880,000	4,670	1.51	No
7/29/2023	38,880,000	4,670	1.51	No
7/30/2023	38,880,000	5,660	1.83	No
7/31/2023	38,880,000	5,660	1.83	No

<sup>1</sup> Maximum daily circulation rate conservatively used to estimate PM<sub>10</sub> emissions when the cooling tower is operated for any part of the day. Circulation rate is zero for days the cooling tower is not operated at all.

<sup>2</sup> Daily emissions limit established in COC AQ-C7.

Reporting Period: August 2023

#### Cooling Tower Total Dissolved Solids (TDS) Sampling Results

Data Source: Positive Lab's Weekly Cooling Tower Blowdown Reports, as provided in Appendix B of the QCR

Sample Date <sup>1</sup>	Period Start Date	End Date	TDS (ppm)
8/2/2023	7/30/2023	8/5/2023	5,660
8/7/2023	8/6/2023	8/12/2023	5,190
8/14/2023	8/13/2023	8/19/2023	4,860
8/23/2023	8/20/2023	8/26/2023	4,560
8/28/2023	8/27/2023	9/2/2023	5,580

#### Methodology (per Condition of Certification [COC] AQ-C7)

 $PM_{10}$  Emissions (lb/day) = Circulation Rate (gal/day) x Density of Water (lb/gal) x Total Dissolved Solids (ppm) / 1,000,000 x Drift Factor (%) / 100 x Correction Factor

Constants		
Parameter	Value	
Circulation Rate per Pump	12 500	
(gal/min) <sup>1</sup>	13,500	
Number of Pumps	2	
Total Circulation Rate	27,000	
(gal/min)	27,000	
Water Density (lb/gal)	8.334	
Drift Factor (%) <sup>2</sup>	0.0005	
Correction Factor	0.3	
(unitless) <sup>3</sup>	0.2	

<sup>1</sup> Source: M3-10 Main Circulating Water System P&ID.

<sup>2</sup> Per COC AQ-C4.

<sup>3</sup> Source: SPX Cooling Technologies' Cooling Tower Drift Mass Distribution.

#### Cooling Tower Daily PM<sub>10</sub> Emissions

	Circulation Rate		PM <sub>10</sub> Emissions	Above 6.2 lb/day PM <sub>10</sub>
Date	(gal/day) <sup>1</sup>	TDS (ppm)	(lb/day)	Limit? <sup>2</sup>
8/1/2023	38,880,000	5,660	1.83	No
8/2/2023	38,880,000	5,660	1.83	No
8/3/2023	38,880,000	5,660	1.83	No
8/4/2023	38,880,000	5,660	1.83	No
8/5/2023	38,880,000	5,660	1.83	No
8/6/2023	38,880,000	5,190	1.68	No
8/7/2023	38,880,000	5,190	1.68	No
8/8/2023	38,880,000	5,190	1.68	No
8/9/2023	38,880,000	5,190	1.68	No
8/10/2023	38,880,000	5,190	1.68	No
8/11/2023	38,880,000	5,190	1.68	No
8/12/2023	38,880,000	5,190	1.68	No
8/13/2023	38,880,000	4,860	1.57	No
8/14/2023	38,880,000	4,860	1.57	No
8/15/2023	38,880,000	4,860	1.57	No
8/16/2023	38,880,000	4,860	1.57	No
8/17/2023	38,880,000	4,860	1.57	No
8/18/2023	38,880,000	4,860	1.57	No
8/19/2023	38,880,000	4,860	1.57	No
8/20/2023	38,880,000	4,560	1.48	No
8/21/2023	38,880,000	4,560	1.48	No
8/22/2023	38,880,000	4,560	1.48	No
8/23/2023	38,880,000	4,560	1.48	No
8/24/2023	38,880,000	4,560	1.48	No
8/25/2023	38,880,000	4,560	1.48	No
8/26/2023	38,880,000	4,560	1.48	No
8/27/2023	38,880,000	5,580	1.81	No
8/28/2023	38,880,000	5,580	1.81	No
8/29/2023	38,880,000	5,580	1.81	No
8/30/2023	38,880,000	5,580	1.81	No
8/31/2023	38,880,000	5,580	1.81	No

<sup>1</sup> Maximum daily circulation rate conservatively used to estimate PM<sub>10</sub> emissions when the cooling tower is operated for any part of the day. Circulation rate is zero for days the cooling tower is not operated at all.

<sup>2</sup> Daily emissions limit established in COC AQ-C7.

#### Reporting Period: September 2023

#### Cooling Tower Total Dissolved Solids (TDS) Sampling Results

Data Source: Positive Lab's Weekly Cooling Tower Blowdown Reports, as provided in Appendix B of the QCR

Sample Date <sup>1</sup>	Period Start Date	End Date	TDS (ppm)
8/28/2023	8/27/2023	9/2/2023	5,580
9/7/2023	9/3/2023	9/9/2023	4,500
9/11/2023	9/10/2023	9/16/2023	4,260
9/19/2023	9/17/2023	9/23/2023	4,690
9/25/2023	9/24/2023	9/30/2023	4,800

#### Methodology (per Condition of Certification [COC] AQ-C7)

PM<sub>10</sub> Emissions (lb/day) = Circulation Rate (gal/day) x Density of Water (lb/gal) x Total Dissolved Solids (ppm) / 1,000,000 x Drift Factor (%) / 100 x Correction Factor

#### Constants

Parameter	Value		
Circulation Rate per Pump	13 500		
(gal/min) <sup>1</sup>	15,500		
Number of Pumps	2		
Total Circulation Rate	27.000		
(gal/min)	27,000		
Water Density (lb/gal)	8.334		
Drift Factor (%) <sup>2</sup>	0.0005		
Correction Factor	0.2		
(unitless) <sup>3</sup>	0.2		

<sup>1</sup> Source: M3-10 Main Circulating Water System P&ID.

<sup>2</sup> Per COC AQ-C4.

<sup>3</sup> Source: SPX Cooling Technologies' Cooling Tower Drift Mass Distribution.

#### Cooling Tower Daily PM<sub>10</sub> Emissions

	Circulation Rate		PM <sub>10</sub> Emissions	Above 6.2 lb/day PM <sub>10</sub>
Date	(gal/day) <sup>1</sup>	TDS (ppm)	(lb/day)	Limit? <sup>2</sup>
9/1/2023	38,880,000	5,580	1.81	No
9/2/2023	38,880,000	5,580	1.81	No
9/3/2023	38,880,000	4,500	1.46	No
9/4/2023	38,880,000	4,500	1.46	No
9/5/2023	38,880,000	4,500	1.46	No
9/6/2023	38,880,000	4,500	1.46	No
9/7/2023	38,880,000	4,500	1.46	No
9/8/2023	38,880,000	4,500	1.46	No
9/9/2023	38,880,000	4,500	1.46	No
9/10/2023	38,880,000	4,260	1.38	No
9/11/2023	38,880,000	4,260	1.38	No
9/12/2023	38,880,000	4,260	1.38	No
9/13/2023	38,880,000	4,260	1.38	No
9/14/2023	38,880,000	4,260	1.38	No
9/15/2023	38,880,000	4,260	1.38	No
9/16/2023	38,880,000	4,260	1.38	No
9/17/2023	38,880,000	4,690	1.52	No
9/18/2023	38,880,000	4,690	1.52	No
9/19/2023	38,880,000	4,690	1.52	No
9/20/2023	38,880,000	4,690	1.52	No
9/21/2023	38,880,000	4,690	1.52	No
9/22/2023	38,880,000	4,690	1.52	No
9/23/2023	38,880,000	4,690	1.52	No
9/24/2023	38,880,000	4,800	1.56	No
9/25/2023	38,880,000	4,800	1.56	No
9/26/2023	38,880,000	4,800	1.56	No
9/27/2023	38,880,000	4,800	1.56	No
9/28/2023	38,880,000	4,800	1.56	No
9/29/2023	38,880,000	4,800	1.56	No
9/30/2023	38,880,000	4,800	1.56	No

<sup>1</sup> Maximum daily circulation rate conservatively used to estimate PM<sub>10</sub> emissions when the cooling tower is operated for any part of the day. Circulation rate is zero for days the cooling tower is not operated at all.

<sup>2</sup> Daily emissions limit established in COC AQ-C7.

Reporting Period: Quarter 3 2023

#### Table 6. Monthly Turbine-Duct Burner Fuel Flow

	July		August		September	
Source	Fuel Flow (MMscf/month) <sup>1, 2</sup>	Above 405 MMscf/month Limit? <sup>3</sup>	Fuel Flow (MMscf/month) <sup>1, 2</sup>	Above 405 MMscf/month Limit? <sup>3</sup>	Fuel Flow (MMscf/month) <sup>1, 2</sup>	Above 405 MMscf/month Limit? <sup>3</sup>
CTG 1	112.1		124.7		116.3	
CTG 1 Duct Burner	4.28		0.94		0.08	
Total CTG 1 & Duct Burner	116	No	126	No	116	No
CTG 2	239.5		225.3		96.1	
CTG 2 Duct Burner	6.22		1.62		0.73	
Total CTG 2 & Duct Burner	246	No	227	No	97	No

<sup>1</sup> CTG and Duct Burner fuel flow data obtained from 'U1/U2\_MonthlySummary\_MassEmissionsAndFuel' and 'All\_12MonthSummary\_GasUsage' RegPerfect Reports. <sup>2</sup> Monthly fuel flow limit is per Condition of Certification (COC) AQ-27.

#### Table 7. Monthly Emissions - July 2023

	Monthly Emissions (lb/month) <sup>1</sup>					
Source	NOx <sup>2</sup>	СО	VOC	SOx	PM <sub>10</sub> /PM <sub>2.5</sub>	NH <sub>3</sub> <sup>3</sup>
CTG 1 & Duct Burner	839	305	179	33	700	1,097
CTG 2 & Duct Burner	1,700	498	379	69	1,478	2,291
Monthly Emission Limits <sup>4</sup>	N/A	7,633	3,236	227	4,876	N/A
Exceeds Limit?	N/A	No	No	No	No	N/A

<sup>1</sup> Unless otherwise noted, monthly emissions data obtained from 'U1/U2\_MonthlySummary\_MassEmissionsAndFuel' RegPerfect Report.

<sup>2</sup> Monthly NOx emissions are as submitted to SCAQMD, based on the 'U1\_U2MonthlyRECLAIMNOxSummaryByDay' RegPerfect Report.

<sup>3</sup> Monthly NH<sub>3</sub> emissions are calculated using monthly fuel usage and default emission factors from the SCAQMD's AER AB 2588 Quadrennial Air Toxics Emission

Inventory Procedures - June 2020. The emission factors are 9.1 lbs/MMscf and 18.0 lbs/MMscf for the CTGs and Duct Burners, respectively.

<sup>4</sup> Monthly emission limits are per COC AQ-5.

#### Table 8. Monthly Emissions - August 2023

	Monthly Emissions (ll	Nonthly Emissions (lb/month) <sup>1</sup>				
Source	NOx <sup>2</sup>	СО	VOC	SOx	PM <sub>10</sub> /PM <sub>2.5</sub>	NH <sub>3</sub> <sup>3</sup>
CTG 1 & Duct Burner	949	368	193	36	755	1,152
CTG 2 & Duct Burner	1,565	473	349	64	1,365	2,080
Monthly Emission Limits <sup>4</sup>	N/A	7,633	3,236	227	4,876	N/A
Exceeds Limit?	N/A	No	No	No	No	N/A

<sup>1</sup> Unless otherwise noted, monthly emissions data obtained from 'U1/U2\_MonthlySummary\_MassEmissionsAndFuel' RegPerfect Report.

<sup>2</sup> Monthly NOx emissions are as submitted to SCAQMD, based on the 'U1\_U2MonthlyRECLAIMNOxSummaryByDay' RegPerfect Report.

<sup>3</sup> Monthly NH<sub>3</sub> emissions are calculated using monthly fuel usage and default emission factors from the SCAQMD's AER AB 2588 Quadrennial Air Toxics Emission

Inventory Procedures - June 2020. The emission factors are 9.1 lbs/MMscf and 18.0 lbs/MMscf for the CTGs and Duct Burners, respectively.

<sup>4</sup> Monthly emission limits are per COC AQ-5.

#### Table 9. Monthly Emissions - September 2023

	Nonthly Emissions (lb/month) <sup>1</sup>					
Source	NOx <sup>2</sup>	СО	VOC	SOx	PM <sub>10</sub> /PM <sub>2.5</sub>	NH <sub>3</sub> <sup>3</sup>
CTG 1 & Duct Burner	831.70	295	179	33	700	1,060
CTG 2 & Duct Burner	708.95	255	149	27	582	887
Monthly Emission Limits <sup>4</sup>	N/A	7,633	3,236	227	4,876	N/A
Exceeds Limit?	N/A	No	No	No	No	N/A

<sup>1</sup> Unless otherwise noted, monthly emissions data obtained from 'U1/U2\_MonthlySummary\_MassEmissionsAndFuel' RegPerfect Report.

<sup>2</sup> Monthly NOx emissions are as submitted to SCAQMD, based on the 'U1\_U2MonthlyRECLAIMNOxSummaryByDay' RegPerfect Report.

<sup>3</sup> Monthly NH<sub>3</sub> emissions are calculated using monthly fuel usage and default emission factors from the SCAQMD's AER AB 2588 Quadrennial Air Toxics Emission

Inventory Procedures - June 2020. The emission factors are 9.1 lbs/MMscf and 18.0 lbs/MMscf for the CTGs and Duct Burners, respectively.

<sup>4</sup> Monthly emission limits are per COC AQ-5.

Reporting Period: Quarter 3 2023

#### Methodology

Emissions (lb/month) = Fuel Usage (gal/month) / 1,000 (gal/Mgal) x Emission Factor (lb/Mgal)

#### **Emission Factors**

	<b>Emission Factor</b>	
Pollutant	(lb/Mgal)	Reference
NOx	469	Emission factor provided in the facility's Title V Permit.
СО	13.62	Emission factor converted from the factor provided in the facility's Title V Permit (0.4 g/bhp-hr), based on the unit's power rating (173 hp) and maximum fuel throughput (11.2 gal/hr).
VOC	3.41	Emission factor converted from the factor provided in the facility's Title V Permit (0.1 g/bhp-hr), based on the unit's power rating (173 hp) and maximum fuel throughput (11.2 gal/hr).
SOx	0.21	Default for Diesel/Distillate Oil, ICEs given in the SCAQMD's Combustion Default Emission Factors - January 2022.
PM <sub>10</sub> /PM <sub>2.5</sub>	3.065	Emission factor converted from the factor provided in the facility's Title V Permit (0.09 g/bhp-hr), based on the unit's power rating (173 hp) and maximum fuel throughput (11.2 gal/hr).
NH <sub>3</sub>	0.80	Default for diesel combustion equipment without an SNCR or SCR given in the SCAQMD's AER AB 2588 Quadrennial Air Toxics Emission Inventory Reporting Procedures - June 2020.

#### Table 10. Monthly Diesel Fire Pump Hours of Operation, Fuel Usage, and Emissions

	Monthly Hours o	f Operation <sup>1</sup>	Ŭ,	Fuel Usage	Monthly Er	nissions (l	b/month)			
Month	Maintenance	Testing	Emergency	(gal/month) <sup>2</sup>	NOx	СО	VOC	SOx	PM <sub>10</sub> /PM <sub>2.5</sub>	NH <sub>3</sub>
January	0.0	2.5	0.0	28.0	13.1	0.38	0.10	0.01	0.09	0.02
February	0.0	2.0	0.0	22.4	10.5	0.31	0.08	0.00	0.07	0.02
March	0.0	2.0	0.0	22.4	10.5	0.31	0.08	0.00	0.07	0.02
April	0.0	2.6	0.0	29.1	13.7	0.40	0.10	0.01	0.09	0.02
May	0.0	2.5	0.0	28.0	13.1	0.38	0.10	0.01	0.09	0.02
June	0.0	2.0	0.0	22.4	10.5	0.31	0.08	0.00	0.07	0.02
July	0.0	2.5	0.0	28.0	13.1	0.38	0.10	0.01	0.09	0.02
August	0.0	2.0	0.0	22.4	10.5	0.31	0.08	0.00	0.07	0.02
September	0.0	2.0	0.0	22.4	10.5	0.31	0.08	0.00	0.07	0.02
October	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00
November	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00
December	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00
Q1 Total	0.0	6.5	0.0	72.8	34.1	0.99	0.25	0.02	0.22	0.06
Q2 Total	0.0	7.1	0.0	79.5	37.3	1.08	0.27	0.02	0.24	0.06
Q3 Total	0.0	6.5	0.0	72.8	34.1	1.0	0.25	0.02	0.22	0.06
Q4 Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Annual Total	0.0	20.1	0.0	225.1	105.6	3.1	0.8	0.0	0.7	0.2
Annual Limit for Ma	aintenance and Test	ing <sup>3</sup>	50							
Total A	nnual Limit <sup>3</sup>		200							

<sup>1</sup> Monthly hours of operation calculated from Device 385/403 run timer readings.

Exceeds Limits?

<sup>2</sup> Fuel usage (gal/month) calculated by multiplying the hours of operation by the unit's maximum fuel throughput (11.2 gal/hour).

No

<sup>3</sup> Annual limits for hours of operation are per Condition of Certification (COC) AQ-15.

Appendix B Cooling Tower Blowdown Reports



781 East Washington Blvd., Los Angeles, CA 90021 (213) 745-5312 FAX (213) 745-6372

July 03, 2023

Matt Richards City of Vernon 4963 Soto St. Vernon, CA 90058

Report No.: 2306228 Project Name: Malburg Generating Station Weekly

Dear Matt Richards,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on June 26, 2023.

The test results in this report are performed in compliance with ELAP accreditation requirements for the certified parameters. The laboratory report may not be produced, except in full, without the written approval of the laboratory.

