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City of VERNON CALIFORNIA

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 MRichards@cityofvernon.org or (323) 583-8811 x378.

Thank you,

Todd Dusenberry
General Manager of Vernon Public Utilities

Copies: Lisa Umeda
Matt Richards

Enclosure: MGS 2023 Q3 Compliance Report

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

Document no: 2301025124945_5fce89e1
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Appendices

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Acronyms and Abbreviations

CEC	California Energy Commission
CEMS	continuous emissions monitoring system
CO	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
NH_3	ammonia
NOx	nitrogen oxides
PM_{10}	particulate matter with aerodynamic diameter less than or equal to 10 microns
$PM_{2.5}$	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.

Table 2-1. Required Quarterly Compliance Report Documentation

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_{10}) 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_3), 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.

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_3 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_3 emissions are also calculated via the CEMS on an hourly basis and confirmed to comply with the NH_3 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.

Appendix A
MGS Emission Calculations

Malburg Generating Station
Quarterly Compliance Report
Appendix A, Table 1

Reporting Period: **Quarter 3 2023**

Table 1. Quarterly Emissions - July 1, 2023 through September 30, 2023

Source	Quarterly Emissions (lb/quarter) NOx	CO	VOC	SOx	$PM_{10}/PM_{2.5}$	NH_3
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**

Malburg Generating Station
Quarterly Compliance Report
Appendix A, Table 2

Reporting Period: **Quarter 3 2023**

Table 2. Cooling Tower Total Dissolved Solids (TDS) Sampling Results [1]

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

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

Malburg Generating Station
Quarterly Compliance Report
Appendix A, Table 3

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

Sample Date [1]	Period 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_{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 (gal/min) [1]	13,500
Number of Pumps	2
Total Circulation Rate (gal/min)	27,000
Water Density (lb/gal)	8.334
Drift Factor (%) [2]	0.0005
Correction Factor (unitless) [3]	0.2

[1] Source: M3-10 Main Circulating Water System P&ID.

[2] Per COC AQ-C4.

[3] Source: SPX Cooling Technologies' Cooling Tower Drift Mass Distribution.

Cooling Tower Daily PM_{10} Emissions

Date	Circulation Rate (gal/day) [1]	TDS (ppm)	PM_{10} Emissions (lb/day)	Above 6.2 lb/day PM_{10} Limit? [2]
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

[1] Maximum daily circulation rate conservatively used to estimate PM_{10} 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.

[2] Daily emissions limit established in COC AQ-C7.

Malburg Generating Station
Quarterly Compliance Report
Appendix A, Table 4

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 [1]	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 (gal/min) [1]	13,500
Number of Pumps	2
Total Circulation Rate (gal/min)	27,000
Water Density (lb/gal)	8.334
Drift Factor (%) [2]	0.0005
Correction Factor (unitless) [3]	0.2

[1] Source: M3-10 Main Circulating Water System P&ID.

[2] Per COC AQ-C4.

[3] Source: SPX Cooling Technologies' Cooling Tower Drift Mass Distribution.

Cooling Tower Daily PM_{10} Emissions

Date	Circulation Rate (gal/day) [1]	TDS (ppm)	PM_{10} Emissions (lb/day)	Above 6.2 lb/day PM_{10} Limit? [2]
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

[1] Maximum daily circulation rate conservatively used to estimate PM_{10} 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.

[2] Daily emissions limit established in COC AQ-C7.

Malburg Generating Station
Quarterly Compliance Report
Appendix A, Table 5

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 [1]	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_{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 (gal/min) [1]	13,500
Number of Pumps	2
Total Circulation Rate (gal/min)	27,000
Water Density (lb/gal)	8.334
Drift Factor (%) [2]	0.0005
Correction Factor (unitless) [3]	0.2

[1] Source: M3-10 Main Circulating Water System P&ID.

[2] Per COC AQ-C4.

[3] Source: SPX Cooling Technologies' Cooling Tower Drift Mass Distribution.

Cooling Tower Daily PM_{10} Emissions

Date	Circulation Rate (gal/day) [1]	TDS (ppm)	PM_{10} Emissions (lb/day)	Above 6.2 lb/day PM_{10} Limit? [2]
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

[1] Maximum daily circulation rate conservatively used to estimate PM_{10} 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.

[2] Daily emissions limit established in COC AQ-C7.

Malburg Generating Station
Quarterly Compliance Report
Appendix A, Tables 6, 7, 8, & 9

Reporting Period: **Quarter 3 2023**

Table 6. Monthly Turbine-Duct Burner Fuel Flow

Source	July Fuel Flow (MMscf/month) [1, 2]	Above 405 MMscf/month Limit? [3]	August Fuel Flow (MMscf/month) [1, 2]	Above 405 MMscf/month Limit? [3]	September Fuel Flow (MMscf/month) [1, 2]	Above 405 MMscf/month Limit? [3]
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**

[1] CTG and Duct Burner fuel flow data obtained from 'U1/U2_MonthlySummary_MassEmissionsAndFuel' and 'All_12MonthSummary_GasUsage' RegPerfect Reports.

[2] Monthly fuel flow limit is per Condition of Certification (COC) AQ-27.

Table 7. Monthly Emissions - July 2023

Source	Monthly Emissions (lb/month) [1] NOx [2]	CO	VOC	SOx	$PM_{10}/PM_{2.5}$	NH_3 [3]
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 [4]	N/A	7,633	3,236	227	4,876	N/A
Exceeds Limit?	N/A	No	No	No	No	N/A

[1] Unless otherwise noted, monthly emissions data obtained from 'U1/U2_MonthlySummary_MassEmissionsAndFuel' RegPerfect Report.

[2] Monthly NOx emissions are as submitted to SCAQMD, based on the 'U1_U2MonthlyRECLAIMNOxSummaryByDay' RegPerfect Report.

[3] Monthly NH_3 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.

[4] Monthly emission limits are per COC AQ-5.

Table 8. Monthly Emissions - August 2023

Source	Monthly Emissions (lb/month) [1] NOx [2]	CO	VOC	SOx	$PM_{10}/PM_{2.5}$	NH_3 [3]
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 [4]	N/A	7,633	3,236	227	4,876	N/A
Exceeds Limit?	N/A	No	No	No	No	N/A

[1] Unless otherwise noted, monthly emissions data obtained from 'U1/U2_MonthlySummary_MassEmissionsAndFuel' RegPerfect Report.

[2] Monthly NOx emissions are as submitted to SCAQMD, based on the 'U1_U2MonthlyRECLAIMNOxSummaryByDay' RegPerfect Report.

[3] Monthly NH_3 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.

[4] Monthly emission limits are per COC AQ-5.

Table 9. Monthly Emissions - September 2023

Source	Monthly Emissions (lb/month) [1] NOx [2]	CO	VOC	SOx	$PM_{10}/PM_{2.5}$	NH_3 [3]
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 [4]	N/A	7,633	3,236	227	4,876	N/A
Exceeds Limit?	N/A	No	No	No	No	N/A

[1] Unless otherwise noted, monthly emissions data obtained from 'U1/U2_MonthlySummary_MassEmissionsAndFuel' RegPerfect Report.

[2] Monthly NOx emissions are as submitted to SCAQMD, based on the 'U1_U2MonthlyRECLAIMNOxSummaryByDay' RegPerfect Report.

[3] Monthly NH_3 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.

[4] Monthly emission limits are per COC AQ-5.

Malburg Generating Station
Quarterly Compliance Report
Appendix A, Table 10

Reporting Period: **Quarter 3 2023**

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

Emission Factors

Pollutant	Emission Factor (lb/Mgal)	Reference
NOx	469	Emission factor provided in the facility's Title V Permit.
CO	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.
$PM_{10}/PM_{2.5}$	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_3	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

Month	Monthly Hours of Operation [1]			Fuel Usage	Monthly Emissions (lb/month)					
	Maintenance	Testing	Emergency	(gal/month) [2]	NOx	CO	VOC	SOx	$PM_{10}/PM_{2.5}$	NH_3
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 Maintenance and Testing [3]	50
Total Annual Limit [3]	200
Exceeds Limits?	No

[1] Monthly hours of operation calculated from Device 385/403 run timer readings.
[2] Fuel usage (gal/month) calculated by multiplying the hours of operation by the unit's maximum fuel throughput (11.2 gal/hour).
[3] Annual limits for hours of operation are per Condition of Certification (COC) AQ-15.