The issuance of the final Certificate of Analysis takes precedence over any previous Preliminary Report. Preliminary data should not be used for regulatory purposes. Authorized signature(s) is provided on final report only.

If you have any questions in reference to this report, please contact your Positive Lab Service coordinator.

Project Manager



#### **Certificate of Analysis**

Page 2 of 2

Report Date: 07/03/23

PLS Report No.: 2306228

Submitted: 06/26/23

File #:74548

City of Vernon 4963 Soto St. Vernon, CA 90058

Attn: Matt Richards

Phone: (323) 476-3626 FAX:(323) 476-3640

Project: Malburg Generating Station Weekly

Analyte	Results	Flag	D.F.	Units	PQL	Pre	p/Test Method	Prepared	Analyzed	Ву	Batch
Total Dissolved Solids	4880	·	1	mg/L	5.0	-	SM 2540C	06/29/23	06/30/23	VC	BF3303
			Q	uality	Contro	ol Data	)				
						Spike	Source	%REC	RI	۳D	
Accelute	Doc	dr	POI		Inits	level	Result %RFC	l imits	RPD Lir	nit (	Dualifier

Blank		Prepared: (	06/29/23	Analyzed: 06/30	/23						
Total Dissolved Soli	ds	ND	5.0	mg/L							<u>.</u>
LCS		Prepared: (	06/29/23	Analyzed: 06/30	/23						
Total Dissolved Soli	ds	50.0	5.0	mg/L	50.00		100	80-120			
Duplicate	Source: 2306228-01	Prepared: (	06/29/23	Analyzed: 06/30	/23						
Total Dissolved Soli	ds	5090	5.0	mg/L		4880			4.28	5	

#### **Notes and Definitions**

NA Not Applicable

ND Analyte NOT DETECTED at or above the reported limit(s)

NR Not Reported

MDL Method Detection Limit

PQL Practical Quantitation Limit

Environmental Laboratory Accreditation Program Certificate No. 1131, Mobile Lab No. 2534, LACSD No. 10138

Fick Owen Parlier

Authorized Signature(s)

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	() .			,						F	ILE NO	.:		LAB N	0.://m/ VIIX
CLIENT NAME: CITY OF VERNON	PROJ	ECT NA	AME/NO	).	MALBUI	RG GENEF	ATING S	TATION	VEEKLY	<u> </u>	P.O.NO.			A	IRBILL NO:
ADDRESS: 4963 SOTO ST. VERNON	CA 90058								AN	ALYS	SES RE	QUEST	ED	0	DBSERVED TEMP 143.92
PROJECT MANAGER MATT RICHAR	DS PHON	E NO:			FAX N	ŇO:								C	CORRECTED TEMP: 1.50
SAMPLER NAME: JOHN BARIE	SIGNA	TURE:	:											Т	HERMO ID:
TAT (Turn-Around-Time): 0=Same Day; 1=	24 Hour; 2=48Hour	; (ETC.)	) N=Nor	mal											
CONTAINER TYPES: B=Brass; E=Encore/E	asy Draw; P=Plasti	; G=G	lass; V=	=VOA V	/ial; (	D=Othe	er								
UST PROJECT: Y N GLOBAL ID#:	*****				-										
SAMPLE DATE TIME SAMPLE DESC	CRIPTION		TRIX		TAT	CONT	AINER	s						S.	AMPLE CONDITIONS/
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GUGY UZ COOLING TOWER	BLOWDOWN X				N	1	P	Х							
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				19. <mark>19</mark> 19. 19									By:		Date:
SPECIAL INSTRUCTION:	~										1.	:			
Arrived at	the lab 62613	1030	<b>,</b>										-		
PRESERVATIVE 1-HNO3 2-H2SO4 3-HCL	4- ZINC ACETATE	5-NaOH	I 6-NH4	BUFFE	R 7-	OTHE	2						_		
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781 East Washington Blvd., Los Angeles, CA 90021 (213) 745-5312 FAX (213) 745-6372

July 17, 2023

Matt Richards City of Vernon 4963 Soto St. Vernon, CA 90058

Report No.: 2307032 Project Name: Malburg Generating Station Weekly

Dear Matt Richards,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on July 07, 2023.

The test results in this report are performed in compliance with ELAP accreditation requirements for the certified parameters. The laboratory report may not be produced, except in full, without the written approval of the laboratory.

The issuance of the final Certificate of Analysis takes precedence over any previous Preliminary Report. Preliminary data should not be used for regulatory purposes. Authorized signature(s) is provided on final report only.

If you have any questions in reference to this report, please contact your Positive Lab Service coordinator.

Project Manager



#### **Certificate of Analysis**

Page 2 of 2

Report Date: 07/17/23

PLS Report No.: 2307032

Submitted: 07/07/23

File #:74548

City of Vernon 4963 Soto St. Vernon, CA 90058

Attn: Matt Richards

Phone: (323) 476-3626 FAX:(323) 476-3640

Project: Malburg Generating Station Weekly

Sample ID: C	Cooling Tower Blowdo	wn Wal	er (230	7032-0	1) San	pled: 0	7/07/23	10:20 R	eceived:	07/07/23				
Analyte	F	Results	Flag	D.F.	Units	PQL	Pre	p/Test Met	hod	Prepared	Anal	yzed	By	Batch
Total Dissolv	ved Solids	4250		1	mg/L	5.0	-	SM	2540C	07/13/23	07/1	4/23	VC	BG31414
				Q	Jality	Contro	ol Data	3						
							Spike	Source		%REC		RPD		60 (300 St
Analyte		Resi	JIL	PQL		Units	Level	Result	%REC	Limits	RPD	Limit	ς	Jualifier
Batch BG3141	4													
Blank		Pre	ared: 07	/13/23	Analyzed	1: 07/14/	23							
Total Dissolve	d Solids	NC	1	5.0		mg/L								
LCS		Pre	ared: 07	/13/23	Analyzed	i: 07/14/	23							
Total Dissolve	d Solids	60.	D	5.0		mg/L	50.00		120	80-120				
Duplicate	Source: 2307031-0:	1 Prep	ared: 07	/13/23	Analyzed	l: 07/14/	23							
Total Dissolve	d Solids	82	נ	5.0		mg/L		785			4.36	5		
Duplicate	Source: 2307044-0:	1 Prej	ared: 07	/13/23	Analyzed	i: 07/14/	23							
Total Dissolve	d Solids	445	0	5.0		mg/L		4400			1.20	5		

#### **Notes and Definitions**

NA Not Applicable

ND Analyte NOT DETECTED at or above the reported limit(s)

NR Not Reported

MDL Method Detection Limit

PQL Practical Quantitation Limit

Environmental Laboratory Accreditation Program Certificate No. 1131, Mobile Lab No. 2534, LACSD No. 10138

Rick Owen Parlie

Authorized Signature(s)

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	LA	AB SI	ERVICE	[213] 74	5-5312	FAX (213	] 745-63	72					FILE	E NO.:		L	AB NO .: 2411032
CLIENT	NAME:	CITY OF	FVERNON	PROJE	CT N.	AME/NC	). l	MALBU	RG GENE	A BIG	MADI TATION	Л weekly	P.O.	NO.			AIRBILL NO:
ADDRE	SS:	4963 SOT	FO ST. VERNON CA 90058									ANA	LYSES	REQU	ESTE	D	OBSERVED TEMP/_9%
PROJEC	CT MANA	GER	MATT RICHARDS	PHONE	NO:			FAX N	NO:								CORRECTED TEMP: 2-1 2
SAMPL	ER NAMI	E:	JOHN BARIE	SIGNA	TURE	: {}											THERMO ID: 60
TAT (Tu	ırn-Arour	1d-Time):	0=Same Day; 1=24 Hour; 2=4	48Hour;	(ETC.	) N=Nor	mal										
CONTA	INER TY	PES: B=E	Brass; E=Encore/Easy Draw; P	=Plastic	; G=G	lass; V=	VOA V	'ial; (	)=Oth	er							
UST PR	OJECT:	Y N	GLOBAL ID#:														
SAMPLE	DATE	TIME	SAMPLE DESCRIPTION		MA	TRIX		TAT	CONT	AINER	S						SAMPLE CONDITIONS/
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PRESE	RVATIVE	1-HNO3	2-H2SO4 3-HCL 4- ZINC ACE	TATE 5	NaOH	16-NH4	BUFFE	R 7-	OTHE	R							



781 East Washington Blvd., Los Angeles, CA 90021 (213) 745-5312 FAX (213) 745-6372

July 17, 2023

Matt Richards City of Vernon 4963 Soto St. Vernon, CA 90058

Report No.: 2307044 Project Name: Malburg Generating Station Weekly

Dear Matt Richards,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on July 10, 2023.

The test results in this report are performed in compliance with ELAP accreditation requirements for the certified parameters. The laboratory report may not be produced, except in full, without the written approval of the laboratory.

The issuance of the final Certificate of Analysis takes precedence over any previous Preliminary Report. Preliminary data should not be used for regulatory purposes. Authorized signature(s) is provided on final report only.

If you have any questions in reference to this report, please contact your Positive Lab Service coordinator.

Project Manager



#### **Certificate of Analysis**

Page 2 of 2

Report Date: 07/17/23

PLS Report No.: 2307044

Submitted: 07/10/23

File #:74548

City of Vernon 4963 Soto St. Vernon, CA 90058

Attn: Matt Richards

Phone: (323) 476-3626 FAX:(323) 476-3640

Project: Malburg Generating Station Weekly

Sample ID: C	Cooling Tower Blowdo	wn Wal	er (230	7044-0	)1) San	pled: 0	7/10/23	08:25 R	eceived:	07/10/23				
Analyte	[	Results	Flag	D.F.	Units	PQL	Prej	o/Test Met	hod	Prepared	Anal	yzed	Ву	Batch
Total Dissolv	ved Solids	4400		1	mg/L	5.0	-	SM	2540C	07/13/23	07/1	4/23	vc	BG31414
				Q	uality	Contro	ol Data	l						
	2012 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 - 1919 -						Spike	Source		%REC		RPD		
Analyte		Resi	ılt	PQL		Units	Level	Result	%REC	Limits	RPD	Limit	Q	ualifier
Batch BG3141	4 <i>7-</i> 9 - 9 - 9 - 9 - 9 - 9 - 9 - 9										elerte en s			
Blank		Prep	ared: 07	/13/23	Analyzed	: 07/14/	23							
Total Dissoive	d Solids	ND	)	5.0		mg/L								
LCS		Prep	ared: 07,	/13/23	Analyzed	i: 07/14/	23							
Total Dissolve	d Solids	60.	D	5.0		mg/L	50.00		120	80-120				
Duplicate	Source: 2307031-0	1 Prep	ared: 07,	/13/23	Analyzed	: 07/14/	23							
Total Dissolve	d Solids	820	)	5.0		mg/L		785			4.36	5		
Duplicate	Source: 2307044-0	1 Prep	ared: 07	/13/23	Analyzed	: 07/14/	23							
Total Dissolver	d Solids	445	0	5.0		mg/L		4400			1.20	5		

#### **Notes and Definitions**

NA Not Applicable

ND Analyte NOT DETECTED at or above the reported limit(s)

NR Not Reported

MDL Method Detection Limit

PQL Practical Quantitation Limit

Environmental Laboratory Accreditation Program Certificate No. 1131, Mobile Lab No. 2534, LACSD No. 10138

Rick Daven Perlier

Authorized Signature(s)

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CLIENT	NAME:	CITY OF	VERNON	PROJE	<u>CT</u> N	AME/N	0.	MALBU	RG GENEI	RATING S	TATION	WEEKLY		P.O.NC	).			AIRBILL NO:
ADDRES	5S:	4963 SOT	FO ST. VERNON CA 90058									AN	ALY	SES RI	QUES	TED		OBSERVED TEMP
PROJEC	T MANA	AGER	MATT RICHARDS	PHONE	NO:			FAX	NO:									CORRECTED TEMP: [.["4
SAMPL	ER NAM	E:	JOHN BARIE	SIGNA	TURE	: D-												THERMO ID:
TAT (Tu	rn-Arou	nd-Time):	0=Same Day; 1=24 Hour; 2=	48Hour;	(ETC	.) N=Noi	rmal											
CONTA	INER TY	PES: B=B	rass; E=Encore/Easy Draw; P	=Plastic	; G=0	lass; V=	=VOA V	Vial; (	D=Oth	er								
UST PR	OJECT:	Y N	GLOBAL ID#:															
SAMPLE	DATE	TIME	SAMPLE DESCRIPTION		MA	ATRIX		TAT	CONT	AINER								SAMPLE CONDITIONS/
ID .	SAMPLED	SAMPLED		WATER	SOIL	SLUDGE	OTHER		#	TYPE	TD					_	_	CONTAINER/COMMENTS
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Relinquis	shed by (S	ignature&	Name):	Receive	d by (S	Signature	& Nam	ie):			Date:		,	Time:		2. Sa	mples v	will not be stored over 30 days,
																unles	s additi	ional storage time is requested
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			Arrived at the lab ) 7	0.73	10	ථා												
PRESE	RVATIVE	1-HNO3	2-H2SO4 3-HCL 4- ZINC ACE	TATE 5	-NaOł	1 6-NH4	BUFF	ER 7-	OTHE	R								



781 East Washington Blvd., Los Angeles, CA 90021 (213) 745-5312 FAX (213) 745-6372

July 24, 2023

Matt Richards City of Vernon 4963 Soto St. Vernon, CA 90058

Report No.: 2307105 Project Name: Malburg Generating Station Weekly

Dear Matt Richards,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on July 18, 2023.

The test results in this report are performed in compliance with ELAP accreditation requirements for the certified parameters. The laboratory report may not be produced, except in full, without the written approval of the laboratory.

The issuance of the final Certificate of Analysis takes precedence over any previous Preliminary Report. Preliminary data should not be used for regulatory purposes. Authorized signature(s) is provided on final report only.

If you have any questions in reference to this report, please contact your Positive Lab Service coordinator.

Project Manager



#### **Certificate of Analysis**

Page 2 of 2

Report Date: 07/24/23

PLS Report No.: 2307105

Submitted: 07/18/23

File #:74548

City of Vernon 4963 Soto St. Vernon, CA 90058

Attn: Matt Richards

Phone: (323) 476-3626 FAX:(323) 476-3640

Project: Malburg Generating Station Weekly

		And the second statements		Augle representation and the	Code foot best to the		all and the contract of the total			Stand Happendale	services and services
Sample ID: Cooling Tower F	3lowdown Wa	ter (230	17105-0	J1) Sam	pled: 07	7/18/23	07:50 Received	1: 07/18/23		Angemeen Services	
Analyte	Results	Flag	D.F.	Units	PQL	Prep	/Test Method	Prepared	Analyzed	By	Batch
Total Dissolved Solids	4780		1	mg/L	5.0	-	SM 2540C	07/19/23	07/20/23	VC	BG32011
			Q	uality (	Contro	ol Data					
		and grant and a second			hale suggestion		and an analysis and an an and a second second	A Bern Lora Astern Habiliti Selaki	Administration and a second		1972 (1972 States and States and

Analyte		Recult	POI	Linits	Spike	Source	%RFC	- %REC	RPD	RPD Limit	Qualifier
		I Madulli,	ו		Erre Sant S. Sant S.	n vezd Gifte	C. W. Z. & Son Ser				
Batch BG32011	••										
Blank		Prepared: 0	7/19/23 Ana	lyzed: 07/20/	23						
Total Dissolved	Solids	ND	5.0	mg/L							
LCS		Prepared: 0	7/19/23 Ana	iyzed: 07/20/	23						
Total Dissolved	l Solids	57.0	5.0	mg/ኒ	50.00		114	80-120			
Duplicate	Source: 2307105-01	Prepared: 0	7/19/23 Ana	lyzed: 07/20/	23						
Total Dissolved	Solids	4560	5.0	mg/L		4780			4.71	5	
Duplicate	Source: 2307104-01	Prepared: 0	7/19/23 Ana	iyzed: 07/20/	23						
Total Dissolved	1 Solids	2470	5.0	mg/L		2440			1.56	5	

#### **Notes and Definitions**

NA Not Applicable

ND Analyte NOT DETECTED at or above the reported limit(s)

NR Not Reported

MDL Method Detection Limit

PQL Practical Quantitation Limit

Environmental Laboratory Accreditation Program Certificate No. 1131, Mobile Lab No. 2534, LACSD No. 10138

Rick Doven Parties

Authorized Signature(s)

			ERVICE CHA	IN OI hington B (213) 74	F CU Ivd., La 5-5312	STOE os Angeles FAX (21:	<b>)Y Aľ</b> 5, CA 900 3) 745-63	ND A 121 172	ANAI	LYSI	S R	EQU	JES	T I FILE N	DATE:_	<u>)18-2</u>	<u>}</u> ]	PAGE: OF
CLIENT	NAME:	CITY OI	F VERNON	PROJE	CT N	AME/NO	<u>.</u>	MALBU	RG GENE	RATING S	TATION	WEEKL	Y	P.O.N	<u>.</u> 0.			AIRBILL NO:
ADDRES	SS:	4963 SO	TO ST. VERNON CA 90058									AN	JALY	SES R	EOUE	STED		OBSERVED TEMP 1.97 °C
PROJEC	T MANA	GER	MATT RICHARDS	PHONE	NO:			FAX N	NO:									CORRECTED TEMP: 202
SAMPLI	ER NAMI	E:	JOHN BARIE	SIGNA	TURE	: Tr												THERMO ID:
TAT (Tu	rn-Aroun	ıd-Time):	0=Same Day; 1=24 Hour; 2=	48Hour;	(ETC	.) N=Nor	mal											
CONTAI	INER TY	PES: B=E	Brass; E=Encore/Easy Draw; P	=Plastic	; G=G	lass; V=	=VOA V	/ial; (	)=Oth	er								
UST PRO	CHAIN OF CUSTODY AND ANALYSIS REQUEST     THE Ext Washington Blvd., Los Angeles, CA 90021 (213) 745-5312   DATE: 16:2-22   PAGE:OFOFOF																	
SAMPLE	NAME:   CITY OF VERNON   PROJECT NAME/NO.   MALEURG GENERATING STATION WEEKLY   P.O.NO.   AIRBILL NO:     RESS:   4963 SOTO ST. VERNON CA 90058   OBSERVED TEMP   OBSERVED TEMP   OBSERVED TEMP   OBSERVED TEMP   OBSERVED TEMP   OBSERVED TEMP   CORRECTED TEMP   CORRECTED TEMP   CORRECTED TEMP   CORRECTED TEMP   CORRECTED TEMP   CORRECTED TEMP   THERMO ID																	
ம	CHAIN OF CUSTODY AND ANALYSIS REQUEST     TRI East Washington Blvd., Los Angeles, CA 90021 [213] 745-5312   DATE 12-22   PAGE:OF																	
	CHAIN OF CUSTODY AND ANALYSIS REQUEST     DATE: 0:																	
				ļ														
	CHAIN OF CUSTODY AND ANALYSIS REQUEST     DATE: 10:																	
	CHAIN OF CUSTODY AND ANALYSIS REQUEST     DATE: 10: 10: 10: 10: 10: 10: 10: 10: 10: 10																	
Relinquis	INT NAME: CITY OF VERNON PROJECT NAME/NO. MALBURG ORDERATING STATION WERKLY P.O.NO. AIRBILL NO:   RESS: 4963 SOTO ST. VERNON CA 90058 OBSERVED TEMP. []] OBSERVED TEMP. []] OBSERVED TEMP. []] CORRECTED TEMP. []] OBSERVED TEMP. []] CORRECTED TEMP. []] CORRECTEMP. []] CORRECTEMP. []] CORRECTE																	
	LESS:   4963 SOTO ST. VERNON CA 90058   ANALYSES REQUESTED   OBSERVED TEMP 10 <sup>+</sup> / <sub>2</sub> ECT MANAGER   MATT RICHARDS   PHONE NO:   FAX NO:   CORRECTED TEMP 10 <sup>+</sup> / <sub>2</sub> LER NAME:   JOHN BARIE   SIGNATURE:   The sign 10 <sup>+</sup> / <sub>2</sub> Sample conditions/   Sample conditional storage time is requested																	
Relinquis	hed by (S	ignature&	Name):	Receive	d by (S	Signature	& Nam	e):			Date:			Time:		2. Sa	imples v	vill not be stored over 30 days,
																unle	ss additi	onal storage time is requested
Relinquis	hed by (S	ignature&	Name):	Receive	d by (S	Signature	& Nam	e):			Date:			Time:		3. St	orage tii	me requested:days,
																By:		Date:
SPECIA	L INSTR	UCTION	: Arrived at the lab	インシン3	1/5 NaOr	16-NH4	BUFFF	-R 7-1		R								



781 East Washington Blvd., Los Angeles, CA 90021 (213) 745-5312 FAX (213) 745-6372

July 27, 2023

Matt Richards City of Vernon 4963 Soto St. Vernon, CA 90058

Report No.: 2307156 Project Name: Malburg Generating Station Weekly

Dear Matt Richards,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on July 25, 2023.

The test results in this report are performed in compliance with ELAP accreditation requirements for the certified parameters. The laboratory report may not be produced, except in full, without the written approval of the laboratory.

The issuance of the final Certificate of Analysis takes precedence over any previous Preliminary Report. Preliminary data should not be used for regulatory purposes. Authorized signature(s) is provided on final report only.

If you have any questions in reference to this report, please contact your Positive Lab Service coordinator.

**Project Manager** 



#### **Certificate of Analysis**

Page 2 of 2

Report Date: 07/27/23

PLS Report No.: 2307156

Submitted: 07/25/23

File #:74548

City of Vernon 4963 Soto St. Vernon, CA 90058

Attn: Matt Richards Phone: (323) 476-3626 FAX:(323) 476-3640

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tower I	Blowdown Wa	ter (23(	)7156-(	)1) Sam	pled: 0	7/25/23	09:15 Received	: 07/25/23			
Analyte	Results	Flag	D.F.	Units	PQL.	Prep	/Test Method	Prepared	Analyzed	By	Batch
Total Dissolved Solids	4670		1	mg/L	5.0		SM 2540C	07/25/23	07/26/23	VC	BG32703
			Q	uality (	Contro	ol Data					

1					Spike	Source		%REC		RPD	
Analyte		Result	PQL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch BG32703	•••										
Blank		Prepared: (	07/25/23	Analyzed: 07/26	5/23						
Total Dissolved Solids		ND	5.0	mg/L			.,				11111111111111111111111111111111111111
LCS		Prepared: (	07/25/23	Analyzed: 07/26	5/23						
Total Dissolved Solids		59.0	5.0	mg/L	50.00		118	80-120			
Duplicate	Source: 2307156-01	Prepared: (	07/25/23	Analyzed: 07/26	5/23						
Total Dissolved Solids		4860	5.0	mg/L		4670			3. <del>9</del> 9	5	

#### **Notes and Definitions**

NA Not Applicable

ND Analyte NOT DETECTED at or above the reported limit(s)

NR Not Reported

MDL Method Detection Limit

PQL Practical Quantitation Limit

Environmental Laboratory Accreditation Program Certificate No. 1131, Mobile Lab No. 2534, LACSD No. 10138

Rick Owen Parties

Authorized Signature(s)

		ne		IN OF	F CU	STOD	Y AN	ND A	NAI	JYSI	S RI	EQU	JES	T						
781 East Washington Blvd., Los Angeles, CA 90021											DATE: 7-2523 PAGE: OF									
Image: Provide the service     [213] 145-5312     FAX [213] 145-6312     FILE NO.:											NO.:			LAB	NO.: 0177150					
CLIENT NAME: CITY OF VERNON PROJECT NAME/NO. MALBURG (									RG GENEI	RATING S	ING STATION WEEKLY P.O.NO.								AIRBILL NO:	
ADDRESS: 4963 SOTO ST. VERNON CA 90058											ANALYSES REQUESTED								OBSERVED TEMP	
PROJEC	PHONE NO:				FAX NO:											CORRECTED TEMP: <u>1.0<sup>9</sup>C</u>				
SAMPLER NAME: JOHN BARIE					SIGNATURE:														THERMO ID:	
TAT (Tu	irn-Arour	nd-Time):	=48Hour;	48Hour; (ETC.) N=Normal																
CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial;									D=Oth	er										
UST PROJECT: Y N GLOBAL ID#:																				
SAMPLE	DATE	TIME	SAMPLE DESCRIPTION	ON MATRIX			T	ТАТ	CONT	AINER	s								SAMPLE CONDITIONS/	
TD-	SAMPLED	SAMPLED		WATER	SOIL	SLUDGE	OTHER		#	TYPE	TD						<u> </u>		CONTAINER/COMMENTS	
	7-25-23	0915	COOLING TOWER BLOWDOWN	x				N	1	Р	X									
					ļ		ļ											<u> </u>		
							ļ													
										<u> </u>										
Relinquished by (Signature & Name): Received by (Sign						Signature	& Nam	e):			Date: Time:						SAMPLE DISPOSITION			
AA -					The Junbarie 7						2523 0915						1. San	1. Samples returned to client? Yes No		
Relinquished by (Signature& Name):					Received by (Signature & Name):						Date: Time:						2. Samples will not be stored over 30 days,			
															unless additional storage time is requested					
Relinquished by (Signature& Name):				Received by (Signature & Name):						Date: Time:				3. Storage time requested:days,						
													By:Date:							
SPECIA	L INSTR	UCTION	:																	
			Arrived at the lab $7.23$	-27 11	ఎం															
PRESE	RVATIVE	1-HNO3	2-H2SO4 3-HCL 4- ZINC AC	ETATE 5	-NaOl	- 6-NH4	BUFF	-R 7.	OTHE	R										



781 East Washington Blvd., Los Angeles, CA 90021 (213) 745-5312 FAX (213) 745-6372

August 10, 2023

Matt Richards City of Vernon 4963 Soto St. Vernon, CA 90058

Report No.: 2308012 Project Name: Malburg Generating Station Weekly

Dear Matt Richards,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on August 02, 2023.

The test results in this report are performed in compliance with ELAP accreditation requirements for the certified parameters. The laboratory report may not be produced, except in full, without the written approval of the laboratory.

The issuance of the final Certificate of Analysis takes precedence over any previous Preliminary Report. Preliminary data should not be used for regulatory purposes. Authorized signature(s) is provided on final report only.

If you have any questions in reference to this report, please contact your Positive Lab Service coordinator.

Project Manager


#### **Certificate of Analysis**

Page 2 of 2

Report Date: 08/10/23

PLS Report No.: 2308012

Submitted: 08/02/23

File #:74548

City of Vernon 4963 Soto St. Vernon, CA 90058

Attn: Matt Richards

Phone: (323) 476-3626 FAX:(323) 476-3640

Project: Malburg Generating Station Weekly

Analyte	Results	Flag	D.F.	Units	PQL	Pre	p/Test Method	Prepared	Analyzed	Ву	Batch
Total Dissolved Solids	5660		1	mg/L	5.0	-	SM 2540C	08/07/23	08/08/23	VC	BH3090
			Q	uality (	Contro	ol Data	3				
						Spike	Source	%REC	RPD		
Analyte	Res	ult	POL	L	Inits	Level	Result %REC	Limits	RPD Limi	: Ç	ualifier

Blank		Prepared: 0	B/07/23 Ana	lyzed: 08/08	/23						
Total Dissolve	d Solids	ND	5.0	mg/L							
LCS		Prepared: 0	B/07/23 Ana	lyzed: 08/08	/23						
Total Dissolve	d Solids	59.0	5.0	mg/L	50.00		118	80-120			
Duplicate	Source: 2308012-01	Prepared: 0	8/07/23 Ana	lyzed: 08/08	3/23						
Total Dissolve	d Solids	5640	5.0	mg/L		5660			0.442	5	

#### **Notes and Definitions**

NA Not Applicable

ND Analyte NOT DETECTED at or above the reported limit(s)

NR Not Reported

MDL Method Detection Limit

PQL Practical Quantitation Limit

Fick Owen

Authorized Signature(s)

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	hington Bl	vd., Lo	s Angeles	, CA 900	21				-		DAT	Е <u>Ø</u>	2-23	РА	GE: OF
LAB SERVICE	[213] 748	5312	FAX (213	ij / 45-63	12					FIL	E NO.:		j	LAB N	10.: <i>1408</i> )12
CLIENT NAME: CITY OF VERNON	PROJE	CT N.	AME/NO	).	MALBUI	RG GENEF	RATING S	TATION '	VEEKLY	P.C	.NO.			A	AIRBILL NO:
ADDRESS: 4963 SOTO ST. VERNON CA 90058									ANA	ALYSE	S REQ	UEST	ED	(	DBSERVED TEMP <u>(-6と</u>
PROJECT MANAGER MATT RICHARDS	PHONE	NO:			FAX	NO:	-								CORRECTED TEMP: 1.82
SAMPLER NAME: JOHN BARIE	SIGNA	<b>TURE</b>	: <b>J</b>											1	THERMO ID: 60
TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=	48Hour;	(ETC	.) N=Nor	mal									ŧ		
CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; F	Perlastic;	G=G	lass; V=	=VOA V	/ial; (	)=Oth	er								
UST PROJECT: Y N GLOBAL ID#:															
SAMPLE DATE TIME SAMPLE DESCRIPTION		MA	TRIX	1	TAT	CONT	AINER	ş						5	SAMPLE CONDITIONS/
ID SAMPLED SAMPLED	WATER	SOIL	SLUDGE	OTHER		#	TYPE	TD							CONTAINER/COMMENTS
8223 B20 COOLING TOWER BLOWDOWN	X				N	1	Р	X							
											_				
											+				
											_				
		<u> </u>						_				<u> </u>			
Relinquished by (Signature Name):	Receive	d by (S	Signature	& Nam	e):			Date:			ne:		SAM	IPLE 1	DISPOSITION
[	V U		Oh Jr	>∩e			(	<u> </u>	۷.3		20		1. Sam	iples retu	rned to client? Yes No
Relinquished by (Signature& Name):	Receive	d by (S	Signature	& Nam	.e):			Date:		Tu	ne:		2. Sam	iples will	l not be stored over 30 days,
								_					unless	addition	al storage time is requested
Relinquished by (Signature& Name):	Receive	d by (S	Signature	& Nam	e):			Date:		Tu	ne:		3. Stor	age time	requested:days,
													By:		Date:
SPECIAL INSTRUCTION: Arrived at the lab $\mathscr{C}_{2}$	-22	[-0]													
PRESERVATIVE 1-HNO3 2-H2SO4 3-HCL 4- 7INC ACE			- 6-NH4	BUFF	-R 7-	OTHE	R				•••				



August 14, 2023

Matt Richards City of Vernon 4963 Soto St. Vernon, CA 90058

Report No.: 2308064 Project Name: Malburg Generating Station Weekly

Dear Matt Richards,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on August 07, 2023.

The test results in this report are performed in compliance with ELAP accreditation requirements for the certified parameters. The laboratory report may not be produced, except in full, without the written approval of the laboratory.

The issuance of the final Certificate of Analysis takes precedence over any previous Preliminary Report. Preliminary data should not be used for regulatory purposes. Authorized signature(s) is provided on final report only.

If you have any questions in reference to this report, please contact your Positive Lab Service coordinator.

Project Manager



Page 2 of 2

Report Date: 08/14/23

PLS Report No.: 2308064

Submitted: 08/07/23

File #:74548

City of Vernon 4963 Soto St. Vernon, CA 90058

Attn: Matt Richards

Phone: (323) 476-3626 FAX:(323) 476-3640

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tower	Blowdown Wa	ter (23(	)8064-C	)1) Sam	pled: 01	3/07/23	08:20 Received	: 08/07/23			
Analyte	Results	Flag	D.F.	Units	PQL	Prer	p/Test Method	Prepared	Analyzed	Ву	Batch
Total Dissolved Solids	5190		1	mg/L	5.0	-	SM 2540C	08/07/23	08/08/23	VC	BH30901
			Q	uality (	Contro	ol Data	ļ				

					Spike	Source		%REC		RPD	
Analyte		Result	PQL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch BH30901	••••••••••••••••••••••••••••••••••••••										
Blank		Prepared:	08/07/23	Analyzed: 08/08	1/23						
Total Dissolved	Solids	ND	5.0	mg/L							
LCS		Prepared:	08/07/23	Analyzed: 08/08	/23						
Total Dissolved	Solids	59.0	5.0	mg/L	50.00		118	80-120			
Duplicate	Source: 2308012-01	Prepared:	08/07/23	Analyzed: 08/08	1/23						
Total Dissolved	Solids	5640	5.0	mg/L		5660			0.442	5	

#### **Notes and Definitions**

NA Not Applicable

ND Analyte NOT DETECTED at or above the reported limit(s)

NR Not Reported

MDL Method Detection Limit

PQL Practical Quantitation Limit

Environmental Laboratory Accreditation Program Certificate No. 1131, Mobile Lab No. 2534, LACSD No. 10138

Rick Owen Parties

Authorized Signature(s)

				1 AT -		GTOD	X7 4 3		NT A T	VOT	C D	TOT	DOT					
	ΔP	OS	TIVE 781 Fast Was	IIN Of hington B	VU. In	SI UD s Anneles	• Y AI 5. CA 900	ND A 121	MAI	7821	экі	υŲU	es i	<b>ה</b> א ת	rr.R	7.7 2	р	AGE: / OF )
		AB S	ERVICE	[213] 74	5-5312	FAX (213	8] 745-63	72					FI	LE NO.:	. L. <u> </u>	10)	LAB	NO .: THORMAY
CLIENI	NAME:	CITY OF	F VERNON	PROJE	CT N	AME/NO	).	MALBU	RG GENEI	RATING S	TATION	WEEKLY	P.	0.NO.				AIRBILL NO:
ADDRE	SS:	4963 SO	TO ST. VERNON CA 90058									AN	ALYS	ES REO	UEST	TED		OBSERVED TEMP / 02
PROJEC	CT MANA	GER	MATT RICHARDS	PHONE	NO:			FAX	NO:									CORRECTED TEMP: 1.2 %
SAMPL	ER NAMI	E:	JOHN BARIE	SIGNA	TURE	: T	~											THERMO ID: 60
TAT (Tu	ırn-Arour	nd-Time):	0=Same Day; 1=24 Hour; 2≕	48Hour;	(ETC	.) N=Nor	mal											
CONTA	INER TY	PES: B=E	Brass; E=Encore/Easy Draw; P	=Plastic	; G=G	lass; V=	=VOA V	/ial; (	D=Oth	er								
UST PR	OJECT:	Y N	GLOBAL ID#:															
SAMPLE	DATE	TIME	SAMPLE DESCRIPTION		MA	TRIX		TAT	CONT	AINER								SAMPLE CONDITIONS/
ю	SAMPLED	SAMPLED		WATER	SOIL	SLUDGE	OTHER		#	ТҮРЕ	TDS							CONTAINER/COMMENTS
	8723	9820	COOLING TOWER BLOWDOWN	x				Ň	1	Р	X							
	-																	
										ŀ								
Relinqui	shed by (S	ignature&	Name):	Receive	d by (S	Signature	& Nam	e):			Date:		Т	ime:		SAM	IPLE	DISPOSITION
_	MA	-		75 (	John	Gore				9	$\gamma_{\mathcal{V}}$	5	С	1820		1. Sam	nples re	sturned to client? Yes No
Relinqui	, shed by (S	ignature&	Name):	Receive	d by (S	Signature	& Nam	.e):			Date:		Т	ime:		2. San	nples w	ill not be stored over 30 days,
		-														unless	additic	onal storage time is requested
Relinqui	shed by (S	ignature&	Name):	Receive	d by (S	Signature	& Nam	e):			Date:		Т	ime:		3. Stor	rage tin	ne requested:days,
																By: _		Date:
SPECIA	L INSTR	UCTION	•															
			Arrived at the lab $B_{ij}$	125	D9.	50												
PRESE	RVATIVE	1-HNO3	2-H2SO4 3-HCL 4- ZINC ACE	TATE 5	-NaOl	- 16-NH4	BUFF	-R 7-	OTHE	R				····				



August 21, 2023

Matt Richards City of Vernon 4963 Soto St. Vernon, CA 90058

Report No.: 2308123 Project Name: Malburg Generating Station Weekly

Dear Matt Richards,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on August 14, 2023.