Appendix B
Cooling Tower Blowdown Reports

POSITIVE
LAB SERVICE

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

POSITIVE LAB SERVICE

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

Certificate of Analysis

City of Vernon
4963 Soto St.
Vernon, CA 90058

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

File #:74548
Report Date: 07/03/23
Submitted: 06/26/23
PLS Report No.: 2306228

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tower Blowdown Water (2306228-01) Sampled: 06/26/23 08:20 Received: 06/26/23

Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Total Dissolved Solids	**4880**		1	mg/L	5.0	- SM 2540C	06/29/23	06/30/23	vc	BF33032

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BF33032 - -										
Blank	**Prepared: 06/29/23 Analyzed: 06/30/23**									
Total Dissolved Solids	ND	5.0	mg/L							
LCS	**Prepared: 06/29/23 Analyzed: 06/30/23**									
Total Dissolved Solids	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 Solids	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

Authorized Signature(s)

POSITIVE LAB SERVICE

CHAIN OF CUSTODY AND ANALYSIS REQUEST

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

DATE: 6-26-23 PAGE: 1 OF 1

FILE NO.: LAB NO.: 1230628

CLIENT NAME: CITY OF VERNON PROJECT NAME/NO. MALBURG GENERATING STATION WEEKLY P.O.NO. AIRBILL NO:

ADDRESS: 4963 SOTO ST. VERNON CA 90058

ANALYSES REQUESTED

OBSERVED TEMP 1.3°C

PROJECT MANAGER MATT RICHARDS PHONE NO: FAX NO:

CORRECTED TEMP: 1.5°C

SAMPLER NAME: JOHN BARIE SIGNATURE:

THERMO ID: 60

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#: --- --- --- --- --- --- --- --- --- ---

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX: WATER	SOIL	SLUDGE	OTHER	TAT	CONTAINER #	TYPE	TDS							SAMPLE CONDITIONS/ CONTAINER/COMMENTS
	6-26-23	08:20	COOLING TOWER BLOWDOWN	X				N	1	P	X							

Relinquished by (Signature& Name):	Received by (Signature & Name):	Date:	Time:
MA	[signature]	6-26-23	08:20
Relinquished by (Signature& Name):	Received by (Signature & Name):	Date:	Time:
Relinquished by (Signature& Name):	Received by (Signature & Name):	Date:	Time:

SAMPLE DISPOSITION

1. Samples returned to client? Yes No
2. Samples will not be stored over 30 days, unless additional storage time is requested.
3. Storage time requested: ________ days.

By: ____________ Date: ____________

SPECIAL INSTRUCTION:

Arrived at the lab 6-26-23 10:30

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

POSITIVE
LAB SERVICE

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

POSITIVE LAB SERVICE

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

Certificate of Analysis

City of Vernon
4963 Soto St.
Vernon, CA 90058

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

File #:74548
Report Date: 07/17/23
Submitted: 07/07/23
PLS Report No.: 2307032

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tower Blowdown Water (2307032-01) Sampled: 07/07/23 10:20 Received: 07/07/23

Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Total Dissolved Solids	**4250**		1	mg/L	5.0	- SM 2540C	07/13/23	07/14/23	vc	BG31414

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BG31414 - -										
Blank	**Prepared: 07/13/23 Analyzed: 07/14/23**									
Total Dissolved Solids	ND	5.0	mg/L							
LCS	**Prepared: 07/13/23 Analyzed: 07/14/23**									
Total Dissolved Solids	60.0	5.0	mg/L	50.00		120	80-120			
Duplicate Source: 2307031-01	**Prepared: 07/13/23 Analyzed: 07/14/23**									
Total Dissolved Solids	820	5.0	mg/L		785			4.36	5	
Duplicate Source: 2307044-01	**Prepared: 07/13/23 Analyzed: 07/14/23**									
Total Dissolved Solids	4450	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 Parlier

Authorized Signature(s)

CHAIN OF CUSTODY AND ANALYSIS REQUEST

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

DATE: 7-7-23 PAGE: ____ OF ____

FILE NO.: ____ LAB NO.: 2307032

CLIENT NAME: CITY OF VERNON | PROJECT NAME/NO.: Cooling Tower Blowdown MALBURG GENERATING STATION WEEKLY | P.O.NO. | AIRBILL NO:

ADDRESS: 4963 SOTO ST. VERNON CA 90058

PROJECT MANAGER: MATT RICHARDS | PHONE NO: | FAX NO:

SAMPLER NAME: JOHN BARIE | SIGNATURE:

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#: --- --- --- --- --- --- --- --- --- ---

OBSERVED TEMP: 1.9°C
CORRECTED TEMP: 2.1°C
THERMO ID: 60

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX: WATER	SOIL	SLUDGE	OTHER	TAT	CONTAINER: #	TYPE	ANALYSES REQUESTED: TDS	SAMPLE CONDITIONS/ CONTAINER/COMMENTS
	7-7-23	1020	COOLING TOWER BLOWDOWN	X				N	1	P	X	

Relinquished by (Signature& Name):	Received by (Signature & Name):	Date:	Time:
MA	John Barie	7-7-23	1020
Relinquished by (Signature& Name):	Received by (Signature & Name):	Date:	Time:
Relinquished by (Signature& Name):	Received by (Signature & Name):	Date:	Time:

SAMPLE DISPOSITION

1. Samples returned to client? Yes No
2. Samples will not be stored over 30 days, unless additional storage time is requested
3. Storage time requested: _____ days,

By: _____ Date: _____

SPECIAL INSTRUCTION:

Arrived at the lab 7-7-23 1145

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

POSITIVE
LAB SERVICE

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

POSITIVE LAB SERVICE

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

Certificate of Analysis

City of Vernon
4963 Soto St.
Vernon, CA 90058

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

File #:74548
Report Date: 07/17/23
Submitted: 07/10/23
PLS Report No.: 2307044

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tower Blowdown Water (2307044-01) Sampled: 07/10/23 08:25 Received: 07/10/23

Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Total Dissolved Solids	**4400**		1	mg/L	5.0	- SM 2540C	07/13/23	07/14/23	vc	BG31414

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BG31414 - -										
Blank	**Prepared: 07/13/23 Analyzed: 07/14/23**									
Total Dissolved Solids	ND	5.0	mg/L							
LCS	**Prepared: 07/13/23 Analyzed: 07/14/23**									
Total Dissolved Solids	60.0	5.0	mg/L	50.00		120	80-120			
Duplicate Source: 2307031-01	**Prepared: 07/13/23 Analyzed: 07/14/23**									
Total Dissolved Solids	820	5.0	mg/L		785			4.36	5	
Duplicate Source: 2307044-01	**Prepared: 07/13/23 Analyzed: 07/14/23**									
Total Dissolved Solids	4450	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 Perlin

Authorized Signature(s)

CHAIN OF CUSTODY AND ANALYSIS REQUEST

POSITIVE LAB SERVICE

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

DATE: 7/10/23 PAGE: 1 OF 1

FILE NO.: LAB NO.: 1307044

CLIENT NAME: CITY OF VERNON PROJECT NAME/NO. MALBURG GENERATING STATION WEEKLY P.O.NO. AIRBILL NO:

ADDRESS: 4963 SOTO ST. VERNON CA 90058 OBSERVED TEMP 0.9°C

PROJECT MANAGER MATT RICHARDS PHONE NO: FAX NO: CORRECTED TEMP: 1.1°C

SAMPLER NAME: JOHN BARIE SIGNATURE: THERMO ID: 66

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#: --- --- --- --- --- --- --- --- --- ---

ANALYSES REQUESTED

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX: WATER	SOIL	SLUDGE	OTHER	TAT	CONTAINER: #	TYPE	TDS	SAMPLE CONDITIONS/ CONTAINER/COMMENTS
	7/10/23	0825	COOLING TOWER BLOWDOWN	X				N	1	P	X	

Relinquished by (Signature& Name): MA Received by (Signature & Name): John Barie Date: 7/10/23 Time: 0825

Relinquished by (Signature& Name): Received by (Signature & Name): Date: Time:

Relinquished by (Signature& Name): Received by (Signature & Name): Date: Time:

SAMPLE DISPOSITION

1. Samples returned to client? Yes No
2. Samples will not be stored over 30 days, unless additional storage time is requested
3. Storage time requested: _____ days,

By: _____ Date: _____

SPECIAL INSTRUCTION:

Arrived at the lab 7/10/23 1000

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

POSITIVE
LAB SERVICE

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

POSITIVE LAB SERVICE

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

Certificate of Analysis

City of Vernon
4963 Soto St.
Vernon, CA 90058

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

File #:74548
Report Date: 07/24/23
Submitted: 07/18/23
PLS Report No.: 2307105

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tower Blowdown Water (2307105-01) Sampled: 07/18/23 07:50 Received: 07/18/23