The test results in this report are performed in compliance with ELAP accreditation requirements for the certified parameters. The laboratory report may not be produced, except in full, without the written approval of the laboratory.

The issuance of the final Certificate of Analysis takes precedence over any previous Preliminary Report. Preliminary data should not be used for regulatory purposes. Authorized signature(s) is provided on final report only.

If you have any questions in reference to this report, please contact your Positive Lab Service coordinator.

Project Manager



Page 2 of 2

Report Date: 08/21/23

PLS Report No.: 2308123

Submitted: 08/14/23

File #:74548

City of Vernon 4963 Soto St. Vernon, CA 90058

Attn: Matt Richards

Phone: (323) 476-3626 FAX:(323) 476-3640

Project: Malburg Generating Station Weekly

Sample ID: Co	oling Tower Blowdow	n Wat	er (230	8123-6	01) Sam	pled: 0	8/14/23	08:55 R	eceived:	08/14/23				
Analyte	Re	sults	Flag	D.F.	Units	PQL	Pre	p/Test Met	hod	Prepared	Anal	yzed	Ву	Batch
Total Dissolv	ed Solids 41	B60		1	mg/L	5.0	-	SM	2540C	08/17/23	08/1	8/23	VC	BH32102
				Q	uality	Contro	ol Data	3						
Analyte		Resu	lt.	PQL	1	Jnits	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Q	ualifier
Batch BH32102	••													
Blank		Prep	ared: 08,	/17/23	Analyzed	: 08/18/	23							
Total Dissolved	Solids	ND		5.0	r	ng/L								
LCS		Prep	ared: 08,	/17/23	Analyzed	: 08/18/	23							
Total Dissolved	Solids	48.0	)	5.0	r	ng/L	50.00		96.0	80-120				
Duplicate	Source: 2308123-01	Prep	ared: 08,	/17/23	Analyzed	: 08/18/	23							
Total Dissolved	Solids	507	)	5.0	r	ng/L		4860			4.06	5		

#### **Notes and Definitions**

NA Not Applicable

ND Analyte NOT DETECTED at or above the reported limit(s)

NR Not Reported

MDL Method Detection Limit

PQL Practical Quantitation Limit

Rick Owen Par

Authorized Signature(s)

				IN OF	' CU	STOD	YAN	ND A	NAI	LYSI	S RI	EQU	EST		0			
			<b>TRVICE</b> 781 East Wash	hington Bl (213) 749	vd., Lo 5-5312	s Angeles FAX (213	;, CA 900  ] 745-63	21 72					FII	DAT E NO.:	Е <u>С</u> и		PA LAB I	AGE:OF NO.: 2308   23
CLIENT	NAME:	CITY OF	VERNON	PROJE	CT N.	AME/NO	).	MALBUI	RG GENEI	RATING ST	TATION	WEEKLY	Р.С	).NO.			,	AIRBILL NO:
ADDRES	SS:	4963 SOT	TO ST. VERNON CA 90058									AN	ALYSE	S REQ	UEST	'ED	1	OBSERVED TEMP
PROJEC	T MANA	GER	MATT RICHARDS	PHONE	NO:			FAXN	NO:									CORRECTED TEMP: 43-4
SAMPLI	ER NAMI	E:	JOHN BARIE	SIGNA	TURE	: L-												THERMO ID:
TAT (Tu	rn-Arour	nd-Time):	0=Same Day; 1=24 Hour; 2=-	48Hour;	(ETC	.) N=Nor	mal											
CONTA	NER TY	PES: B=E	Brass; E=Encore/Easy Draw; P	=Plastic:	G=G	lass; V=	-VOA V	/ial; (	)=Oth	er								
UST PR	DJECT:	Y N	GLOBAL ID#:															
SAMPLE	DATE	TIME	SAMPLE DESCRIPTION		MA	TRIX	,	ТАТ	CONT	AINER								SAMPLE CONDITIONS/
D	SAMPLED	SAMPLED		WATER	SOIL	SLUDGE	OTHER		#	TYPE	SQL				<u> </u>			CONTAINER/COMMENTS
	12-14-23	2055	COOLING TOWER BLOWDOWN	x				N	1	Р	x							
																		····
									1									
Relinguis	shed by (S	ignature&	Name):	Receive	d by (S	Signature	& Nam	e):			Date:	·	Ti	me:		SAM	PLE	DISPOSITION
1	N AF	F F		ħ>	Joh	nBaze		-		E	3-Rel	}	OB .	5		1. Sam	ples ret	urned to client? Yes No
Relingui	shed by (S	ignature&	Name):	Receive	d by (S	Signature	& Nam	e):			Date		Ti	me:		2. Sam	iples wi	ll not be stored over 30 days,
	• 、	C			•	-										unless	addition	nal storage time is requested
Relingui	shed by (S		Name):	Receive	d by (	Signature	& Nam	e):			Date		Ti	me:		3. Stor	rage tim	e requested:days,
		U U	,		2 \	C		,								By:		Date:
SPECIA	L INSTR	UCTION	: Arrived at the lab	<u> </u>														
				う														
PRESE	RVATIVE	E 1-HNO3	2-H2SO4 3-HCL 4- ZINC ACE	TATE 5	-NaOl	H 6-NH4	BUFFI	=R 7-	OTHE	R								

Arrived at the lab 8-14-143 1/45



August 29, 2023

Matt Richards City of Vernon 4963 Soto St. Vernon, CA 90058

Report No.: 2308194 Project Name: Malburg Generating Station Weekly

Dear Matt Richards,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on August 23, 2023.

The test results in this report are performed in compliance with ELAP accreditation requirements for the certified parameters. The laboratory report may not be produced, except in full, without the written approval of the laboratory.

The issuance of the final Certificate of Analysis takes precedence over any previous Preliminary Report. Preliminary data should not be used for regulatory purposes. Authorized signature(s) is provided on final report only.

If you have any questions in reference to this report, please contact your Positive Lab Service coordinator.

Project Manager



Page 2 of 2

City of Vernon 4963 Soto St. Vernon, CA 90058

Attn: Matt Richards

File #:74548 Report Date: 08/29/23 Submitted: 08/23/23 PLS Report No.: 2308194

Phone: (323) 476-3626 FAX:(323) 476-3640

Project: Malburg Generating Station Weekly

Analyte	Results	Flag	D.F.	Units	PQL	Prep/	/Test Method	Prepared	Analyzed	By	Batch
Total Dissolved Solids	4560		1	mg/L	5.0	-	SM 2540C	08/23/23	08/24/23	SS	BH32409
			Qı	uality (	Contro	ol Data					

Analyte		Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BH3240	9										
Blank		Prepared: 0	)8/23/23 Ana	lyzed: 08/24	1/23						
Total Dissolved	1 Solids	ND	5.0	mg/L							
LCS		Prepared: 0	)8/23/23 Ana	lyzed: 08/24	1/23						
Total Dissolved	d Solids	59.0	5.0	mg/L	50.00		118	80-120			
Duplicate	Source: 2308186-01	Prepared: 0	)8/23/23 Ana	lyzed: 08/24	1/23						
Total Dissolved	d Solids	4750	5.0	mg/L		4760			0.0358	5	

#### Notes and Definitions

 NA
 Not Applicable

 ND
 Analyte NOT DETECTED at or above the reported limit(s)

NR Not Reported

MDL Method Detection Limit

PQL. Practical Quantitation Limit

k Fick Owen leer an

Authorized Signature(s)

CLIENT	NAME:	CITY OF	VERNON	PROJE	CT N.	AME/NO	).	MALBU	RG GENEI	RATING S	TATION W	TEEKLY	P.O.	NO.				AIRBILL NO:
ADDRES	S:	4963 SOT	TO ST. VERNON CA 90058									ANA	LYSES	REQU	JEST	ED		OBSERVED TEMP
PROJEC	T MANA	GER	MATT RICHARDS	PHONE	NO:			FAX	NO:									CORRECTED TEMP: 1122
SAMPL	R NAMI	E:	JOHN BARIE	SIGNA	TURE	-7-												THERMO ID: 66
TAT (Tu	rn-Arour	d-Time):	0=Same Day; 1=24 Hour; 2=	48Hour;	(ETC	) N=Nor	mal											
CONTA	NER TY	PES: B=B	brass; E=Encore/Easy Draw; P	=Plastic:	G=G	lass; V=	=VOA V	/ial; (	)=Oth	er								
UST PR	DJECT:	Y N	GLOBAL ID#:		 MA	TDIV		<b>T</b> 1 <b>T</b>										
D	DATE SAMPLED	SAMPLED	SAMPLE DESCRIPTION	WATER	SOIL	SUDCE	OTHER	IAI	CONT #	TVPE	DS							CONTAINER/COMMENTS
	2.73.22	=9122	COOLING TOWER BLOWDOWN	Y	SOIL	SLUDGE	OTHER	N	1	D	E V			+				CONTAINER/COMMENTS
	<i>J</i> • <i>J</i> • <i>J</i>		COOLING TOWER BEOWDOWN					11	1						1			
												Ť						
																		=
Relinquis	hed by (S	ignature&	Name):	Receive	d by (S	Signature	& Nam	e):			Date:		Tim	e:		SAM	PLE	DISPOSITION
	MA			SNS	- J	inn B	and			B	.23.	23	01	20		1. Sam	ples ret	turned to client? Yes No
Relinqui	hed by (S	ignature&	Name):	Receive	d by (S	Signature	& Nam	e):			Date:		Tim	e:		2. Sam	ples wi additio	ill not be stored over 30 days, onal storage time is requested
Relinqui	hed by (S	ignature&	Name):	Receive	d by (S	Signature	& Nam	e):			Date:		Tim	e:		3. Stora By:	age tim	ne requested:days,days,
SPECIA	L INSTR	UCTION	Arrived at the lab $B_2$	3-23	102	ŝ												



September 01, 2023

Matt Richards City of Vernon 4963 Soto St. Vernon, CA 90058

Report No.: 2308230 Project Name: Malburg Generating Station Weekly

Dear Matt Richards,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on August 28, 2023.

The test results in this report are performed in compliance with ELAP accreditation requirements for the certified parameters. The laboratory report may not be produced, except in full, without the written approval of the laboratory.

The issuance of the final Certificate of Analysis takes precedence over any previous Preliminary Report. Preliminary data should not be used for regulatory purposes. Authorized signature(s) is provided on final report only.

If you have any questions in reference to this report, please contact your Positive Lab Service coordinator.

Project Manage



Page 2 of 2

Report Date: 09/01/23

PLS Report No.: 2308230

Submitted: 08/28/23

File #:74548

City of Vernon 4963 Soto St. Vernon, CA 90058

Attn: Matt Richards

Phone: (323) 476-3626 FAX:(323) 476-3640

Project: Malburg Generating Station Weekly

			dia contracto estera		Najatno strategi	en e				Świestawaczas	50000000000000
Sample ID: Cooling Tower	Blowdown Wa	ter (230	8230-0	<b>1) Sam</b>	pled: O	3/28/23 0	8:25 Received	: 08/28/23		doceseecod	
Analyte	Results	Flag	D.F.	Units	PQL	Prep/	Test Method	Prepared	Analyzed	Ву	Batch
Total Dissolved Solids	5580		1	mg/L	5.0	_	SM 2540C	08/29/23	08/30/23	VC	BH33105
			Q	uality (	Contro	ol Data					

					Spike	Source	1. (0. 32. 33	%REC		RPD	
Analyte		Result	PQL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch BH33105	j										
Blank		Prepared: 0	8/29/23	Analyzed: 08/30	/23						
Total Dissolved	1 Solids	ND	5.0	mg/L.				vit <i>ia</i>			AU 9 4/4
LCS		Prepared: 0	8/29/23	Analyzed: 08/30	/23						
Total Dissolved	1 Solids	58.0	5.0	mg/L	50.00		116	80-120			
Duplicate	Source: 2308230-01	Prepared: 0	8/29/23	Analyzed: 08/30,	/23						
Total Dissolved	1 Solids	5700	5.0	mg/L		5580			2.13	5	
Duplicate	Source: 2308241-01	Prepared: 0	8/29/23	Analyzed: 08/30	/23						
Total Dissolved	1 Solids	4590	5.0	mg/L		4800			4.58	5	

#### **Notes and Definitions**

NA Not Applicable

ND Analyte NOT DETECTED at or above the reported limit(s)

NR Not Reported

MDL Method Detection Limit

PQL Practical Quantitation Limit

Fick Owen Par

Authorized Signature(s)

ADDRESS: 4963 SOTO ST. VERNON CA 90058         ANALYSES REQUEST         PROJECT MANAGER       MATT RICHARDS       PHONE NO:       FAX NO:       V         SAMPLE NAME:       JOHN BARIE       SIGNATURE:       FAX NO:       V         TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal         CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other         VST PROJECT: Y N GLOBAL ID#:	ED OBSERVED TEMP <u>1./ <sup>2</sup></u> CORRECTED TEMP: <u>1.3</u> THERMO ID: <u>6</u>
PROJECT MANAGER       MATT RICHARDS       PHONE NO:       FAX NO:         SAMPLER NAME:       JOHN BARIE       SIGNATURE:	CORRECTED TEMP: 1/3 THERMO ID:
SAMPLER NAME:       JOHN BARIE       SIGNATURE:	THERMO ID:
TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour; 2=48Hour; (ETC.) N=Normal         CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other         UST PROJECT: Y N GLOBAL ID#:	
CONTAINER TYPES: B=Brass; E=Encore/Easy Draw; P=Plastic; G=Glass; V=VOA Vial; O=Other         UST PROJECT: Y N GLOBAL ID#:	
UST PROJECT: Y N GLOBAL ID#:	
SAMPLE       DATE       TIME       SAMPLE DESCRIPTION       MATRIX       TAT       CONTAINER         ID       SAMPLED       SAMPLED       water       Soil       Sludge       other       #       TYPE $\beta$ B: 20:22 $032$ cooling tower blowdown       X       N       1       P       X       Image: Cooling tower blowdown       X       Image: Cooling tower blowdown       N       1       P       X       Image: Cooling tower blowdown       Image:	
ID     SAMPLED     SAMPLED     WATER     SOIL     SLUDGE     OTHER     #     TYPE     H       Bugger     USUK     COOLING TOWER BLOWDOWN     X     N     1     P     X	SAMPLE CONDITIONS/
SUG12 COOLING TOWER BLOWDOWN X N 1 P X	CONTAINER/COMMEN
	SAMPLE DISPOSITION
$A = \frac{1}{2} \left( \frac{1}{2} + \frac{1}{2} +$	1. Semples returned to alignt? Ver No.
Alinguicked ky (Simeture & Name):	2. Samples will not be stored ever 20 days
Received by (Signature & Name). Date. Thie.	2. Samples will not be stored over 50 days,
Palinguished by (Signature & Name): Date: Time:	2. Storage time requested:
Received by (Signature & Name). Date. Time.	Bur Date:
	Duto



September 13, 2023

Matt Richards City of Vernon 4963 Soto St. Vernon, CA 90058

Report No.: 2309035 Project Name: Malburg Generating Station Weekly

Dear Matt Richards,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on September 07, 2023.

The test results in this report are performed in compliance with ELAP accreditation requirements for the certified parameters. The laboratory report may not be produced, except in full, without the written approval of the laboratory.

The issuance of the final Certificate of Analysis takes precedence over any previous Preliminary Report. Preliminary data should not be used for regulatory purposes. Authorized signature(s) is provided on final report only.

If you have any questions in reference to this report, please contact your Positive Lab Service coordinator.

Project Manager



Page 2 of 2

City of Vernon 4963 Soto St. Vernon, CA 90058 File #:74548 Report Date: 09/13/23 Submitted: 09/07/23 PLS Report No.: 2309035

Attn: Matt Richards Phone: (323) 476-3626 FAX:(323) 476-3640

Project: Malburg Generating Station Weekly

Analyte	Results	Flag	D.F.	Units	PQL	Pre	p/Test Method	Prepared	Analyzed	Ву	Batch
Total Dissolved Solids	4500		1	mg/L	5.0	-	SM 2540C	09/11/23	09/12/23	VC	BI3121
			Q	uality (	Contro	ol Data	l				
						Spike	Source	%REC	RPD		
Analyte	Resi	ult	POL	l	Inits	Level	Result %RE	C Limits	RPD Limi	: C	Jualifier

**************************************	na nýžer pres oprovácie na vreve vistov postá chel ne	an a	eren der berkenten er bekannen.				Alexandra (g. anarara)	Sector and the sector grant processing			and the second of the second
Blank		Prepared: 0	9/11/23 An	alyzed: 09/12	/23						
Total Dissolved	Solids	ND	5.0	mg/L							
LCS		Prepared: 0	9/11/23 An	alyzed: 09/12	/23						
Total Dissolved	Solids	59.0	5.0	mg/L	50.00		118	80~120			
Duplicate	Source: 2309035-01	Prepared: 0	9/11/23 An	aiyzed: 09/12	/23						
Total Dissolved	Solids	4450	5.0	mg/L		4500			1.30	5	

#### Notes and Definitions

NA Not Applicable

ND Analyte NOT DETECTED at or above the reported limit(s)

NR Not Reported

MDL. Method Detection Limit

PQL Practical Quantitation Limit

Environmental Laboratory Accreditation Program Certificate No. 1131, Mobile Lab No. 2534, LACSD No. 10138

Rick Diven Par lier

Authorized Signature(s)

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		n	ITIVE <sup>Cha</sup>	IN OF	F CU	STOD	DY AN	ND A	NAI	LYSI	S RI	EQU	JES	T		_			
			🛛 🗳 💙 🖵 781 East Was	hington B	lvd., Lo	s Angeles	s, CA 900	121							DATE	: 1*	7.23	Р	AGE: OF
		AB SI	ERVICE	[213] 74	5-5312	FAX (213	3) 745-63	72						FILE	NO.:			LAB	NO.1309035
CLIENT	NAME:	CITY OI	F VERNON	PROJE	CT N	AME/NO	<b>)</b> .	MALBU	RG GENEI	RATING S	TATION	WEEKL	.Y	P.O.N	10.				AIRBILL NO:
ADDRE	SS:	4963 SOT	FO ST. VERNON CA 90058									AN	JALY	YSES	REOU	EST	ED		OBSERVED TEMP 1.6 °C
PROIE	T MANA	GFR	MATT RICHARDS	PHONE	NO			FAYP	NO-										CORRECTED TEMP: 1-8
SAMDI	ED NAMI			SIGNA	TIDE	. T		TAAI	10.										
TAT (T-			9-Same David 1-24 Haure 2-	AOTTama	TURE (ETC														
	Irn-Aroun	ia-1 ime):	<u>0=Same Day;</u> 1=24 Hour; 2=	48H0UF;	(EIC	.) IN=INOT	mai												
CONTA	INER TY	PES: B=E	Brass; E=Encore/Easy Draw; F	=Plastic	; G=G	lass; V=	=VOA V	/1al; (	J=Oth	er									
UST PR	OJECT:	Y N TIME	GLOBAL ID#:		 MA	 TRIX		TAT	CONT	AINED									SAMPLE CONDITIONS/
5AMILE m	CAMBI ED	CAMPLED	SAM DE DESCRITTION	WATER	SOT	SUDCE	OTUER		#	TVDE	SO								CONTAINED/COMMENTS
	G. 1 1 2	Res -		WAILK	3012	SECDUE	OTHER	N	1	D									CONTAINENCOMMENTS
	1.003	<u>DOS</u>	COOLING TOWER BLOWDOWN	A				IN	1	r								<u> </u>	
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	<u> </u>	<u> </u>																	
┣───			1		<u> </u>														
Relinqui	shed by (S	ignature&	Name):	Receive	d by <u>(</u> S	Signature	& Nam	e):			$\mathcal{O}_{\mathcal{O}}$			Time	:		SAM	PLE	DISPOSITION
	/	m		30		vm.	Gene				l'	123		H	205		1. Sam	iples re	turned to client? Yes No
Relinqui	shed by (S	ignature&	Name):	Receive	d by (S	Signature	& Nam	.e):			Date			Time	:		2. Sam	ples w	ill not be stored over 30 days,
																	unless	additio	onal storage time is requested
Relinqui	shed by (S	ignature&	Name):	Receive	d by (S	Signature	& Nam	e):			Date			Time	:		3. Stor	age tin	ne requested:days,
																	Ву:		Date:
SPECLA	L INSTR	UCTION	•																
			Arrived at the lab 9-7	23 C	945	/													
PRESE	RVATIVE	1-HNO3	2-H2SO4 3-HCL 4- ZINC ACE	TATE 5	-NaOl	16-NH4	BUFF	ER 7-	OTHE	R									



September 15, 2023

Matt Richards City of Vernon 4963 Soto St. Vernon, CA 90058

Report No.: 2309057 Project Name: Malburg Generating Station Weekly

Dear Matt Richards,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on September 11, 2023.

The test results in this report are performed in compliance with ELAP accreditation requirements for the certified parameters. The laboratory report may not be produced, except in full, without the written approval of the laboratory.

The issuance of the final Certificate of Analysis takes precedence over any previous Preliminary Report. Preliminary data should not be used for regulatory purposes. Authorized signature(s) is provided on final report only.

If you have any questions in reference to this report, please contact your Positive Lab Service coordinator.

Project Manager



Page 2 of 2

File #:74548 Report Date: 09/15/23 Submitted: 09/11/23 PLS Report No.: 2309057

City of Vernon 4963 Soto St. Vernon, CA 90058

Attn: Matt Richards

Phone: (323) 476-3626 FAX:(323) 476-3640

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tow	er Blowdown V	Vater (23	09057-0	1) San	npled: O	9/11/23	08:20 R	eceived:	09/11/23				
Analyte	Results	Flag	D.F.	Units	PQL	Pre	p/Test Met	hod	Prepared	Anai	yzed	Ву	Batch
Total Dissolved Solids	4260		1	mg/L	5.0	-	SM	2540C	09/11/23	09/1	2/23	VC	BI31215
			Q	uality	Contro	ol Data	1						
						Spike	Source		%REC		RPD		
Analyte	R	esult	PQL		Units	Level	Result	%REC	Limits	RPD	Limit	Q	ualifier
Batch BI31215													
Blank	F	repared: 09	/11/23	Analyzed	1: 09/12/	23							
Total Dissolved Solids		ND	5.0		mg/L								
LCS	F	repared: 09	)/11/23	Analyzed	l: 09/12/	23							
Total Dissolved Solids		59.0	5.0		mg/L	50.00		118	80-120				
Duplicate Source:	2309035-01	repared: 09	/11/23	Analyzed	l: 09/12/	23							
Total Dissolved Solids		4450	5.0		mg/L		4500			1.30	5		

#### **Notes and Definitions**

 NA
 Not Applicable

 ND
 Analyte NOT DETECTED at or above the reported limit(s)

 NR
 Not Reported

MDL Method Detection Limit

PQL Practical Quantitation Limit

Fick Owen Parlier

Authorized Signature(s)

	M			IN OF	r CU	STOE	Y AI	ND A	NAI	LYSI	S RI	EQU	EST					
	<u>y</u> r	U3	781 East Was	shington B	lvd., Lo	s Angeles	5, CA 90(	)21				•		DAT	E:[·]	1-23	Р	PAGE: OF
		AB SI	ERVICE	[213] 74	5-5312	FAX (213	3) 745-63	172					FU	LE NO.:			LAB	NO.: 1309057
CLIENT	NAME:	CITY OF	VERNON	PROJE	CT N	AME/NO	Э.	MALBU	RG GENE	RATING S	TATION	WEEKLY	P.	D.NO.				AIRBILL NO:
ADDRE	SS:	4963 SOI	TO ST. VERNON CA 90058									AN.	ALYSI	ES REQ	UEST	FED		OBSERVED TEMP <u>€.8°</u>
PROJE	CT MANA	GER	MATT RICHARDS	PHONE	NO:			FAX	NO:									CORRECTED TEMP: 1.0°C
SAMPL	ER NAMI	E:	JOHN BARIE	SIGNA	TURE	: L	$\checkmark$											THERMO ID: <u>66</u>
TAT (TI	irn-Aroui	ıd-Time):	0=Same Day; 1=24 Hour; 2=	-48Hour;	(ETC	.) N=Nor	mal											
CONTA	INER TY	PES: B=B	crass; E=Encore/Easy Draw; I	Persic	; G=G	lass; V=	=VOA V	Vial; (	0=Oth	er								
UST PR	OJECT:	Y N	GLOBAL ID#:						1									
SAMPLE	DATE	TIME	SAMPLE DESCRIPTION		MA			TAT	CONT	AINER	SC							SAMPLE CONDITIONS/
<u> </u>	GALD	SAMPLED		WATER	SOIL	SLUDGE	OTHER	N	#	D								CONTAINER/COMMENTS
	1-14-5	0000	COOLING TOWER BLOWDOWN					11							-			
																$\square$		······································
<b> </b>																		
						<b> </b>			1	1								
Relinqui	shed by (S	ignature&	Name):	Receive	d by (S	Signature	& Nam	le):			Date:		Ti	me:		SAM	IPLE	DISPOSITION
	MA			Th~	$\sim$	tohy	Ban	!		9	1123		OSI	L-J		1. San	nples re	sturned to client? Yes No
Relinqui	shed by (S	ignature&	Name):	Receive	d by (S	Signature	& Nam	le):			Date:		Ti	me:		2. San	nples w	ill not be stored over 30 days,
																unless	additic	onal storage time is requested
Relinqui	shed by (S	ignature&	Name):	Receive	d by (S	Signature	& Nam	ie):			Date:		Ti	me:		3. Stor	rage tin	ne requested:days,
																Ву:		Date:
SPECIA	L INSTR	UCTION	Arrived at the lab	'n														
	m.1 / 2 mm.1 /		7 ipi	10	<u>)</u>				<u> </u>				:					
RESE	KVAIIVE	1-HNO3	2-H2SU4 3-HCL 4- ZINC ACI	IAIE 5	-NaOł	ч 6-NH4	BUFF	=K 7-	UTHE	к								



September 26, 2023

Matt Richards City of Vernon 4963 Soto St. Vernon, CA 90058

Report No.: 2309118 Project Name: Malburg Generating Station Weekly

Dear Matt Richards,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on September 19, 2023.

The test results in this report are performed in compliance with ELAP accreditation requirements for the certified parameters. The laboratory report may not be produced, except in full, without the written approval of the laboratory.

The issuance of the final Certificate of Analysis takes precedence over any previous Preliminary Report. Preliminary data should not be used for regulatory purposes. Authorized signature(s) is provided on final report only.

If you have any questions in reference to this report, please contact your Positive Lab Service coordinator.

Rick Owen Parlin Project Manager



Page 2 of 2

Report Date: 09/26/23

PLS Report No.: 2309118

Submitted: 09/19/23

File #:74548

City of Vernon 4963 Soto St. Vernon, CA 90058

Attn: Matt Richards

Phone: (323) 476-3626 FAX:(323) 476-3640

Project: Malburg Generating Station Weekly

Sample ID: Co	oling Tower Blowdo	wn Wat	er (230	9118-0	1) San	ipled: 0	9/19/23	07:55 R	eceived:	09/19/23				
Analyte	F	Results	Flag	D.F.	Units	PQL	Prej	o/Test Met	hod	Prepared	Anal	yzed	Ву	Batch
Total Dissolve	d Solids	4690		1	mg/L	5.0	-	SM	2540C	09/21/23	09/2	2/23	vc	BI32301
				Qı	uality	Contr	ol Data							
							Splke	Source		%REC		RPD		
- Analyte		Resi	llt	PQL		Units	Level	Result	%REC	Limits	RPD	Limit	Q	ualifier
Batch BI32301 -	•													
Blank		Prep	ared: 09,	/21/23	Analyzed	I: 09/22/	23							
Total Dissolved S	Solids	ND		5.0		mg/L								
LCS		Prep	ared: 09,	/21/23	Analyzed	l: 09/22/	23							
Total Dissolved S	Solids	54.0	)	5.0		mg/L	50.00		108	80-120				
Duplicate	Source: 2309118-01	L Prep	ared: 09,	/21/23	Analyzed	l: 09/22/	23							
Total Dissolved S	Total Dissolved Solids		D	5.0		mg/L		4690			4.65	5		

#### **Notes and Definitions**

NA Not Applicable

ND Analyte NOT DETECTED at or above the reported limit(s)

NR Not Reported

MDL. Method Detection Limit

PQL Practical Quantitation Limit

Rick Bloen Parties

Authorized Signature(s)

			ICTOI					C DI		DOT					
	Vashington E	r u Blvd., L	os Angele	<b>J Y</b> AJ s, CA 90	ND A 021	ANAI		5 KI	LQU	ESI	DAT	е: <u>9</u> 7	<i>.............</i>	PA	.GE: <u>(</u> OF <u>/</u>
	[213] /2	10-0312	- FAX (21	J 745-0	372					FIL	E NO.:			LAB N	10.: <u>0309118</u>
CLIENT NAME: CITY OF VERNON	PROJE	CT N	AME/N	0.	MALBU	RG GENE	RATING S	TATION	WEEKLY	P.0	.NO.			A	JRBILL NO:
ADDRESS: 4963 SOTO ST. VERNON CA 90058									AN	ALYSES	REQ	UEST	ED	c	DBSERVED TEMP
PROJECT MANAGER MATT RICHARDS	PHONE	NO:			FAX	NO:									CORRECTED TEMP: 1.6%
SAMPLER NAME: JOHN BARIE	SIGNA	TURE													HERMO ID: 60
TAT (Turn-Around-Time): 0=Same Day; 1=24 Hour;	2=48Hour:	(ETC	.) N=Noi	rmal											
CONTAINER TYPES: B=Brass; E=Encore/Easy Draw	; P=Plastic	; G=0	Glass; V	=VOA V	Vial: (	)=Oth	er								
UST PROJECT: Y N GLOBAL ID#:		·													
SAMPLE DATE TIME SAMPLE DESCRIPTIO	N N	MA	TRIX		TAT	CONT	AINER							s	AMPLE CONDITIONS/
ID SAMPLED SAMPLED	WATER	SOIL	SLUDGE	OTHER		#	TYPE	TDS						c	CONTAINER/COMMENTS
179.230755 COOLING TOWER BLOWDOW	N X			ļ	N	1	Р	x							
				L											
Relinquished by (Signature& Name): 사사	Receive	d by (	Signature	& Nam	e):		g	Date:	,	Tim	e:		SAM	PLE D	ISPOSITION
Relinquished by (Signature & Name)	Panoiura Banoiura	d by (		P. Marrie				<u>/ //</u>	<u></u>	<u> </u>	)		1. Sam	ples retur	ned to client? Yes No
reconquisited by (orginatureae reanic).	Receive	a oy (:	Signature	& Nam	e):			Date:		Tim	e:		2. Sam	ples will i	not be stored over 30 days,
Relinquished by (Signature & Nome)	D !	11. ((		• N	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~								unless :	additiona	l storage time is requested
rechniquished by (signaturee tvanie).	Receive	a by (:	Signature	& Nam	e):			Date:		Tim	e:		3. Stora	age time r	requested:days,
SPECIAL INSTRUCTION.													Ву:		Date:
Arrived at the lab	9.23 0	Rai	,												
PRESERVATIVE 1-HNO3 2-H2SO4 3-HCL 4- ZINC A	CETATE 5	-NaOF	16-NH4	BUFFF	R 7- (	OTHER	२								



October 03, 2023

Matt Richards City of Vernon 4963 Soto St. Vernon, CA 90058

Report No.: 2309157 Project Name: Malburg Generating Station Weekly

Dear Matt Richards,

.

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on September 25, 2023.

The test results in this report are performed in compliance with ELAP accreditation requirements for the certified parameters. The laboratory report may not be produced, except in full, without the written approval of the laboratory.

The issuance of the final Certificate of Analysis takes precedence over any previous Preliminary Report. Preliminary data should not be used for regulatory purposes. Authorized signature(s) is provided on final report only.

If you have any questions in reference to this report, please contact your Positive Lab Service coordinator.