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

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BG32011 - -										
Blank	**Prepared: 07/19/23 Analyzed: 07/20/23**									
Total Dissolved Solids	ND	5.0	mg/L							
LCS	**Prepared: 07/19/23 Analyzed: 07/20/23**									
Total Dissolved Solids	57.0	5.0	mg/L	50.00		114	80-120			
Duplicate Source: 2307105-01	**Prepared: 07/19/23 Analyzed: 07/20/23**									
Total Dissolved Solids	4560	5.0	mg/L		4780			4.71	5	
Duplicate Source: 2307104-01	**Prepared: 07/19/23 Analyzed: 07/20/23**									
Total Dissolved 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 Owen Parlin

Authorized Signature(s)

CHAIN OF CUSTODY AND ANALYSIS REQUEST

POSITIVE LAB SERVICE

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

DATE: 7-18-23 PAGE: 1 OF 1

FILE NO.: _____ LAB NO.: 2307105

CLIENT NAME: CITY OF VERNON **PROJECT NAME/NO.** MALBURG GENERATING STATION WEEKLY **P.O.NO.** **AIRBILL NO:**

ADDRESS: 4963 SOTO ST. VERNON CA 90058

PROJECT MANAGER MATT RICHARDS **PHONE NO:** **FAX NO:**

SAMPLER NAME: JOHN BARIE **SIGNATURE:** JB

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#:** --- --- --- --- --- --- --- --- --- --- ---

ANALYSES REQUESTED

OBSERVED TEMP 18°C
CORRECTED TEMP: 20°C
THERMO ID: 68

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX: WATER	SOIL	SLUDGE	OTHER	TAT	CONTAINER: #	TYPE	TDS								SAMPLE CONDITIONS/ CONTAINER/COMMENTS
	7/18/23	0750	COOLING TOWER BLOWDOWN	X				N	1	P	X								

Relinquished by (Signature& Name): MA Received by (Signature & Name): JB John Barie Date: 7/18/23 Time: 0750

Relinquished by (Signature& Name): Received by (Signature & Name): Date: Time:

Relinquished by (Signature& Name): Received by (Signature & Name): Date: Time:

SAMPLE DISPOSITION

1. Samples returned to client? Yes No
2. Samples will not be stored over 30 days, unless additional storage time is requested
3. Storage time requested: _____ days,

By: _____ Date: _____

SPECIAL INSTRUCTION:

Arrived at the lab 7/18/23 1115

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

POSITIVE
LAB SERVICE

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

POSITIVE LAB SERVICE

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

Certificate of Analysis

City of Vernon
4963 Soto St.
Vernon, CA 90058

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

File #:74548
Report Date: 07/27/23
Submitted: 07/25/23
PLS Report No.: 2307156

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tower Blowdown Water (2307156-01) Sampled: 07/25/23 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

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BG32703 - -										
Blank	**Prepared: 07/25/23 Analyzed: 07/26/23**									
Total Dissolved Solids	ND	5.0	mg/L							
LCS	**Prepared: 07/25/23 Analyzed: 07/26/23**									
Total Dissolved Solids	59.0	5.0	mg/L	50.00		118	80-120			
Duplicate **Source: 2307156-01**	**Prepared: 07/25/23 Analyzed: 07/26/23**									
Total Dissolved Solids	4860	5.0	mg/L		4670			3.99	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 Parlier

Authorized Signature(s)

CHAIN OF CUSTODY AND ANALYSIS REQUEST

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

DATE: 7-25-23 PAGE: 1 OF 1
FILE NO.: LAB NO.: 2307156

CLIENT NAME: CITY OF VERNON | PROJECT NAME/NO. MALBURG GENERATING STATION WEEKLY | P.O.NO. | AIRBILL NO:

ADDRESS: 4963 SOTO ST. VERNON CA 90058 | OBSERVED TEMP 0.8°C

PROJECT MANAGER MATT RICHARDS | PHONE NO: | FAX NO: | CORRECTED TEMP: 1.0°C

SAMPLER NAME: JOHN BARIE | SIGNATURE: | THERMO ID: 66

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#: --- --- --- --- --- --- --- --- --- ---

ANALYSES REQUESTED

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX: WATER	SOIL	SLUDGE	OTHER	TAT	CONTAINER: #	TYPE	TDS	SAMPLE CONDITIONS/ CONTAINER/COMMENTS
	7-25-23	0915	COOLING TOWER BLOWDOWN	X				N	1	P	X	

Relinquished by (Signature& Name): MA | Received by (Signature & Name): John Barie | Date: 7-25-23 | Time: 0915

Relinquished by (Signature& Name): | Received by (Signature & Name): | Date: | Time:

Relinquished by (Signature& Name): | Received by (Signature & Name): | Date: | Time:

SAMPLE DISPOSITION

1. Samples returned to client? Yes No
2. Samples will not be stored over 30 days, unless additional storage time is requested
3. Storage time requested: _____days.

By: _____ Date: _____

SPECIAL INSTRUCTION:

Arrived at the lab 7-25-23 1100

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

POSITIVE
LAB SERVICE

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

POSITIVE LAB SERVICE

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

Certificate of Analysis

City of Vernon
4963 Soto St.
Vernon, CA 90058

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

File #:74548
Report Date: 08/10/23
Submitted: 08/02/23
PLS Report No.: 2308012

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tower Blowdown Water (2308012-01) Sampled: 08/02/23 08:20 Received: 08/02/23

Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Total Dissolved Solids	**5660**		1	mg/L	5.0	- SM 2540C	08/07/23	08/08/23	vc	BH30901

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BH30901 - -										
Blank	**Prepared: 08/07/23 Analyzed: 08/08/23**									
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: 08/08/23**									
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 Parlier

Authorized Signature(s)

CHAIN OF CUSTODY AND ANALYSIS REQUEST

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

DATE: 8-2-23 PAGE: 1 OF 1

FILE NO.: LAB NO.: 230812

CLIENT NAME: CITY OF VERNON PROJECT NAME/NO. MALBURG GENERATING STATION WEEKLY P.O.NO.

AIRBILL NO:

ADDRESS: 4963 SOTO ST. VERNON CA 90058

PROJECT MANAGER MATT RICHARDS PHONE NO: FAX NO:

SAMPLER NAME: JOHN BARIE SIGNATURE:

OBSERVED TEMP 1-6°C

CORRECTED TEMP: 1.8°C

THERMO ID: 60

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#: --- --- --- --- --- --- --- --- --- --- ---

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX: WATER	SOIL	SLUDGE	OTHER	TAT	CONTAINER: #	TYPE	ANALYSES REQUESTED: TDS								SAMPLE CONDITIONS/ CONTAINER/COMMENTS
	8-2-23	0820	COOLING TOWER BLOWDOWN	X				N	1	P	X								

Relinquished by (Signature& Name): NA

Received by (Signature & Name): John Barie

Date: 8-2-23 Time: 0820

Relinquished by (Signature& Name):

Received by (Signature & Name):

Date: Time:

Relinquished by (Signature& Name):

Received by (Signature & Name):

Date: Time:

SAMPLE DISPOSITION

1. Samples returned to client? Yes No
2. Samples will not be stored over 30 days, unless additional storage time is requested
3. Storage time requested: _____days,

By: _____ Date: _____

SPECIAL INSTRUCTION:

Arrived at the lab 8-2-23 1030

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

POSITIVE
LAB SERVICE

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

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

POSITIVE LAB SERVICE

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

Certificate of Analysis

City of Vernon
4963 Soto St.
Vernon, CA 90058

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

File #:74548
Report Date: 08/14/23
Submitted: 08/07/23
PLS Report No.: 2308064

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tower Blowdown Water (2308064-01) Sampled: 08/07/23 08:20 Received: 08/07/23

Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Total Dissolved Solids	**5190**		1	mg/L	5.0	- SM 2540C	08/07/23	08/08/23	vc	BH30901

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BH30901 - -										
Blank	**Prepared: 08/07/23 Analyzed: 08/08/23**									
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: 08/08/23**									
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 Parkin

Authorized Signature(s)

CHAIN OF CUSTODY AND ANALYSIS REQUEST

POSITIVE LAB SERVICE
781 East Washington Blvd., Los Angeles, CA 90021
[213] 745-5312 FAX [213] 745-6372

DATE: 8-7-23 PAGE: 1 OF 1

FILE NO.: LAB NO.: 130804

CLIENT NAME: CITY OF VERNON PROJECT NAME/NO. MALBURG GENERATING STATION WEEKLY P.O.NO. AIRBILL NO:

ADDRESS: 4963 SOTO ST. VERNON CA 90058 OBSERVED TEMP 1.0°C

PROJECT MANAGER MATT RICHARDS PHONE NO: FAX NO: CORRECTED TEMP: 1.2°C

SAMPLER NAME: JOHN BARIE SIGNATURE: THERMO ID: 60

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#: ---- ---- ---- ---- ---- ---- ---- ---- ---- ----

ANALYSES REQUESTED

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX: WATER	SOIL	SLUDGE	OTHER	TAT	CONTAINER: #	TYPE	TDS	SAMPLE CONDITIONS/ CONTAINER/COMMENTS
	8-7-23	0820	COOLING TOWER BLOWDOWN	X				N	1	P	X	

Relinquished by (Signature& Name):	Received by (Signature & Name):	Date:	Time:
MA	JB John Barie	8-7-23	0820
Relinquished by (Signature& Name):	Received by (Signature & Name):	Date:	Time:
Relinquished by (Signature& Name):	Received by (Signature & Name):	Date:	Time:

SAMPLE DISPOSITION

1. Samples returned to client? Yes No
2. Samples will not be stored over 30 days, unless additional storage time is requested
3. Storage time requested: _____days,

By: _____ Date: _____

SPECIAL INSTRUCTION:

Arrived at the lab 8-7-23 0950

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

POSITIVE
LAB SERVICE

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

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

POSITIVE LAB SERVICE

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

Certificate of Analysis

City of Vernon
4963 Soto St.
Vernon, CA 90058

File #:74548
Report Date: 08/21/23
Submitted: 08/14/23
PLS Report No.: 2308123

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

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tower Blowdown Water (2308123-01) Sampled: 08/14/23 08:55 Received: 08/14/23

Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Total Dissolved Solids	**4860**		1	mg/L	5.0	- SM 2540C	08/17/23	08/18/23	vc	BH32102

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BH32102 - -										
Blank	**Prepared: 08/17/23 Analyzed: 08/18/23**									
Total Dissolved Solids	ND	5.0	mg/L							
LCS	**Prepared: 08/17/23 Analyzed: 08/18/23**									
Total Dissolved Solids	48.0	5.0	mg/L	50.00		96.0	80-120			
Duplicate **Source: 2308123-01**	**Prepared: 08/17/23 Analyzed: 08/18/23**									
Total Dissolved Solids	5070	5.0	mg/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

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

Rick Owen Parlier

Authorized Signature(s)

CHAIN OF CUSTODY AND ANALYSIS REQUEST

POSITIVE LAB SERVICE

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

DATE: 8/14/23 PAGE: 1 OF 1
FILE NO.: LAB NO.: 23081 23

CLIENT NAME: CITY OF VERNON | PROJECT NAME/NO.: MALBURG GENERATING STATION WEEKLY | P.O.NO.: | AIRBILL NO:

ADDRESS: 4963 SOTO ST. VERNON CA 90058 | OBSERVED TEMP: 41°C

PROJECT MANAGER: MATT RICHARDS | PHONE NO: | FAX NO: | CORRECTED TEMP: 43°C

SAMPLER NAME: JOHN BARIE | SIGNATURE: | THERMO ID: 66

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#: --- --- --- --- --- --- --- --- --- ---

ANALYSES REQUESTED

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX: WATER	SOIL	SLUDGE	OTHER	TAT	CONTAINER: #	TYPE	TDS	SAMPLE CONDITIONS/ CONTAINER/COMMENTS
	8.14.23	0855	COOLING TOWER BLOWDOWN	X				N	1	P	X	

Relinquished by (Signature& Name):	Received by (Signature & Name):	Date:	Time:
NA	John Barie	8-14-23	0855
Relinquished by (Signature& Name):	Received by (Signature & Name):	Date:	Time:
Relinquished by (Signature& Name):	Received by (Signature & Name):	Date:	Time:

SAMPLE DISPOSITION

1. Samples returned to client? Yes No
2. Samples will not be stored over 30 days, unless additional storage time is requested
3. Storage time requested: _____days,
By: _____ Date: _____

SPECIAL INSTRUCTION:

Arrived at the lab 8/14/23

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

Arrived at the lab 8-14-23 1145

POSITIVE
LAB SERVICE

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

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

POSITIVE LAB SERVICE

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

Certificate of Analysis

City of Vernon
4963 Soto St.
Vernon, CA 90058

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

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

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tower Blowdown Water (2308194-01) Sampled: 08/23/23 09:20 Received: 08/23/23

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

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BH32409 - -										
Blank	**Prepared: 08/23/23 Analyzed: 08/24/23**									
Total Dissolved Solids	ND	5.0	mg/L							
LCS	**Prepared: 08/23/23 Analyzed: 08/24/23**									
Total Dissolved Solids	59.0	5.0	mg/L	50.00		118	80-120			
Duplicate **Source: 2308186-01**	**Prepared: 08/23/23 Analyzed: 08/24/23**									
Total Dissolved 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

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

Rick Owen Parker

Authorized Signature(s)

CHAIN OF CUSTODY AND ANALYSIS REQUEST

POSITIVE LAB SERVICE

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

DATE: 8-23-23 PAGE: 1 OF 1

FILE NO.: _____ LAB NO.: 2308194

CLIENT NAME: CITY OF VERNON | PROJECT NAME/NO. MALBURG GENERATING STATION WEEKLY | P.O.NO. | AIRBILL NO:

ADDRESS: 4963 SOTO ST. VERNON CA 90058 | OBSERVED TEMP 1.0°C

PROJECT MANAGER MATT RICHARDS | PHONE NO: | FAX NO: | CORRECTED TEMP: 1.2°C

SAMPLER NAME: JOHN BARIE | SIGNATURE: | THERMO ID: 66

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#: --- --- --- --- --- --- --- --- --- ---

ANALYSES REQUESTED

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX: WATER	SOIL	SLUDGE	OTHER	TAT	CONTAINER: #	TYPE	TDS	SAMPLE CONDITIONS/ CONTAINER/COMMENTS
	8-23-23	0920	COOLING TOWER BLOWDOWN	X				N	1	P	X	

Relinquished by (Signature& Name):	Received by (Signature & Name):	Date:	Time:
MA	John Barie	8-23-23	0920
Relinquished by (Signature& Name):	Received by (Signature & Name):	Date:	Time:
Relinquished by (Signature& Name):	Received by (Signature & Name):	Date:	Time:

SAMPLE DISPOSITION

1. Samples returned to client? Yes No
2. Samples will not be stored over 30 days, unless additional storage time is requested
3. Storage time requested: _____ days,

By: _____ Date: _____

SPECIAL INSTRUCTION:

Arrived at the lab 8-23-23 1000

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

POSITIVE
LAB SERVICE

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

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 Manager

POSITIVE LAB SERVICE

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

Certificate of Analysis

City of Vernon
4963 Soto St.
Vernon, CA 90058

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

File #:74548
Report Date: 09/01/23
Submitted: 08/28/23
PLS Report No.: 2308230

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tower Blowdown Water (2308230-01) Sampled: 08/28/23 08:25 Received: 08/28/23

Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Total Dissolved Solids	**5580**		1	mg/L	5.0	- SM 2540C	08/29/23	08/30/23	vc	BH33105

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BH33105 - -										
Blank	**Prepared: 08/29/23 Analyzed: 08/30/23**									
Total Dissolved Solids	ND	5.0	mg/L							
LCS	**Prepared: 08/29/23 Analyzed: 08/30/23**									
Total Dissolved Solids	58.0	5.0	mg/L	50.00		116	80-120			
Duplicate Source: 2308230-01	**Prepared: 08/29/23 Analyzed: 08/30/23**									
Total Dissolved Solids	5700	5.0	mg/L		5580			2.13	5	
Duplicate Source: 2308241-01	**Prepared: 08/29/23 Analyzed: 08/30/23**									
Total Dissolved 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

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

Rick Owen Parlier

Authorized Signature(s)

CHAIN OF CUSTODY AND ANALYSIS REQUEST

POSITIVE LAB SERVICE
781 East Washington Blvd., Los Angeles, CA 90021
[213] 745-5312 FAX [213] 745-6372

DATE: 8-28-23 PAGE: 1 OF 1
FILE NO.: _____ LAB NO.: 1308230

CLIENT NAME: CITY OF VERNON | PROJECT NAME/NO. MALBURG GENERATING STATION WEEKLY | P.O.NO. | AIRBILL NO:

ADDRESS: 4963 SOTO ST. VERNON CA 90058 | ANALYSES REQUESTED | OBSERVED TEMP 1.1°C

PROJECT MANAGER MATT RICHARDS | PHONE NO: | FAX NO: | CORRECTED TEMP: 1.3°C

SAMPLER NAME: JOHN BARIE | SIGNATURE: | THERMO ID: 66

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#: --- --- --- --- --- --- --- --- --- ---

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX: WATER	SOIL	SLUDGE	OTHER	TAT	CONTAINER: #	TYPE	TDS								SAMPLE CONDITIONS/ CONTAINER/COMMENTS
	8-28-23	0824	COOLING TOWER BLOWDOWN	X				N	1	P	X								

Relinquished by (Signature& Name):	Received by (Signature & Name):	Date:	Time:
MA	Tom Barie	8-28-23	0825
Relinquished by (Signature& Name):	Received by (Signature & Name):	Date:	Time:
Relinquished by (Signature& Name):	Received by (Signature & Name):	Date:	Time:

SAMPLE DISPOSITION

1. Samples returned to client? Yes No
2. Samples will not be stored over 30 days, unless additional storage time is requested
3. Storage time requested: _____days,
By: _____Date:_____

SPECIAL INSTRUCTION:

Arrived at the lab 8-28-23 1000

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

POSITIVE
LAB SERVICE

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

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

POSITIVE LAB SERVICE

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

Certificate of Analysis

City of Vernon
4963 Soto St.
Vernon, CA 90058

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

File #:74548
Report Date: 09/13/23
Submitted: 09/07/23
PLS Report No.: 2309035

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tower Blowdown Water (2309035-01) Sampled: 09/07/23 08:05 Received: 09/07/23

Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Total Dissolved Solids	**4500**		1	mg/L	5.0	- SM 2540C	09/11/23	09/12/23	vc	BI31215

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BI31215 - -										
Blank	**Prepared: 09/11/23 Analyzed: 09/12/23**									
Total Dissolved Solids	ND	5.0	mg/L							
LCS	**Prepared: 09/11/23 Analyzed: 09/12/23**									
Total Dissolved Solids	59.0	5.0	mg/L	50.00		118	80-120			
Duplicate **Source: 2309035-01**	**Prepared: 09/11/23 Analyzed: 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 Owen Parker

Authorized Signature(s)

CHAIN OF CUSTODY AND ANALYSIS REQUEST

POSITIVE LAB SERVICE

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

DATE: 9-7-23 PAGE: 1 OF 1

FILE NO.: LAB NO. 2309035

CLIENT NAME: CITY OF VERNON PROJECT NAME/NO. MALBURG GENERATING STATION WEEKLY P.O.NO.

AIRBILL NO:

ADDRESS: 4963 SOTO ST. VERNON CA 90058

OBSERVED TEMP 1.6 °C

CORRECTED TEMP: 1.8 °C

PROJECT MANAGER MATT RICHARDS PHONE NO: FAX NO:

SAMPLER NAME: JOHN BARIE SIGNATURE:

THERMO ID: 60

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#: — — — — — — — — — —

ANALYSES REQUESTED

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		TDS								SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE									
	9-7-23	0805	COOLING TOWER BLOWDOWN	X				N	1	P	X								

Relinquished by (Signature& Name): MA

Received by (Signature & Name): Tom Barie

Date: 9-7-23 Time: 0805

Relinquished by (Signature& Name):

Received by (Signature & Name):

Date: Time:

Relinquished by (Signature& Name):

Received by (Signature & Name):

Date: Time:

SAMPLE DISPOSITION

1. Samples returned to client? Yes No
2. Samples will not be stored over 30 days, unless additional storage time is requested
3. Storage time requested: _____ days,

By: _____ Date: _____

SPECIAL INSTRUCTION:

Arrived at the lab 9-7-23 0945

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

POSITIVE
LAB SERVICE

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

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

POSITIVE LAB SERVICE

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

Certificate of Analysis

City of Vernon
4963 Soto St.
Vernon, CA 90058

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

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

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tower Blowdown Water (2309057-01) Sampled: 09/11/23 08:20 Received: 09/11/23

Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Total Dissolved Solids	**4260**		1	mg/L	5.0	- SM 2540C	09/11/23	09/12/23	vc	BI31215

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BI31215 - -										
Blank	**Prepared: 09/11/23 Analyzed: 09/12/23**									
Total Dissolved Solids	ND	5.0	mg/L							
LCS	**Prepared: 09/11/23 Analyzed: 09/12/23**									
Total Dissolved Solids	59.0	5.0	mg/L	50.00		118	80-120			
Duplicate **Source: 2309035-01**	**Prepared: 09/11/23 Analyzed: 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 Owen Parlin

Authorized Signature(s)

CHAIN OF CUSTODY AND ANALYSIS REQUEST

POSITIVE LAB SERVICE

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

DATE: 9-11-23 PAGE: 1 OF 1

FILE NO.: _____ LAB NO.: 1309057

CLIENT NAME: CITY OF VERNON **PROJECT NAME/NO.** MALBURG GENERATING STATION WEEKLY **P.O.NO.**

AIRBILL NO:

ADDRESS: 4963 SOTO ST. VERNON CA 90058

OBSERVED TEMP 0.8°C

PROJECT MANAGER MATT RICHARDS **PHONE NO:** **FAX NO:**

CORRECTED TEMP: 1.0°C

SAMPLER NAME: JOHN BARIE **SIGNATURE:**

THERMO ID: 66

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#:** --- --- --- --- --- --- --- --- --- ---

ANALYSES REQUESTED

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX: WATER	SOIL	SLUDGE	OTHER	TAT	CONTAINER: #	TYPE	TDS	SAMPLE CONDITIONS/ CONTAINER/COMMENTS
	9/11/23	0820	COOLING TOWER BLOWDOWN	X				N	1	P	X	

Relinquished by (Signature& Name): MA — Received by (Signature & Name): John Barie — Date: 9/11/23 — Time: 0820

Relinquished by (Signature& Name): — Received by (Signature & Name): — Date: — Time:

Relinquished by (Signature& Name): — Received by (Signature & Name): — Date: — Time:

SAMPLE DISPOSITION

1. Samples returned to client? Yes No
2. Samples will not be stored over 30 days, unless additional storage time is requested
3. Storage time requested: _____ days,

By: _____ Date: _____

SPECIAL INSTRUCTION: Arrived at the lab 9/11/23 1100

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

POSITIVE
LAB SERVICE

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

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

POSITIVE LAB SERVICE

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

Certificate of Analysis

City of Vernon
4963 Soto St.
Vernon, CA 90058

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

File #:74548
Report Date: 09/26/23
Submitted: 09/19/23
PLS Report No.: 2309118

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tower Blowdown Water (2309118-01) Sampled: 09/19/23 07:55 Received: 09/19/23

Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Total Dissolved Solids	**4690**		1	mg/L	5.0	- SM 2540C	09/21/23	09/22/23	vc	BI32301

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BI32301 - -										
Blank	**Prepared: 09/21/23 Analyzed: 09/22/23**									
Total Dissolved Solids	ND	5.0	mg/L							
LCS	**Prepared: 09/21/23 Analyzed: 09/22/23**									
Total Dissolved Solids	54.0	5.0	mg/L	50.00		108	80-120			
Duplicate **Source: 2309118-01**	**Prepared: 09/21/23 Analyzed: 09/22/23**									
Total Dissolved Solids	4910	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

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

Rick Doren Parker

Authorized Signature(s)

CHAIN OF CUSTODY AND ANALYSIS REQUEST

POSITIVE LAB SERVICE

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

DATE: 9-19-23 PAGE: 1 OF 1

FILE NO.: LAB NO.: 2309118

CLIENT NAME: CITY OF VERNON PROJECT NAME/NO. MALBURG GENERATING STATION WEEKLY P.O.NO.