Project Manager



Page 2 of 2

File #:74548 Report Date: 10/03/23 Submitted: 09/25/23 **PLS Report No.: 2309157** 

City of Vernon 4963 Soto St. Vernon, CA 90058

Attn: Matt Richards

Phone: (323) 476-3626 FAX:(323) 476-3640

Project: Malburg Generating Station Weekly

Sample ID: C	Cooling Tower Blowdo	wn Wat	er (230	9157-6	01) Sar	npled: 0	9/25/23	08:05 R	eceived:	09/25/23				
Analyte	I	Results	Flag	D.F.	Units	PQL	Pre	p/Test Met	hod	Prepared	Ana	lyzed	Ву	Batch
Total Dissolv	ved Solids	4800		1	mg/L	5,0	-	SM	2540C	09/28/23	09/2	29/23	VC	BI32910
				Q	uality	Contr	ol Data	Ì						
							Spike	Source		%REC		RPD		
Analyte		Resi	ılt	PQL		Units	Level	Result	%REC	Limits	RPD	Limit	Q	ualifier
Batch BI32910	)													
Blank		Prep	ared: 09,	28/23	Analyzea	f: 09/29/	23							
Total Dissolved	d Solids	ND		5.0		mg/L								
LCS		Prep	ared: 09	28/23	Analyzed	l: 09/29/	23							
Total Dissolved	d Solids	49.(	)	5.0		mg/L	50.00		98.0	80-120				
Duplicate	Source: 2309157-0	1 Prep	ared: 09,	28/23	Analyzed	l: 09/29/	23							
Total Dissolved	d Solids	481	0	5.0		mg/L		4800			0.243	5		
Duplicate	Source: 2309175-0	3 Prep	ared: 09	28/23	Analyzed	1: 09/29/	23							
Total Dissolved	d Solids	267	0	5.0		mg/L		2660			0.312	5		

#### **Notes and Definitions**

NA Not Applicable

ND Analyte NOT DETECTED at or above the reported limit(s)

NR Not Reported

MDL Method Detection Limit

PQL Practical Quantitation Limit

Rick Owen Var 401

Authorized Signature(s)

			TIVE CHA 781 East Was	IN OF hington B (213) 74!	7 CU Ivd., Lo 5-5312	STOD s Angeles FAX (21:	<b>PY AP</b> 5, CA 900 8] 745-63	ND A 121 172	NAI	LYSI	S RI	EQU	EST	DAT	е. <u>Д-</u> 2	25-23	PAGE: OF
CLIENT	NAME:	CITY OF	VERNON	PROJE	CT N	AME/N	).	MALBU	RG GENEI	RATING ST	TATION	WEEKLY	P.C	.NO.		, 	AIRBILL NO:
ADDRE	SS:	4963 SOT	TO ST. VERNON CA 90058									AN	ALYSE	S REQ	UEST	ED	OBSERVED TEMP 1.12
PROJE(	CT MANA	GER	MATT RICHARDS	PHONE	NO:			FAX	NO:								CORRECTED TEMP/-3"4
SAMPL	ER NAMI	E:	JOHN BARIE	SIGNA	TURE	: T											THERMO ID: 66
TAT (T	urn-Aroun	ıd-Time):	0=Same Day; 1=24 Hour; 2=	48Hour;	(ETC	.) N=Nor	mal										
CONTA	INER TY	PES: B==E	Brass; E=Encore/Easy Draw; P	=Plastic	; G=G	lass; V=	=VOA V	/ial; (	)=Oth	er							
UST PR	OJECT:	Y N	GLOBAL ID#:														Lot # 10BDH2221
SAMPLE	DATE	TIME	SAMPLE DESCRIPTION		MA	TRIX	1	TAT	CONT	AINER							SAMPLE CONDITIONS/
ID	SAMPLED	SAMPLED		WATER	SOIL	SLUDGE	OTHER		#	TYPE	TDS						CONTAINER/COMMENTS
	9:25:23	0805	COOLING TOWER BLOWDOWN	X	 			N	1	Р	x						
								ļ									
					1												
Relinqui	shed by (S	ignature&	Name):	Receive Fr-	d by (! J J	Signature ~~ Ga	& Nam	.e):	•	C	Date:	ruz	Tin ØE	ne: もく~		SAMI	PLE DISPOSITION ples returned to client? Yes No
Relinqui	shed by (S	ignature&	Name):	Receive	d by (	Signature	& Nam	e):			Date:		Tin	ie:		2. Samp	ples will not be stored over 30 days, additional storage time is requested
Relinqui	ished by (S	ignature&	Name):	Receive	d by (	Signature	& Nam	ie):			Date:		Tir	ne:		3. Stora By:	age time requested:days,Date:
SPECIA	AL INSTR	UCTION	Arrived at the lab 925	m3A	120				0705								

PRESERVATIVE 1-HNO3 2-H2SO4 3-HCL 4- ZINC ACETATE 5-NaOH 6-NH4 BUFFER 7- OTHER

Appendix C Operation Logs

#### Malburg Generating Station Appendix C, Table 1 Combustion Turbine Generator (CTG) Startup and Shutdown Events During Quarter 3, 2023

Shutdown

C.	ΤG	1
_		-

Date	Event Type <sup>1</sup>	Event Start	Event End	Duration (hrs:min)
7/17/2023	Cold Start	17:01	18:17	1:16
8/9/2023	Shutdown	0:01	0:10	0:09
8/15/2023	Cold Start	15:43	16:48	1:05
8/22/2023	Shutdown	0:00	0:08	0:08
8/28/2023	Cold Start	13:41	14:49	1:08
8/31/2023	Shutdown	22:15	22:24	0:09
9/12/2023	Cold Start	15:47	17:05	1:18
9/29/2023	Trip / Shutdown	7:42	7:42	0:00
		CTG 2		
Date	Event Type <sup>1</sup>	Event Start	Event End	Duration (hrs:min)

21:05

0:08

9/29/2023Cold Start15:4017:041:24<sup>1</sup> A startup event is defined as initiation of combustion until the system becomes emissions compliant, for<br/>consistency with the Title V Permit definitions.

20:57

301025124945\_5fce89e1

9/12/2023

#### Malburg Generating Station Appendix C, Table 2 Diesel Firewater Pump Testing Times During Quarter 3, 2023

Date	Time (hh:mm)	Start Hours	End Hours	Event Type	Hours of Operation
7/2/2023	19:34	368.8	369.3	Testing	0.5
7/9/2023	19:20	369.3	369.8	Testing	0.5
7/16/2023	20:19	369.8	370.3	Testing	0.5
7/23/2023	17:58	370.3	370.8	Testing	0.5
7/30/2023	16:45	370.8	371.3	Testing	0.5
8/6/2023	19:56	371.3	371.8	Testing	0.5
8/13/2023	17:50	371.8	372.3	Testing	0.5
8/21/2023	18:36	372.3	372.8	Testing	0.5
8/27/2023	20:46	372.8	373.3	Testing	0.5
9/3/2023	20:13	373.3	373.8	Testing	0.5
9/10/2023	21:38	373.8	374.3	Testing	0.5
9/17/2023	19:19	374.3	374.8	Testing	0.5
9/24/2023	20:48	374.8	375.3	Testing	0.5

Appendix D Diesel Fuel Oil Purchase Records

-	SC Commercial, LLC 1800 West Katella A	C, DBA SC Fuels						SALES REP PHONE:	TERMS: N30 : Todd Cripps 714-938-5714
	P.O. Box 14237, Ora	inge, CA 92863-4159						PC	#: QUOTE
	Ph: (800) 659-5823	Credit Inquiries: (888) SCFUELS E	xt. 6017					SHIP DAT	E: 12/31/5999
									ROM:
									SHIP VIA:
									WHSE: 101
	ACCT NO (Bill-t CITY OF VERNO 4305 SANTA FE ATTN: DEPARTM VERNON, CA 90 (323) 583-8811	o); DN AVE MENT D 0058	мy	ACCT NO (SI CITY OF VER 963 SOTO S PERNON, CA	11p-to) 0' NON-SOTO T 90058	I <b>-0001045 10</b> D ST-L	3L		
ΗΛ	M ITEM CODE	ITEM DESCRIPTION		QTY ORDERED	QTY DEI	PACKAGE	EXTENDED	UNIT PRICE	EXT PRICE
				ONDERED	DEL	DESC	QIY		
	O: TODD C /	POC:ROB 562-208-0808/ DEL H	OURS 8AM	- 2PM					
x	NA1993, DIESEL	FUEL, 3 PG III / CARGO TANK	<b>07</b>		$\cap$				
	422D055	DYED CARB ULS DIESEL		2.00		55 G DR	110.00 GALS	5.70	626.92
		TAXABLE USE ONLY - PENA TAXABLE USE	ALLY FOR	-	~			1	
		15 PPM OR LESS SULFUR - MAY	CONTAIN	1)/	SF	DAI	CH		
	Federal Lust	UP TO 5% BIODIESEL	e 11	Nor II		1 N N	0.00100		0.11
	Federal Oil Spill						0.00214	Ļ	0.24
	CA - AB 32 - DSI					7	0.00950	i.	1.05
	Fed Superfund Fe	P					0.00391		0.43
							5,71585	i	628.75
	04225120081005			1.00			EE OD CALS	10.52	1 072 60
	5	235120981		1.00		55 G DR	55.00 GALS	19.52	1,073.00
	CA Oil Recycling F	ee					0.24000	ř.	13.20
	CA Lube Fee						0.05000		2.75
						-	19.81000		1,089.55
	DRUMDEPOSITC	DRUM DEPOSIT FEE		3.00		MISC CHRG	3.00 EACH	25.00	75.00
	001				3 C				0.00
	FUELCHLUBE	FUEL SURCHARGE LUBES							9.92
	/RCFLUBE	REG COMPLIANCE FEE LUBES							12.95
							Private PTI State		
	**Prices quoted	are <u>not</u> firm and are subject to c	hange base	ed upon			Net Order	r: +	1,816.17
	product avai	lablity, quantity delivered and ma	irket fluctua	tions			Less Discourt	t. h	0.00
							Sales Tax	с.	153.71
							Order Tota	l:	1,969.88

SALES QUOTE

**ORDER NUMBER: 2425945** 

-----



**INVOICE DATE: 7/28/2023** DUE DATE: 8/27/2023 SHIP DATE: 7/28/2023

**SHIP VIA: 910** 

Page 1 of 1

**ORDER DATE: 7/6/2023 ORDER NUMBER: 2425945 CUSTOMER PO: 00240105** 

TERMS: N30

SALEPERSON: Todd Cripps 714-938-5714

01-0001045

ACCT NO (Bill-to): CITY OF VERNON 4305 SANTA FE AVE ATTN: DEPARTMENT D VERNON, CA 90058 (323) 583-8811

**-UELS**®

SC Commercial, LLC, DBA SC Fuels

P.O. Box 4159, Orange, CA 92863-4159

PLEASE REMIT ALL PAYMENTS TO:

Ph: (800) 659-5823 Credit Inquiries: (888) SCFUELS Ext.6017

1800 West Katella Ave, Suite 400

ORANGE, CA 92863-1237

P.O. BOX 14237

#### 01-0001045 103L ACCT NO (Ship-to)

CITY OF VERNON-SOTO ST-L 4963 SOTO ST VERNON, CA 90058

ITEM CODE		ITEM DESCRIPTION	QUANTITY ORDERED	QUA DELI	NTITY VERED	PACKAGE DESCRIPTION	EXTENDED QTY	UNIT PRICE	EXT PRICE
422D055	DYED CARB NON TAXABL PENALTY FO 15 PPM OR L CONTAIN UP TO	ULS DIESEL E USE ONLY - R TAXABLE USE ESS SULFUR - MAY TO 5% BIODIESEL	2 Whse:	2 101	2.00	55 G DR	110.00	) 6.10800	671.88
Federal Lust								0.00100	0.11
Federal Oil Spill								0.00214	0.24
CA - AB 32 - DSL								0.00950	1.05
Fed Superfund Fee	•							0.00391	0.43
								6.12455	673.71
CH235120981D05 5	CH DELO 400 235120981	) SAE 40	1 Whse:	1 101	.00	55 G DR	55.00	19.52000	1,073.60
М	то								
CA Oil Recycling Fe	ee							0.24000 0.05000	13.20 2.75
								19.81000	1,089.55
DRUMDEPOSITC 001	DRUM DEPO	SIT FEE	3 Whse:	3 101	8.00	MISC CHRG	3.00	25.00000	75.00
/FUELC	HLUBE	FUEL SURCHARGE LUBES							9.92
/RCFLU	IBE	REG COMPLIANCE FEE LUBES	3						12.95

Save time, hav onlined. View invoices, make havments and more	Net Invoice:	1,861.13
Sign up for the Customer Portal today. Email: creditinguiries@scfuels.com or Call 888-SCFuels	Less Discount:	0.00
Ext. 6017 or login to Customer Portal: https://customerportal.scfuels.com	Freight:	0.00
24-hour Emergency Response Call CHEMTREC: 800-424-9300	Sales Tax:	156.55
	Invoice Total:	2,017.68

- IN THE EVENT THAT THE ABOVE CHARGES ARE NOT PAID WHEN DUE, SC COMMERCIAL, LLC, DBA SC FUELS RESERVES THE RIGHT TO REFUSE FURTHER

- CHARGES TO THE ACCOUNT. A SERVICE CHARGE OF 1.5% PER MONTH{A.P.R. 18%} WILL APPLY TO ALL PAST DUE INVOICES.

- ERRORS IN PRICE, EXTENSION, AND ADDITION SUBJECT TO CORRECTION.

- It is the purchaser's responsibility to verify that all applicable taxes are being charged in accordance with fedral and state laws. - Prices shown on this invoice reflect discounts received for Payment by Cash, Check, or Electronic Funds Transfer (EFT). Payment by other means is subject to a 3% surcharge.

#### **INVOICE: 2425945-IN**

# Appendix E Excess Emission Reports

## Startup/Shutdown Excess Emissions Report

## U1 CO Startup/Shutdown



From:	07/01/2023 00:00	<b>To:</b> 09/	/30/2023 23:	59 <b>Faci</b>	lity Name:	Malburg	Generating	Station
Generated:	10/04/2023 20:02			Loca	tion:	Vernon,	California	
Tag Name:	U1_CO_LbPerHr_1M			SI = S	ampleInvalid, * = E	Excess Emission		
Total Operating Time: 1,168.05 Hours								
Non-Operatin	ıg Time: 1,039.95 Но	urs	Report Time:	2,208.00	Hours			

Unit Operation							
Event Period				Reason	Action		
Begin/End	Duration in Minute(s)	Lb/Event	Limit	Code - Description	Code - Description		

No excess emissions were found in the reporting period.

## Startup/Shutdown Excess Emissions Report U1 CO Startup/Shutdown



From:07/01/2023 00:00To:09/30/2023 23:59Facility Name:Malburg Generating StationGenerated:10/04/2023 20:02Location:Vernon, CaliforniaTag Name:U1\_CO\_LbPerHr\_1MSI = SampleInvalid, \* = Excess EmissionTotal Operating Time:1,168.05HoursNon-Operating Time:1,039.95HoursReport Time:2,208.00Hours

No invalid events were found in the reporting period.

## Startup/Shutdown Excess Emissions Report

## U1 NOx Startup/Shutdown



Unit Operation								
Event Period				Reason	Action			
Begin/End	Duration in Minute(s) Ll	_b/Event	Limit	Code - Description	Code - Description			

No excess emissions were found in the reporting period.


## U1 NOx Startup/Shutdown



From:	07/01/2023 00:	00 <b>To:</b>	09/30/2023 23:	59 Facility Nam	<b>ne:</b> Malburg	Generating Station	
Generated:	10/04/2023 20:	03		Location:	Vernon,	California	
Tag Name:	U1_NOXRECLM_Lb	PerHr_1M		<pre>SI = SampleInvalid,</pre>	<pre>SI = SampleInvalid, * = Excess Emission</pre>		
Total Opera <sup>.</sup>	ting Time:	1,168.	.05 Hours				
Non-Operatir	ng Time: 1,039.95	Hours	Report Time:	2,208.00 Hours			

No invalid events were found in the reporting period.

## U1 VOC Startup/Shutdown



From:	07/01/2023 00:00	<b>To:</b> 09	9/30/2023 23:	59 Facility Nam	<b>ne:</b> Malburg	Generating	Station
Generated:	10/04/2023 20:03			Location:	Vernon,	California	
Tag Name:	U1_VOC_LbPerHr_1	М		<pre>SI = SampleInvalid,</pre>	* = Excess Emission		
Total Operat	ing Time:	1,168.0	)5 Hours				
Non-Operatin	д Time: 1,039.95 H	ours	Report Time:	2,208.00 Hours			

Unit Operation								
Event Period				Reason	Action			
Duration in Begin/EndDuration in Minute(s)Lb/Event				Code - Description	Code - Description			

No excess emissions were found in the reporting period.

### U1 VOC Startup/Shutdown



From:07/01/2023 00:00To:09/30/2023 23:59Facility Name:Malburg Generating StationGenerated:10/04/2023 20:03Location:Vernon, CaliforniaTag Name:U1\_VOC\_LbPerHr\_1MSI = SampleInvalid, \* = Excess EmissionTotal Operating Time:1,168.05HoursNon-Operating Time:1,039.95HoursReport Time:2,208.00Hours

No invalid events were found in the reporting period.

#### Unit 1 - CO ppmvdc 1-hour during Normal Operation

 From:
 07/01/2023
 00:00
 To:
 09/30/2023
 23:59
 Facility Name:

 Generated:
 10/04/2023
 20:04
 Location:

Malburg Generating Station Vernon, California



Tag Name:U1\_CONormal\_Ppmvdc\_1HTotal Operating Time:1,172.00 Hour(s)Non-Operating Time:1,036.00 Hour(s)Report Time:2,208.00 Hour(s)

No Exclusions Allowed

Total Operating Time:	1,172.00 Hour(s)
Total Duration (Online only):	0.00 Hour(s)
Time in exceedance as a percentage of operating time:	0.00 %
Time in compliance as a percentage of operating time:	100.00 %

#### Unit 1 - NOx ppmvdc 1-hour during Normal Operation

 From:
 07/01/2023
 00:00
 To:
 09/30/2023
 23:59
 Facility Name:

 Generated:
 10/04/2023
 20:06
 Location:

Malburg Generating Station Vernon, California



Tag Name:U1\_NOxNormal\_Ppmvdc\_1HTotal Operating Time:1,172.00 Hour(s)Non-Operating Time:1,036.00 Hour(s)Report Time:2,208.00 Hour(s)

No Exclusions Allowed

Total Operating Time:	1,172.00 Hour(s)
Total Duration (Online only):	0.00 Hour(s)
Time in exceedance as a percentage of operating time:	0.00 %
Time in compliance as a percentage of operating time:	100.00 %

#### Unit 1 - VOC ppmvdc 1-hour during Normal Operation

 From:
 07/01/2023
 00:00
 To:
 09/30/2023
 23:59
 Facility Name:

 Generated:
 10/04/2023
 20:05
 Location:

Malburg Generating Station Vernon, California



Tag Name:U1\_VOCNormal\_Ppmvdc\_1HTotal Operating Time:1,172.00 Hour(s)Non-Operating Time:1,036.00 Hour(s)Report Time:2,208.00 Hour(s)

No Exclusions Allowed

Total Operating Time:	1,172.00 Hour(s)
Total Duration (Online only):	0.00 Hour(s)
Time in exceedance as a percentage of operating time:	0.00 %
Time in compliance as a percentage of operating time:	100.00 %

#### Unit 1 - CO ppmvdc 3-hour Rolling during Normal Operation

 From:
 07/01/2023 00:00
 To: 09/30/2023 23:59
 Facility Name:
 Malburg Generating Station

 Generated:
 10/04/2023 20:13
 Location:
 Vernon, California



Tag Name:U1\_C0\_3HrRoll\_Ppmvdc\_1HTotal Operating Time:1,172.00 Hour(s)Non-Operating Time:1,036.00 Hour(s)Report Time:2,208.00 Hour(s)Report Time:2,208.00 Hour(s)

No Exclusions Allowed

Total Operating Time:	1,172.00 Hour(s)
Total Duration (Online only):	0.00 Hour(s)
Time in exceedance as a percentage of operating time:	0.00 %
Time in compliance as a percentage of operating time:	100.00 %

## Quad K Excess Emissions Report

#### U1 NOX 4-Hour Events

From:07/01/202300:00To:09/30/202323:59Generated:10/04/202320:06

Facility Name: Location:

Malburg Generating Station Vernon, California



Tag Name:U1\_NOx4H\_Ppmvdc\_1HTotal Operating Time:1,172.00 Hour(s)Non-Operating Time:1,036.00 Hour(s)Report Time:2,208.00 Hour(s)Report Time:2,208.00 Hour(s)

No Exclusions Allowed

Total Operating Time:	1,172.00 Hour(s)
Total Duration (Online only):	0.00 Hour(s)
Time in exceedance as a percentage of operating time:	0.00 %
Time in compliance as a percentage of operating time:	100.00 %

## Startup/Shutdown Event Report

## U2 CO Startup/Shutdown Events



From:	07/01/2023 00	:00 <b>To:</b>	09/30/2023 23:	59 Facility Nam	e: Malburg	Generating	Station
Generated:	10/04/2023 20	:08		Location:	Vernon,	California	
Tag Name:	U2_CO_LbPerHr_	_1M		<pre>SI = SampleInvalid,</pre>	* = Excess Emission		
Total Operat	ing Time:	1,805	.43 Hours				
Non-Operatin	g Time: 402.57	Hours	Report Time:	2,208.00 Hours			

Unit Operation							
Event Period				Reason Action			
Begin/End	Duration in Minute(s)	Lb/Event	Limit	Code - Description	Code - Description		

No excess emissions were found in the reporting period.