ADDRESS: 4963 SOTO ST. VERNON CA 90058

PROJECT MANAGER MATT RICHARDS PHONE NO: FAX NO:

SAMPLER NAME: JOHN BARIE SIGNATURE:

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#: --- --- --- --- --- --- --- --- --- ---

AIRBILL NO:

OBSERVED TEMP 1.4°C

CORRECTED TEMP: 1.6°C

THERMO ID: 60

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX: WATER	MATRIX: SOIL	MATRIX: SLUDGE	MATRIX: OTHER	TAT	CONTAINER #	CONTAINER TYPE	ANALYSES REQUESTED: TDS	SAMPLE CONDITIONS/ CONTAINER/COMMENTS
	9-19-23	0755	COOLING TOWER BLOWDOWN	X				N	1	P	X	

Relinquished by (Signature& Name): MF

Received by (Signature & Name): John Barie

Date: 9-19-23 Time: 0755

Relinquished by (Signature& Name):

Received by (Signature & Name):

Date: Time:

Relinquished by (Signature& Name):

Received by (Signature & Name):

Date: Time:

SAMPLE DISPOSITION

1. Samples returned to client? Yes No
2. Samples will not be stored over 30 days, unless additional storage time is requested
3. Storage time requested: _____ days,

By: _____ Date: _____

SPECIAL INSTRUCTION: Arrived at the lab 9-19-23 0850

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

POSITIVE
LAB SERVICE

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

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

POSITIVE LAB SERVICE

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

Certificate of Analysis

City of Vernon
4963 Soto St.
Vernon, CA 90058

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

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

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tower Blowdown Water (2309157-01) Sampled: 09/25/23 08:05 Received: 09/25/23

Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	By	Batch
Total Dissolved Solids	**4800**		1	mg/L	5.0	- SM 2540C	09/28/23	09/29/23	vc	BI32910

Quality Control Data

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BI32910 - -										
Blank	**Prepared: 09/28/23 Analyzed: 09/29/23**									
Total Dissolved Solids	ND	5.0	mg/L							
LCS	**Prepared: 09/28/23 Analyzed: 09/29/23**									
Total Dissolved Solids	49.0	5.0	mg/L	50.00		98.0	80-120			
Duplicate Source: 2309157-01	**Prepared: 09/28/23 Analyzed: 09/29/23**									
Total Dissolved Solids	4810	5.0	mg/L		4800			0.243	5	
Duplicate Source: 2309175-03	**Prepared: 09/28/23 Analyzed: 09/29/23**									
Total Dissolved Solids	2670	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

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

Rick Owen Parker

Authorized Signature(s)

CHAIN OF CUSTODY AND ANALYSIS REQUEST

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

DATE: 9-25-23 PAGE: 1 OF 1

FILE NO.: LAB NO.: 300157

CLIENT NAME: CITY OF VERNON PROJECT NAME/NO. MALBURG GENERATING STATION WEEKLY P.O.NO.

AIRBILL NO:

ADDRESS: 4963 SOTO ST. VERNON CA 90058

PROJECT MANAGER MATT RICHARDS PHONE NO: FAX NO:

SAMPLER NAME: JOHN BARIE SIGNATURE:

OBSERVED TEMP 1.1°C

CORRECTED TEMP 1.3°C

THERMO ID: 06

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#: — — — — — — — — — — —

pH CHECK : X = 7

LOT # 10BDH2221

SAMPLE ID	DATE SAMPLED	TIME SAMPLED	SAMPLE DESCRIPTION	MATRIX				TAT	CONTAINER		ANALYSES REQUESTED								SAMPLE CONDITIONS/ CONTAINER/COMMENTS
				WATER	SOIL	SLUDGE	OTHER		#	TYPE	TDS								
	9.25.23	0805	COOLING TOWER BLOWDOWN	X				N	1	P	X								

Relinquished by (Signature& Name): NA

Received by (Signature & Name): For John Barie

Date: 9.25.23 Time: 0805

Relinquished by (Signature& Name):

Received by (Signature & Name):

Date: Time:

Relinquished by (Signature& Name):

Received by (Signature & Name):

Date: Time:

SAMPLE DISPOSITION

1. Samples returned to client? Yes No
2. Samples will not be stored over 30 days, unless additional storage time is requested
3. Storage time requested: _____days,

By: _____ Date: _____

SPECIAL INSTRUCTION: Arrived at the lab 9.25.23 0820

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

CTG 1

Date	Event Type [1]	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 [1]	Event Start	Event End	Duration (hrs:min)
9/12/2023	Shutdown	20:57	21:05	0:08
9/29/2023	Cold Start	15:40	17:04	1:24

[1] A startup event is defined as initiation of combustion until the system becomes emissions compliant, for consistency with the Title V Permit definitions.

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

SALES QUOTE

ORDER NUMBER: 2425945
DATE:7/6/2023
TERMS: N30
SALES REP: Todd Cripps
PHONE: 714-938-5714

PO#: QUOTE
SHIP DATE: 12/31/5999
ROM:
SHIP VIA:
WHSE: 101

SC Commercial, LLC, DBA SC Fuels
1800 West Katella Ave., Suite 400
P.O. Box 14237, Orange, CA 92863-4159
Ph: (800) 659-5823 Credit Inquiries: (888) SCFUELS Ext. 6017

ACCT NO (Bill-to): 01-0001045
CITY OF VERNON
4305 SANTA FE AVE
ATTN: DEPARTMENT D
VERNON, CA 90058
(323) 583-8811

ACCT NO (Ship-to) 01-0001045 103L
CITY OF VERNON-SOTO ST-L
4963 SOTO ST
VERNON, CA 90058

MY COPY

HM	ITEM CODE	ITEM DESCRIPTION	QTY ORDERED	QTY DEL	PACKAGE DESC	EXTENDED QTY	UNIT PRICE	EXT PRICE
	O: TODD C / POC:ROB 562-208-0808/ DEL HOURS 8AM - 2PM							
X	**NA1993, DIESEL FUEL, 3 PG III / CARGO TANK**							
	422D055	DYED CARB ULS DIESEL NON TAXABLE USE ONLY - PENALTY FOR TAXABLE USE 15 PPM OR LESS SULFUR - MAY CONTAIN UP TO 5% BIODIESEL	2.00		55 G DR	110.00 GALS	5.70	626.92
	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
						5.71585		628.75
	CH235120981D055	CH DELO 400 SAE 40 235120981	1.00	___	55 G DR	55.00 GALS	19.52	1,073.60
	CA Oil Recycling Fee					0.24000		13.20
	CA Lube Fee					0.05000		2.75
						19.81000		1,089.55
	DRUMDEPOSITC001	DRUM DEPOSIT FEE	3.00	___	MISC CHRG	3.00 EACH	25.00	75.00
	/FUELCHLUBE	FUEL SURCHARGE LUBES		___				9.92
	/RCFLUBE	REG COMPLIANCE FEE LUBES		___				12.95

**Prices quoted are not firm and are subject to change based upon product availablity, quantity delivered and market fluctuations

Net Order:	1,816.17
Less Discount:	0.00
Freight:	0.00
Sales Tax:	153.71
Order Total:	1,969.88

created by:crippsto1
ver. SCF20230717

www.scfuels.com

FOR CHEMICAL EMERGENCY
Spill, Leak, Fire Exposure or Accident
CALL CHEMTREC - DAY OR NIGHT
(800) 424-9300

Invoice

SC Commercial, LLC, DBA SC Fuels
1800 West Katella Ave, Suite 400
P.O. Box 4159, Orange, CA 92863-4159

PLEASE REMIT ALL PAYMENTS TO:
P.O. BOX 14237
ORANGE, CA 92863-1237

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

INVOICE: 2425945-IN

INVOICE DATE: 7/28/2023
DUE DATE: 8/27/2023
SHIP DATE: 7/28/2023
SHIP VIA: 910
ORDER DATE: 7/6/2023
ORDER NUMBER: 2425945
CUSTOMER PO: 00240105
TERMS: N30
SALEPERSON: Todd Cripps
714-938-5714

ACCT NO (Bill-to): 01-0001045

CITY OF VERNON
4305 SANTA FE AVE
ATTN: DEPARTMENT D
VERNON, CA 90058
(323) 583-8811

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

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

ITEM CODE	ITEM DESCRIPTION	QUANTITY ORDERED	QUANTITY DELIVERED	PACKAGE DESCRIPTION	EXTENDED QTY	UNIT PRICE	EXT PRICE
422D055	DYED CARB ULS DIESEL NON TAXABLE USE ONLY - PENALTY FOR TAXABLE USE 15 PPM OR LESS SULFUR - MAY CONTAIN UP TO 5% BIODIESEL	2 **Whse:** 101	2.00	55 G DR	110.00	6.10800	671.88
	MTO						
	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
CH235120981D055	CH DELO 400 SAE 40 235120981	1 **Whse:** 101	1.00	55 G DR	55.00	19.52000	1,073.60
	MTO						
	CA Oil Recycling Fee					0.24000	13.20
	CA Lube Fee					0.05000	2.75
						19.81000	1,089.55
DRUMDEPOSITC001	DRUM DEPOSIT FEE	3 **Whse:** 101	3.00	MISC CHRG	3.00	25.00000	75.00
/FUELCHLUBE	FUEL SURCHARGE LUBES						9.92
/RCFLUBE	REG COMPLIANCE FEE LUBES						12.95

Save time, pay online! View invoices, make payments and more.
Sign up for the Customer Portal today. Email: creditinquiries@scfuels.com or Call 888-SCFuels Ext. 6017 or login to Customer Portal: **https://customerportal.scfuels.com**
24-hour Emergency Response Call CHEMTREC: 800-424-9300

Net Invoice:	1,861.13
Less Discount:	0.00
Freight:	0.00
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.