## Startup/Shutdown Event Report

### U2 CO Startup/Shutdown Events From: 07/01/2023 00:00 To: 09/30/2023 23:59 Facility Name: Malburg Generating Station Generated: 10/04/2023 20:08 Location: Vernon, California Tag Name: U2\_CO\_LbPerHr\_1M SI = SampleInvalid, \* = Excess Emission Total Operating Time: 1,805.43 Hours Non-Operating Time: 402.57 Hours Report Time: 2,208.00 Hours

No invalid events were found in the reporting period.



2

## U2 NOx Startup/Shutdown



Unit Operation								
Event Period				Reason Action				
Begin/End	Duration in Minute(s)	Lb/Event	Limit	Code - Description	Code - Description			

No excess emissions were found in the reporting period.



## U2 NOx Startup/Shutdown



From:	07/01/2023 00:	:00 <b>To:</b>	09/30/2023 23:	59 Facility Name:	Malburg Generating St	ation
Generated:	10/04/2023 20:	:10		Location:	Vernon, California	
Tag Name:	U2_NOXRECLM_Lb	PerHr_1M		<pre>SI = SampleInvalid, *</pre>	= Excess Emission	
Total Operat	ting Time:	1,805	.43 Hours			
Non-Operatin	іg Time: 402.57	Hours	Report Time:	2,208.00 Hours		

No invalid events were found in the reporting period.

## Startup/Shutdown Event Report

## U2 VOC Startup/Shutdown Events



From:	07/01/2023 00:00	) <b>то:</b> 09	/30/2023 23	:59 Facility Name	e: Malburg Generating Station
Generated:	10/04/2023 20:10	)		Location:	Vernon, California
Tag Name:	U2_VOC_LbPerHr_2	M		<pre>SI = SampleInvalid,</pre>	* = Excess Emission
Total Operat	ting Time:	1,805.43	3 Hours		
Non-Operatir	ıg Time: 402.57 н	ours	Report Time:	2,208.00 Hours	

Unit Operation								
Event Period Reason Action								
Duration in Begin/End Minute(s) Lb/Event Limit			Limit	Code - Description	Code - Description			

No excess emissions were found in the reporting period.

## Startup/Shutdown Event Report

## U2 VOC Startup/Shutdown Events



From:07/01/2023 00:00To:09/30/2023 23:59Facility Name:Malburg Generating StationGenerated:10/04/2023 20:10Location:Vernon, CaliforniaTag Name:U2\_VOC\_LbPerHr\_1MSI = SampleInvalid, \* = Excess EmissionTotal Operating Time:1,805.43HoursNon-Operating Time:402.57HoursReport Time:2,208.00Hours

No invalid events were found in the reporting period.

#### Unit 2 - CO ppmvdc 1-hour during Normal Operation

 From:
 07/01/2023
 00:00
 To:
 09/30/2023
 23:59
 Facility Name:

 Generated:
 10/04/2023
 20:11
 Location:

Malburg Generating Station Vernon, California



Tag Name:U2\_CONormal\_Ppmvdc\_1HTotal Operating Time:1,807.00 Hour(s)Non-Operating Time:401.00 Hour(s)Report Time:2,208.00 Hour(s)

No Exclusions Allowed

Total Operating Time:	1,807.00 Hour(s)
Total Duration (Online only):	0.00 Hour(s)
Time in exceedance as a percentage of operating time:	0.00 %
Time in compliance as a percentage of operating time:	100.00 %

#### Unit 2 - NOx ppmvdc 1-hour during Normal Operation

 From:
 07/01/2023
 00:00
 To:
 09/30/2023
 23:59
 Facility Name:

 Generated:
 10/04/2023
 20:09
 Location:

Malburg Generating Station Vernon, California



Tag Name:U2\_NOxNormal\_Ppmvdc\_1HTotal Operating Time:1,807.00 Hour(s)Non-Operating Time:401.00 Hour(s)Report Time:2,208.00 Hour(s)

No Exclusions Allowed

Total Operating Time:	1,807.00 Hour(s)
Total Duration (Online only):	0.00 Hour(s)
Time in exceedance as a percentage of operating time:	0.00 %
Time in compliance as a percentage of operating time:	100.00 %

#### Unit 2 - VOC ppmvdc 1-hour during Normal Operation

 From:
 07/01/2023
 00:00
 To:
 09/30/2023
 23:59
 Facility Name:

 Generated:
 10/04/2023
 20:12
 Location:

Malburg Generating Station Vernon, California



Tag Name:U2\_VOCNormal\_Ppmvdc\_1HTotal Operating Time:1,807.00 Hour(s)Non-Operating Time:401.00 Hour(s)Report Time:2,208.00 Hour(s)

No Exclusions Allowed

Total Operating Time:	1,807.00 Hour(s)
Total Duration (Online only):	0.00 Hour(s)
Time in exceedance as a percentage of operating time:	0.00 %
Time in compliance as a percentage of operating time:	100.00 %

#### Unit 2 - CO ppmvdc 3-hour Rolling during Normal Operation

 From:
 07/01/2023 00:00
 To: 09/30/2023 23:59
 Facility Name:
 Malburg Generating Station

 Generated:
 10/04/2023 20:13
 Location:
 Vernon, California



Tag Name:U2\_CO\_3HrRoll\_Ppmvdc\_1HTotal Operating Time:1,807.00 Hour(s)Non-Operating Time:401.00 Hour(s)Report Time:2,208.00 Hour(s)

No Exclusions Allowed

Total Operating Time:	1,807.00 Hour(s)
Total Duration (Online only):	0.00 Hour(s)
Time in exceedance as a percentage of operating time:	0.00 %
Time in compliance as a percentage of operating time:	100.00 %

## Quad K Excess Emissions Report

#### U2 NOX 4-Hour Events

From:07/01/202300:00To:09/30/202323:59Generated:10/04/202320:12

Facility Name: Location:

Malburg Generating Station Vernon, California



Tag Name:U2\_NOx4H\_Ppmvdc\_1HTotal Operating Time:1,807.00 Hour(s)Non-Operating Time:401.00 Hour(s)Report Time:2,208.00 Hour(s)

No Exclusions Allowed

Total Operating Time:	1,807.00 Hour(s)
Total Duration (Online only):	0.00 Hour(s)
Time in exceedance as a percentage of operating time:	0.00 %
Time in compliance as a percentage of operating time:	100.00 %

# Appendix F Ammonia Slip Exceedance Reports



August 31, 2023

#### SUBJECT: NOTICE OF INTENT TO FILE Form 500-N for Deviation Event with Excess Emissions on 08/21/2023 Vernon Public Utilities, SCAQMD Facility ID 195802

Dear Mr. Revilla:

Attached is Form 500-N for an August 21, 2023 deviation event resulting in excess emissions of ammonia at Vernon Public Utilities, Facility ID 195802. Supporting documentation is also provided, where warranted.

Please contact Matt Richards at (323) 583-8811 ext. 378 (email address: <u>MRichards@cityofvernon.org</u>) or Elyse Engel at (702) 354-2648 (email address: <u>Elyse.Engel@jacobs.com</u>) if you have any questions or need additional information.

Thank you,

 $\leq$ 

Todd Dusenberry General Manger of Public Utilities

Cc: Lisa Umeda Matt Richards Elyse Engel

Encl: Form 500-N Attachment A – Additional Form 500-N Descriptions Attachment B – Ammonia Calculations and Compliance Demonstration

> Vernon Public Utilities 4305 Santa Fe Avenue, Vernon, CA, 90058 323.583.8811 | CityofVernon.org

J.	South Coast A Form 50 Title V	ir Quality Management District ) <b>0-N</b> - <b>Deviations, Emergen</b>	cies & Breakdowns		SCAQMD- Compliance & E P.C Diamond Bar, CAS	Mail To Enforcemen D. Box 494 91765-094	
South C	calling AQMD	eport is in addition to requirements to v at 1-800-288-7664 (1-800-CUT-SMOG) (	rerbally report certain types of incidents. Verbal re or AQMD enforcement personnel.	eports may be made by	Tel: (909 www	9) 396-3385 w.aqmd.go	
Sectio	on I - Operator	Information					
1. Faci	lity Name (Business	Name of Operator That Appears On Perr	mit): 2. Valid	AQMD Facility ID (Avail	able On Permit Or Invoice	Issued By	
Ve	rnon Public U	tilities	AQME	<b>)</b> ):	195802		
				-			
3. Add	ress:	4963 S Soto Street	Streat Address				
(winc		Vernon	Olicel Address	CA	90058		
		Venion	City	State	Zip		
4 Mail	ing Address'	4305 Santa Fe Avenue	~		·		
(if di	fferent from Item 3)		Street Address				
		Vernon		CA	90058		
			City	State	Zip		
5. Prov	vide the name, title,	and phone number of the person to co	intact for further information:				
	Ν	latt Richards	Utilities Operations Manage	er (62	6) 393-3748		
		Name	Title		Phone #		
Sectio	on II - Reporting	g of Breakdowns, Deviations, a	and Emergencies				
1. This	written notification	is to report a(n):					
Тур	e of Incident		Verbal Report Due*	Written Report Due			
a.	Emergency unde	r Rule 3002(g)	Within 1 hour of discovery Within 2 workin exceeded.		lays from when the emission limit was		
b.	Breakdown unde     Rule 430 (N     Rule 2004 (f     Rule 218 (N     [See Rule 2'	r: on-RECLAIM) RECLAIM) on-RECLAIM) 18(f)(3)]	For Rules 430 & 2004 - Within 1 hour of discovery. For Rule 218 – Within 24 hours or next business day for failure/shutdown exceeding 24 hours	For Rules 430 & 200 breakdown is correct start of the breakdow granted. For Rule 218 - With r	4 - Within 7 calendar days ed, but no later than 30 da n, unless a written extension equired semi-annual report	after ys from on is ts.	
c.	Deviation with ex [See Title V Perm	cess emissions nit, Section K, Condition No. 22B]	Within 72 hours of discovery of the deviation or shorter reporting period if required by an applicable State or Federal Regulation.	Within 14 days of dis	covery of the deviation.		
d. (	Other Deviation [See Title V Perm	nit, Section K, Condition Nos. 22D & 23]	None	With required semi-a	nnual monitoring reports.		
		Coor Teulor		00/04/00000	04.47		
2. The	incident was first di	scovered by: Sean Taylor	Nameon	08/21/2023			
		Operator #5		08/22/2022	02:10	) ( m	
3. The	incident was first re	ported by: Operator #5 Name c	of AQMD Staff Person on	Date		O AM	
a. ( b. ( 4. Whe	<ul> <li>Via Phone</li> <li>In Person</li> <li>In did the incident a</li> </ul>	ctually occur?08/21/2023	Notification Number <u> O1:00</u> Time PM	(Required):_759883	1		
	Received By:		Assigned By:	Inspector:			
	Date/Time Receive	d:	Date/Time Assigned: Dat Date Reviewed Inspector Report: Dat		ime Received Assignment:		
AOMD	Date Delivered To 1	Feam:			te Inspected Facility		
USE	Team:	Sector:	Breakdown/Deviation Notification No.	Date Comple	pleted Report:		
	Recommended Acti	ion: Cancel Notification Gran	t Relief Issue NOV No	Other:			
	Final Action:	Cancel Notification Gran	nt Relief Issue NOV No	Other:			

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5.	Has the incident stopped? a. • Yes. on	08/21/2023	04:00	• AM	b. O No						
		Date	Time	O PM							
6.	What was the total duration of the incident?	20	03	_							
7	For equipment with an operating cycle as	Days	Hours								
1.	when was the end of the operating cycle du	uring which the incident occurred?			-	O AM					
8.	Describe the incident and identify each piece of equipment (by permit, application, or device number) affected. Attach photos (when available) of the affected equipment and attach additional pages as necessary. See Attachment A.										
9.	The incident may have resulted in a: a. 🔀 Violation of Permit Condition(s):	Section D, Condition No. A	A195.4								
	b. Violation of AQMD Rule(s):										
10.	What was the probable cause of the inciden See Attachment A.	nt? Attach additional pages as necess	ary.								
11.	Did the incident result in excess emissions	? O No • Yes (Complete the f	ollowing and attach calculations.)								
	VOCIbs	NOxibs	SOx	lbs	H2S	lbs					
	COlbs	□ PMIbs	X Other:C	0.510 <sub>lbs</sub> N	H3	pollutant					
12. 13. 14. 15. 16. See	□ CO										
For	Title V Facilities ONLY: I also certify	under penalty of law that that I am the	e responsible official for this fact	ility as defined ir	n AQMD Regulation	n XXX.					
1. 8	ignature of Responsible Official:		2. Title of Responsible Official	:							
	TVS	×	General Mar	nager of Ver	rnon Public U	Itilities					
3. F	rint Name: Todd Duser	nberry	4. Date: 8/31/2	3							
5. F	Phone #:		6. Fax #:								
	(323) 583-	8811									
7./	ddress of Responsible Official:										
	4305 Santa Fe	Avenue	Vernon	CA	9	0058					
Stre	et#	Cit	у	State	Zip						

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Attachment A: Additional Form 500-N Descriptions

This attachment presents additional information regarding the ammonia (NH<sub>3</sub>) excess emissions event which occurred on August 21, 2023, as prompted by Form 500-N.

# 8. Describe the incident and identify each piece of equipment (by permit, application, or device number) affected. Attach photos (when available) of the affected equipment and attach additional pages as necessary.

For the hours of 01:00 AM through 03:59 AM on August 21, 2023, the Selective Catalytic Reduction (SCR) System for Gas Turbine No. 1 (Device IDs C33 and D27, respectively) emitted NH<sub>3</sub> at 5.91 parts per million by volume (ppmv), 5.38 ppmv, and 5.09 ppmv. These are in excess of the hourly 5 ppmv limit established in Title V Permit, Section D, Condition No. A195.4. NH<sub>3</sub> emissions returned to compliance with the 04:00 AM to 04:59 AM hour.

#### 10. What was the probable cause of the incident? Attach additional pages as necessary.

On August 21, 2023, the facility was subject to heavy rainfall resulting from Hurricane Hillary. During this timeframe, the oxygen readings for Gas Turbine No. 1 (Device ID D27) fell from an average of 14.9 percent down to 14.5 percent beginning at 01:00 AM. This drop in oxygen caused the calculated NH<sub>3</sub> slip to nearly double. The NH<sub>3</sub> flow did not significantly increase during this timeframe. The NH<sub>3</sub> slip was back under 5 ppmv starting at 04:00 AM, which aligns with the time at which oxygen readings also returned to expected values.

Although there was a drop in oxygen during this incident, the oxygen analyzers did pass their daily calibrations on August 20, 2023 and again on August 21, 2023, immediately following this incident. This demonstrates that the oxygen analyzers were operating properly.

Since the most recent NH<sub>3</sub> slip test was conducted in May 2023, Gas Turbine No. 1 has been operating with an NH<sub>3</sub> slip correction factor of 3.41, which is quite high compared to historical values. Because Gas Turbine No. 1 was operating at close to zero NH<sub>3</sub> slip during testing, there was only a small absolute difference between the site's calculated NH<sub>3</sub> slip and the source tester's reference method calculations, but a high multiplier.

The use of this high NH<sub>3</sub> slip correction factor has resulted in Gas Turbine No. 1 having a much smaller operational window. Therefore, even acceptable variations in oxygen, with no notable changes in NH<sub>3</sub> flow or other operational constraints, provide a greater propensity for causing exceedances of the 5 ppmv NH<sub>3</sub> slip limit established in Title V Permit, Section D, Condition No. A195.4.

#### 11. Did the incident result in excess emissions?

As documented in Form 500-N, the event did result in 0.51 pounds of excess NH<sub>3</sub> emissions. Calculations are provided in Attachment B.

13. Describe the steps taken to correct the problem (i.e., steps taken to mitigate excess emissions, equipment repairs, etc.) and the preventative measures employed to avoid future incidents. Include photos of the failed equipment if available and attach additional pages as necessary.