Appendix E
Excess Emission Reports

Startup/Shutdown Excess Emissions Report

U1 CO Startup/Shutdown

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

Generated: 10/04/2023 20:02 **Location:** Vernon, California

Tag Name: U1_CO_LbPerHr_1M SI = SampleInvalid, * = Excess Emission

Total Operating Time: 1,168.05 Hours

Non-Operating Time: 1,039.95 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 Excess Emissions Report

U1 CO Startup/Shutdown

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

Generated: 10/04/2023 20:02 **Location:** Vernon, California

Tag Name: U1_CO_LbPerHr_1M SI = SampleInvalid, * = Excess Emission

Total Operating Time: 1,168.05 Hours

Non-Operating Time: 1,039.95 Hours Report Time: 2,208.00 Hours

No invalid events were found in the reporting period.

Startup/Shutdown Excess Emissions Report

U1 NOx Startup/Shutdown

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

Generated: 10/04/2023 20:03 **Location:** Vernon, California

Tag Name: U1_NOxRECLM_LbPerHr_1M SI = SampleInvalid, * = Excess Emission

Total Operating Time: 1,168.05 Hours

Non-Operating Time: 1,039.95 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 Excess Emissions Report

U1 NOx Startup/Shutdown

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

Generated: 10/04/2023 20:03 **Location:** Vernon, California

Tag Name: U1_NOxRECLM_LbPerHr_1M SI = SampleInvalid, * = Excess Emission

Total Operating Time: 1,168.05 Hours

Non-Operating Time: 1,039.95 Hours Report Time: 2,208.00 Hours

No invalid events were found in the reporting period.

Startup/Shutdown Excess Emissions Report

U1 VOC Startup/Shutdown

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

Generated: 10/04/2023 20:03 **Location:** Vernon, California

Tag Name: U1_VOC_LbPerHr_1M SI = SampleInvalid, * = Excess Emission

Total Operating Time: 1,168.05 Hours

Non-Operating Time: 1,039.95 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 Excess Emissions Report

U1 VOC Startup/Shutdown

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

Generated: 10/04/2023 20:03 **Location:** Vernon, California

Tag Name: U1_VOC_LbPerHr_1M SI = SampleInvalid, * = Excess Emission

Total Operating Time: 1,168.05 Hours

Non-Operating Time: 1,039.95 Hours Report Time: 2,208.00 Hours

No invalid events were found in the reporting period.

Excess Emission Report

Unit 1 - CO ppmvdc 1-hour during Normal Operation

From: 07/01/2023 00:00 **To:** 09/30/2023 23:59 **Facility Name:** Malburg Generating Station
Generated: 10/04/2023 20:04 **Location:** Vernon, California

Tag Name: U1_CONormal_Ppmvdc_1H
Total Operating Time: 1,172.00 Hour(s) **No Exclusions Allowed**
Non-Operating Time: 1,036.00 Hour(s) Report Time: 2,208.00 Hour(s)

No incidents have been reported for this reporting period. Data is 100% in compliance.

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 %**

Excess Emission Report

Unit 1 - NOx ppmvdc 1-hour during Normal Operation

From: 07/01/2023 00:00 **To:** 09/30/2023 23:59 **Facility Name:** Malburg Generating Station
Generated: 10/04/2023 20:06 **Location:** Vernon, California

Tag Name: U1_NOxNormal_Ppmvdc_1H
Total Operating Time: 1,172.00 Hour(s) **No Exclusions Allowed**
Non-Operating Time: 1,036.00 Hour(s) Report Time: 2,208.00 Hour(s)

No incidents have been reported for this reporting period. Data is 100% in compliance.

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 %**

Excess Emission Report

Unit 1 - VOC ppmvdc 1-hour during Normal Operation

From: 07/01/2023 00:00 **To:** 09/30/2023 23:59 **Facility Name:** Malburg Generating Station
Generated: 10/04/2023 20:05 **Location:** Vernon, California

Tag Name: U1_VOCNormal_Ppmvdc_1H
Total Operating Time: 1,172.00 Hour(s) **No Exclusions Allowed**
Non-Operating Time: 1,036.00 Hour(s) Report Time: 2,208.00 Hour(s)

No incidents have been reported for this reporting period. Data is 100% in compliance.

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 %**

Excess Emission Report

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_CO_3HrRoll_Ppmvdc_1H
Total Operating Time: 1,172.00 Hour(s) **No Exclusions Allowed**
Non-Operating Time: 1,036.00 Hour(s) Report Time: 2,208.00 Hour(s)

No incidents have been reported for this reporting period. Data is 100% in compliance.

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: 07/01/2023 00:00 **To:** 09/30/2023 23:59 **Facility Name:** Malburg Generating Station
Generated: 10/04/2023 20:06 **Location:** Vernon, California

Tag Name: U1_NOx4H_Ppmvdc_1H
Total Operating Time: 1,172.00 Hour(s) **No Exclusions Allowed**
Non-Operating Time: 1,036.00 Hour(s) Report Time: 2,208.00 Hour(s)

No incidents have been reported for this reporting period. Data is 100% in compliance.

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 **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

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.

Startup/Shutdown Excess Emissions Report

U2 NOx Startup/Shutdown

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

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

Tag Name: U2_NOxRECLM_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

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

U2 NOx Startup/Shutdown

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

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

Tag Name: U2_NOxRECLM_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.

Startup/Shutdown Event Report

U2 VOC Startup/Shutdown Events

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

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

Tag Name: U2_VOC_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

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 VOC Startup/Shutdown Events

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

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

Tag Name: U2_VOC_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.

Excess Emission Report

Unit 2 - CO ppmvdc 1-hour during Normal Operation

From: 07/01/2023 00:00 **To:** 09/30/2023 23:59 **Facility Name:** Malburg Generating Station
Generated: 10/04/2023 20:11 **Location:** Vernon, California

Tag Name: U2_CONormal_Ppmvdc_1H
Total Operating Time: 1,807.00 Hour(s) **No Exclusions Allowed**
Non-Operating Time: 401.00 Hour(s) Report Time: 2,208.00 Hour(s)

No incidents have been reported for this reporting period. Data is 100% in compliance.

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 %**

Excess Emission Report

Unit 2 - NOx ppmvdc 1-hour during Normal Operation

From: 07/01/2023 00:00 **To:** 09/30/2023 23:59 **Facility Name:** Malburg Generating Station
Generated: 10/04/2023 20:09 **Location:** Vernon, California

Tag Name: U2_NOxNormal_Ppmvdc_1H
Total Operating Time: 1,807.00 Hour(s) **No Exclusions Allowed**
Non-Operating Time: 401.00 Hour(s) Report Time: 2,208.00 Hour(s)

No incidents have been reported for this reporting period. Data is 100% in compliance.

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 %**

Excess Emission Report

Unit 2 - VOC ppmvdc 1-hour during Normal Operation

From: 07/01/2023 00:00 **To:** 09/30/2023 23:59 **Facility Name:** Malburg Generating Station
Generated: 10/04/2023 20:12 **Location:** Vernon, California

Tag Name: U2_VOCNormal_Ppmvdc_1H
Total Operating Time: 1,807.00 Hour(s) **No Exclusions Allowed**
Non-Operating Time: 401.00 Hour(s) Report Time: 2,208.00 Hour(s)

No incidents have been reported for this reporting period. Data is 100% in compliance.

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 %**

Excess Emission Report

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_1H
Total Operating Time: 1,807.00 Hour(s) **No Exclusions Allowed**
Non-Operating Time: 401.00 Hour(s) Report Time: 2,208.00 Hour(s)

No incidents have been reported for this reporting period. Data is 100% in compliance.

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: 07/01/2023 00:00 **To:** 09/30/2023 23:59 **Facility Name:** Malburg Generating Station
Generated: 10/04/2023 20:12 **Location:** Vernon, California

Tag Name: U2_NOx4H_Ppmvdc_1H
Total Operating Time: 1,807.00 Hour(s) **No Exclusions Allowed**
Non-Operating Time: 401.00 Hour(s) Report Time: 2,208.00 Hour(s)

No incidents have been reported for this reporting period. Data is 100% in compliance.