As noted in the response to Question 10 above, the problem was corrected when the oxygen readings returned to expected values. Moving forward, the oxygen analyzer will continue to be calibrated daily to assure it is operating within its specifications. The site's Control Room Operators will also operate Gas Turbine No. 1 with additional attention to variations in measured oxygen. Lastly, the site intends to evaluate and discuss the representativeness of the May 2023 NH<sub>3</sub> slip correction factor with the South Coast Air Quality Management District (SCAQMD).

# 15. Did the incident result from operator error, neglect or improper operation or maintenance procedures?

As noted in the response to Question 10 above, this incident resulted from heavy rainfall causing a slight variation in measured oxygen, although still within acceptable limits. During this incident, the oxygen analyzer was working properly, as determined through its routine calibrations, and Gas Turbine No. 1 was operating under normal conditions.

#### 16. Has the facility returned to compliance?

As documented in Form 500-N, the facility has returned to compliance. Demonstration of this return to compliance is provided in Attachment B.

## Attachment B: Ammonia Calculations and Compliance Demonstration

## Malburg Generating Station, Facility ID 195802 Gas Turbine No. 1 NH<sub>3</sub> Emission Calculations

Date of Data: August 21, 2023

#### **Excess Emissions Mass Determination**

Title V Permit Condition No. A195.4: NH<sub>3</sub> concentration will not exceed 5 ppmv averaged over 1 hour.

#### **Calculation Methodology:**

 $ppmv_{Exceedance} = ppmv_{NH3} - ppmv_{Limit}$   $\dot{m}_{NH3} = (ppmv_{NH3} / 10^6) \times (MW_{NH3} / MW_{flue gas}) \times \dot{m}_{flue gas dry}$   $\dot{m}_{Exceedance} = (ppmv_{Exceedance} / 10^6) \times (MW_{NH3} / MW_{flue gas}) \times \dot{m}_{flue gas dry}$ 

#### Constants:

ppmv <sub>Limit</sub>	5	ppmv
MW flue gas	29.303	lb/lb-mol
MW NH3	17.03	lb/lb-mol

			DAHS Data			Calculation of NH <sub>3</sub> Emissions	Calculation of NH <sub>3</sub> Emissions Exceedance
Date	Time	ppmv <sub>NH3</sub>	ṁ <sub>flue gas dry</sub> (lb/hr)	NO <sub>x</sub> ppmvdc	ṁ <sub>scr NH3</sub> (lb/hr)	ṁ <sub>NH3</sub> (lb/hr)	ṁ <sub>Exceedance</sub> (lb/hr) Methodology
8/21/2023	0:00	3.21	657,128	1.83	25.9	N/A	0.00
8/21/2023	1:00	5.91	628,266	1.80	27.1	2.16	0.33
8/21/2023	2:00	5.38	648,744	1.75	28.3	2.03	0.14
8/21/2023	3:00	5.09	633,224	1.78	26.8	1.87	0.03
8/21/2023	4:00	3.73	663,688	1.73	27.5	N/A	0.00
						Total	0.51

#### **Return to Compliance**

As shown in the table above, the  $NH_3$  concentration returns to below the 5 ppmv limit of Condition No. A195.4 immediately following the 3:00 hour. As shown in the table above, the  $NO_x$  concentration does not exceed the 2 ppmvdc limit of Condition No. A195.5 during this time period.



September 12, 2023

#### NOTICE OF INTENT TO FILE Form 500-N for Deviation Event with Excess Emissions on 08/30/2023 Vernon Public Utilities, SCAQMD Facility ID 195802

Dear Mr. Revilla:

Attached is Form 500-N for an August 30, 2023 deviation event resulting in excess emissions of ammonia at Vernon Public Utilities, Facility ID 195802. Supporting documentation is also provided, where warranted.

Please contact Matt Richards at (323) 583-8811 ext. 378 (email address: <u>MRichards@cityofvernon.org</u>) or Elyse Engel at (702) 354-2648 (email address: <u>Elyse.Engel@jacobs.com</u>) if you have any questions or need additional information.

Thank you,

Todd Dusenberry General Manager of Public Utilities

Cc: Lisa Umeda Matt Richards Elyse Engel

Encl: Form 500-N Attachment A – Additional Form 500-N Descriptions Attachment B – Ammonia Calculations and Compliance Demonstration

> Vernon Public Utilities 4305 Santa Fe Avenue, Vernon, CA, 90058 323.583.8811 | CityofVernon.org

South	South Coast A Form 50 Title V - "This written re calling AQMD	ir Quality Management District <b>D-N</b> <b>Deviations, Emergen</b> eport is <u>in addition to</u> requirements to at 1-800-288-7664 (1-800-CUT-SMOG)	verbally report certain types of incidents. Ver or AQMD enforcement personnel.	bal reports may be made by	SCAQMD- Compliand Diamond Bar, Tel	Mail T & & Enforceme P.O. Box 494 CA 91765-094 : (909) 396-33 www.aqmd.g
Secti	ion I - Operator	Information				
1. Fac	cility Name (Business	Name of Operator That Appears On Pe	mit): 2. V	alid AQMD Facility ID (Avai	lable On Permit Or Inv	oice Issued By
Ve	ernon Public U	tilities		GIVID).	195802	
2 44	dranas	4963 S Soto Street				
(wh	nere incident occurred)		Street Address			
		Vernon		CA	90058	
			City	State	Zip	
4. Mai	iling Address:	4305 Santa Fe Avenue	<b>0</b>			
(if d	different from Item 3)	Vernon	Street Address	CA	90058	
			City	State	Zip	
	M	att Richards	Utilities Operations Man	ager (62	26) 393-3748	
0 1		Name			FIDILE #	
Secti	ion II - Reporting	of Breakdowns, Deviations,	and Emergencies			
1. Thi	is written notification	is to report a(n):				
Ty	pe of Incident		Verbal Report Due"	Written Report Due		
a.	Emergency unde	r Rule 3002(g)	Within 1 hour of discovery	Within 2 working day exceeded.	ys from when the emis	sion limit was
b.	Breakdown under Rule 430 (No Rule 2004 (F Rule 218 (No See Rule 21	r: pn-RECLAIM) RECLAIM) pn-RECLAIM) (8(f)(3)]	For Rules 430 & 2004 - Within 1 hour of discovery. For Rule 218 – Within 24 hours or next busin day for failure/shutdown exceeding 24 hours	For Rules 430 & 200 breakdown is correc start of the breakdow granted. ness s For Rule 218 - With	04 - Within 7 calendar o ted, but no later than 3 wn, unless a written ex required semi-annual	lays after i0 days from tension is reports.
c.	Deviation with ex [See Title V Perm	cess emissions it, Section K, Condition No. 22B]	Within 72 hours of discovery of the deviation shorter reporting period if required by an applicable State or Federal Regulation.	or Within 14 days of dis	scovery of the deviatio	n.
d.	Other Deviation [See Title V Perm	it, Section K, Condition Nos. 22D & 23]	None	With required semi-a	annual monitoring repo	rts.
2. The	e incident was first di	scovered by: Mark Yeaman	on	08/30/2023	03:56	O AM
			Name	Date	lime	(• PM
3. The	e incident was first re	ported by: Operator #9	onon	09/01/2023	10:41	O AM
a.	Via Phone	Name	or AQMD Staff Person	Date	lime	O PM
	0			76100	7	
b.	In Person		Notification Nur	nber (Required): 70123	r	
4. Wh	en did the incident a	ctually occur? 08/30/202 Date	3 <u>11:00</u> • AM Time • PM			
	Received By:		Assigned By:	Inspector:	and the star	
	Date/Time Received	ti	Date/Time Assigned:	Date/Time R	eceived Assignment:	
AOMD	Date Delivered To T	eam:	Date Reviewed Inspector Report:     Date Inspector Report:       Breakdown/Deviation Notification No.     Date Content		Inspected Facility:	
USE	Team:	Sector:			pleted Report:	
	Recommended Activ	on: Cancel Notification Gra	nt Relief Issue NOV No	Other:		
	Final Action:	Cancel Notification Gra	nt Relief Issue NOV No.	Other		
	Recommended Activ	on: Cancel Notification Gra Cancel Notification Gra	nt Relief Issue NOV No nt Relief Issue NOV No		Other:	Other:

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5.	Has the incident stopped? a.  Yes on:	08/30/2023		12:00	O AM	b. O No			
	and the monant of opposition of the off	Date		Time	PM				
6.	What was the total duration of the incident?_	0		01					
7	For oquinment with an encreting evelopes de	Days		Hours					
7.	when was the end of the operating cycle dur	ing which the incident occurred?					O AM		
8.	Date Time O PM Describe the incident and identify each piece of equipment (by permit, application, or device number) affected. Attach photos (when available) of the affected equipment and attach additional pages as necessary. See Attachment A.								
9.	The incident may have resulted in a: a. K Violation of Permit Condition(s): Section D, Condition No. A195.4								
10.	b. Violation of AQMD Rule(s): What was the probable cause of the incident? Attach additional pages as necessary. See Attachment A.								
11.	Did the incident result in excess emissions?	No     Yes (Complete the	following and at	tach calculations.)					
	VOCIbs	NOxlbs		Dx	lbs	H2S	lbs		
	COlbs	PMlbs		her:	Ibs Se	ee Attachment A	pollutant		
<ul> <li>12. For RECLAIM facilities Subject to Rule 2004 (i)(3) ONLY: If excess emissions of NOx and/or SOx were reported in Item 11, do you want these emissions to be counted when determining compliance with your annual allocations? <ul> <li>a. ○ Yes, for: ○ NOX ○ SOX</li> <li>b. ○ No, for: ○ NOX ○ SOX</li> <li>lf box 12(b) above is checked, include all information specified in Rule 2004(i)(3)(B) and (C), as applicable.</li> </ul> </li> <li>13. Describe the steps taken to correct the problem (i.e., steps taken to mitigate excess emissions, equipment repairs, etc.) and the preventative measures employed to avoid future incidents. Include photos of the failed equipment if available and attach additional pages as necessary. See Attachment A.</li> <li>14. Was the facility operating properly prior to the incident? <ul> <li>a. ○ Yes</li> <li>b. ○ No, because:</li> </ul> </li> <li>15. Did the incident result from operator error, neglect or improper operation or maintenance procedures? <ul> <li>a. ○ Yes</li> <li>b. ○ No, because:</li> <li>See Attachment A.</li> </ul> </li> </ul> <li>16. Has the facility returned to compliance? <ul> <li>a. ○ Yes (Attach evidence such as emissions calculations, contemporaneous operating logs or other credible evidence.)</li> </ul> </li>									
Se	ction III - Certification Statement								
I certify under penalty of law that based on information and belief formed after reasonable inquiry, the statements and information in this document and in all attachments and other materials are true, accurate, and complete.									
For	r Title V Facilities ONLY: I also certify u	under penalty of law that that I am th	e responsible	official for this facilit	y as defined in	AQMD Regulation XXX.	_		
1. 8	Signature of Responsible Official: 2. Title of Responsible Official: General Manager of Vernon Public Utilities						S		
3. F	Print Name: Todd Dusen	berry	4. Date:	9-12-	202:	3			
5. F	Phone #:		6. Fax #:						
	(323) 583-8	811							
7.	Address of Responsible Official:								
	4305 Santa Fe A	Avenue		Vernon	CA	90058			
Stre	et #	Ci	ty		State	Zip			

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Attachment A: Additional Form 500-N Descriptions

This attachment presents additional information regarding the ammonia (NH<sub>3</sub>) excess emissions event which occurred on August 30, 2023, as prompted by Form 500-N.

# 8. Describe the incident and identify each piece of equipment (by permit, application, or device number) affected. Attach photos (when available) of the affected equipment and attach additional pages as necessary.

For the hour of 11:00 AM through 11:59 AM on August 30, 2023, the Selective Catalytic Reduction (SCR) System for Gas Turbine No. 1 (Device IDs C33 and D27, respectively) emitted NH<sub>3</sub> at 5.07 parts per million by volume (ppmv). This is conservatively being reported as an exceedance of the hourly 5 ppmv limit established in Title V Permit, Section D, Condition No. A195.4, despite the calculated NH<sub>3</sub> concentration being within the sensitivity of the site's analyzers. NH<sub>3</sub> emissions returned to compliance with the 12:00 PM to 12:59 PM hour.

#### 10. What was the probable cause of the incident? Attach additional pages as necessary.

On August 30, 2023, the facility conducted linearity testing between the hours of 5:00 AM and 11:00 AM. There was a slight increase in NH<sub>3</sub> flow through the SCR for Gas Turbine No. 1 while the Continuous Emissions Monitoring System (CEMS) was out of service during testing, which temporarily remained slightly above normal operating values following the CEMS' return to service. This variability is typical during testing activities, but not during routine operations. Although the site's Control Room Operators reduced the NH<sub>3</sub> flow, the adjustment was not made quickly enough to bring the one-hour average NH<sub>3</sub> slip below the 5 ppmv limit. The NH<sub>3</sub> slip was back under 5 ppmv starting with the 12:00 PM hour.

Since the most recent NH<sub>3</sub> slip test was conducted on May 16, 2023, Gas Turbine No. 1 has been operating with an NH<sub>3</sub> slip correction factor of 3.41, which is quite high compared to historical values. Because Gas Turbine No. 1 was operating at close to zero NH<sub>3</sub> slip during testing, there was only a small absolute difference between the site's calculated NH<sub>3</sub> slip and the source tester's reference method calculations, but a high multiplier.

The use of this high NH<sub>3</sub> slip correction factor has resulted in Gas Turbine No. 1 having a much smaller operational window. Any variation in NH<sub>3</sub> flow, in conjunction with this higher factor, increases the probability of an exceedance of the 5 ppmv NH<sub>3</sub> slip limit established in Title V Permit, Section D, Condition No. A195.4 and requires faster response times from operators.

#### 11. Did the incident result in excess emissions?

Based on data evaluation conducted following verbal notification of this incident to the South Coast Air Quality Management District (SCAQMD) on September 1, 2023, the calculated excess emissions were 0.0 pounds of NH<sub>3</sub>. This is documented in Form 500-N with supporting calculations provided in Attachment B.

13. Describe the steps taken to correct the problem (i.e., steps taken to mitigate excess emissions, equipment repairs, etc.) and the preventative measures employed to avoid future incidents. Include photos of the failed equipment if available and attach additional pages as necessary.

As noted in the response to Question 10 above, the problem was corrected when the  $NH_3$  flow through the SCR was reduced following the completion of testing activities. Moving forward, the site's Control Room Operators will adjust the  $NH_3$  flow through the SCR more quickly following completion of testing activities. The site will also continue to calibrate its  $NH_3$  flow transmitter at least annually to ensure the accuracy of  $NH_3$  flow measurements; the most recent calibration was conducted in May 23, 2023. Additionally, the site intends to evaluate and discuss the representativeness of the May 16, 2023  $NH_3$  slip correction factor with the SCAQMD.

# 15. Did the incident result from operator error, neglect or improper operation or maintenance procedures?

As noted in the response to Question 10 above, this incident resulted from an increase in NH<sub>3</sub> flow through the SCR. Although the operator reduced the NH<sub>3</sub> flow, the adjustment was not made quickly enough to keep the one-hour average NH<sub>3</sub> slip in compliance with the 5 ppmv limit, particularly given the smaller operational window for Gas Turbine No. 1.

#### 16. Has the facility returned to compliance?

As documented in Form 500-N, the facility has returned to compliance. Demonstration of this return to compliance is provided in Attachment B.

Attachment B: Ammonia Calculations and Compliance Demonstration

## Malburg Generating Station, Facility ID 195802 Gas Turbine No. 1 NH<sub>3</sub> Emission Calculations

Date of Data: August 30, 2023

#### **Excess Emissions Mass Determination**

Title V Permit Condition No. A195.4: NH<sub>3</sub> concentration will not exceed 5 ppmv averaged over 1 hour.

#### **Calculation Methodology:**

ppmv <sub>Exceedance</sub> = ppmv <sub>NH3</sub> - ppmv <sub>Limit</sub>

 $\dot{m}_{NH3} = (ppmv_{NH3} / 10^{6}) \times (MW_{NH3} / MW_{flue gas}) \times \dot{m}_{flue gas} dry$  $\dot{m}_{Exceedance} = (ppmv_{Exceedance} / 10^{6}) \times (MW_{NH3} / MW_{flue gas}) \times \dot{m}_{flue gas} dry$ 

#### Constants:

ppmv <sub>Limit</sub>	5	ppmv		
MW flue gas	29.303	lb/lb-mol		
MW NH3	17.03	lb/lb-mol		

DAHS Data					Calculation of NH <sub>3</sub>	NH <sub>3</sub> Concentration	Calculation of NH <sub>3</sub>	
					Emissions	Above Permit Limit	<b>Emissions Exceedance</b>	
								m <sub>Exceedance</sub> (lb/hr)
Date	Time	ppmv <sub>NH3</sub>	ṁ <sub>flue gas dry</sub> (lb/hr)	NO <sub>x</sub> ppmvdc	ṁ <sub>scR NH3</sub> (lb/hr)	m <sub>NH3</sub> (lb/hr)	ppmv <sub>NH3</sub>	Methodology
8/30/2023	9:00	3.41	668,770	1.80	25.0	1.3	N/A	N/A
8/30/2023	10:00	2.83	667,620	1.80	24.6	1.1	N/A	N/A
8/30/2023	11:00	5.07	674,024	1.20	26.8	2.0	0	0.0
8/30/2023	12:00	0.57	671,686	1.78	21.9	0.2	N/A	N/A
8/30/2023	13:00	2.50	669,113	1.80	23.6	1.0	N/A	N/A
							Total	0.0

#### **Return to Compliance**

As shown in the table above, the  $NH_3$  concentration returns to below the 5 ppmv limit of Condition No. A195.4 immediately following the 11:00 hour. As shown in the table above, the  $NO_x$  concentration does not exceed the 2 ppmvdc limit of Condition No. A195.5 during this time period.