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

City of VERNON CALIFORNIA

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: MRichards@cityofvernon.org) or Elyse Engel at (702) 354-2648 (email address: Elyse.Engel@jacobs.com) if you have any questions or need additional information.

Thank you,

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

South Coast Air Quality Management District

Form 500-N

Title V - Deviations, Emergencies & Breakdowns

*This written report is in addition to requirements to verbally report certain types of incidents. Verbal reports may be made by calling AQMD at 1-800-288-7664 (1-800-CUT-SMOG) or AQMD enforcement personnel.

Mail To:
SCAQMD- Compliance & Enforcement
P.O. Box 4941
Diamond Bar, CA 91765-0941

Tel: (909) 396-3385
www.aqmd.gov

Section I - Operator Information

1. Facility Name (Business Name of Operator That Appears On Permit): Vernon Public Utilities

2. Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD): 195802

3. Address: (where incident occurred) 4963 S Soto Street (Street Address)
Vernon (City) CA (State) 90058 (Zip)

4. Mailing Address: (if different from Item 3) 4305 Santa Fe Avenue (Street Address)
Vernon (City) CA (State) 90058 (Zip)

5. Provide the name, title, and phone number of the person to contact for further information:

Name	Title	Phone #
Matt Richards	Utilities Operations Manager	(626) 393-3748

Section II - Reporting of Breakdowns, Deviations, and Emergencies

1. This written notification is to report a(n):

Type of Incident	Verbal Report Due*	Written Report Due
a. ☐ Emergency under Rule 3002(g)	Within 1 hour of discovery	Within 2 working days from when the emission limit was exceeded.
b. ☐ Breakdown under: ☐ Rule 430 (Non-RECLAIM) ☐ Rule 2004 (RECLAIM) ☐ Rule 218 (Non-RECLAIM) [See Rule 218(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 & 2004 - Within 7 calendar days after breakdown is corrected, but no later than 30 days from start of the breakdown, unless a written extension is granted. For Rule 218 - With required semi-annual reports.
c. ☒ Deviation with excess emissions [See Title V Permit, 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 discovery of the deviation.
d. ☐ Other Deviation [See Title V Permit, Section K, Condition Nos. 22D & 23]	None	With required semi-annual monitoring reports.

2. The incident was first discovered by: Sean Taylor (Name) on 08/21/2023 (Date) 04:17 (Time) ◉ AM ○ PM

3. The incident was first reported by: Operator #5 (Name of AQMD Staff Person) on 08/23/2023 (Date) 03:18 (Time) ○ AM ◉ PM

a. ◉ Via Phone

b. ○ In Person

Notification Number (Required): 759883

4. When did the incident actually occur? 08/21/2023 (Date) 01:00 (Time) ◉ AM ○ PM

AQMD USE ONLY				
Received By:		Assigned By:	Inspector:	
Date/Time Received:		Date/Time Assigned:	Date/Time Received Assignment:	
Date Delivered To Team:		Date Reviewed Inspector Report:	Date Inspected Facility:	
Team:	Sector:	Breakdown/Deviation Notification No.	Date Completed Report:	
Recommended Action:	Cancel Notification	Grant Relief	Issue NOV No.	Other:
Final Action:	Cancel Notification	Grant Relief	Issue NOV No.	Other:

5. Has the incident stopped? a. (•) Yes, on: 08/21/2023 (Date) 04:00 (Time) (•) AM ( ) PM b. ( ) No

6. What was the total duration of the incident? 0 (Days) 03 (Hours)

7. For equipment with an operating cycle, as defined in Rule 430 (b)(3)(A), when was the end of the operating cycle during which the incident occurred? _____ (Date) _____ (Time) ( ) AM ( ) PM

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. [X] Violation of Permit Condition(s): Section D, Condition No. A195.4

b. [ ] Violation of AQMD Rule(s): _____

10. 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 attach calculations.)

[ ] VOC _____ lbs [ ] NOx _____ lbs [ ] SOx _____ lbs [ ] H2S _____ lbs

[ ] CO _____ lbs [ ] PM _____ lbs [X] Other: 0.510 lbs NH3 pollutant

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?

a. ( ) Yes, for: [ ] NOx [ ] SOx b. ( ) No, for: [ ] NOx [ ] SOx

If box 12(b) above is checked, include all information specified in Rule 2004(i)(3)(B) and (C), as applicable.

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.

14. Was the facility operating properly prior to the incident?

a. (•) Yes b. ( ) No, because: _____

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

a. ( ) Yes b. (•) No, because: See Attachment A.

16. Has the facility returned to compliance?

a. ( ) No, because: _____

b. (•) Yes (Attach evidence such as emissions calculations, contemporaneous operating logs or other credible evidence.)

Section 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 Title V Facilities ONLY: [X] I also certify under penalty of law that that I am the responsible official for this facility as defined in AQMD Regulation XXX.

1. Signature of Responsible Official:	2. Title of Responsible Official:
	General Manager of Vernon Public Utilities
3. Print Name: Todd Dusenberry	4. Date: 8/31/23
5. Phone #: (323) 583-8811	6. Fax #:

7. Address of Responsible Official:

4305 Santa Fe Avenue (Street #) Vernon (City) CA (State) 90058 (Zip)

Attachment A: Additional Form 500-N Descriptions

This attachment presents additional information regarding the ammonia (NH_3) 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_3 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_3 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_3 slip to nearly double. The NH_3 flow did not significantly increase during this timeframe. The NH_3 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_3 slip test was conducted in May 2023, Gas Turbine No. 1 has been operating with an NH_3 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_3 slip during testing, there was only a small absolute difference between the site's calculated NH_3 slip and the source tester's reference method calculations, but a high multiplier.

The use of this high NH_3 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_3 flow or other operational constraints, provide a greater propensity for causing exceedances of the 5 ppmv NH_3 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_3 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_3 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_3 Emission Calculations

Date of Data: August 21, 2023

Excess Emissions Mass Determination

Title V Permit Condition No. A195.4: NH_3 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:

$ppmv_{Limit}$	5	ppmv
$MW_{flue\ gas}$	29.303	lb/lb-mol
MW_{NH3}	17.03	lb/lb-mol

DAHS Data						Calculation of NH_3 Emissions	Calculation of NH_3 Emissions Exceedance
Date	Time	$ppmv_{NH3}$	$\dot{m}_{flue\ gas\ dry}$ (lb/hr)	NO_X ppmvdc	$\dot{m}_{SCR\ NH3}$ (lb/hr)	$\dot{m}_{NH3}$ (lb/hr)	$\dot{m}_{Exceedance}$ (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.

City of VERNON CALIFORNIA

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: MRichards@cityofvernon.org) or Elyse Engel at (702) 354-2648 (email address: Elyse.Engel@jacobs.com) 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

South Coast Air Quality Management District

Form 500-N

Title V - Deviations, Emergencies & Breakdowns

*This written report is in addition to requirements to verbally report certain types of incidents. Verbal reports may be made by calling AQMD at 1-800-288-7664 (1-800-CUT-SMOG) or AQMD enforcement personnel.

Mail To:
SCAQMD- Compliance & Enforcement
P.O. Box 4941
Diamond Bar, CA 91765-0941

Tel: (909) 396-3385
www.aqmd.gov

Section I - Operator Information

1. Facility Name (Business Name of Operator That Appears On Permit): Vernon Public Utilities

2. Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD): 195802

3. Address: (where incident occurred) 4963 S Soto Street (Street Address)
Vernon (City) CA (State) 90058 (Zip)

4. Mailing Address: (if different from Item 3) 4305 Santa Fe Avenue (Street Address)
Vernon (City) CA (State) 90058 (Zip)

5. Provide the name, title, and phone number of the person to contact for further information:

Matt Richards (Name) | Utilities Operations Manager (Title) | (626) 393-3748 (Phone #)

Section II - Reporting of Breakdowns, Deviations, and Emergencies

1. This written notification is to report a(n):

Type of Incident	Verbal Report Due*	Written Report Due
a. ☐ Emergency under Rule 3002(g)	Within 1 hour of discovery	Within 2 working days from when the emission limit was exceeded.
b. ☐ Breakdown under: ☐ Rule 430 (Non-RECLAIM) ☐ Rule 2004 (RECLAIM) ☐ Rule 218 (Non-RECLAIM) [See Rule 218(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 & 2004 - Within 7 calendar days after breakdown is corrected, but no later than 30 days from start of the breakdown, unless a written extension is granted. For Rule 218 - With required semi-annual reports.
c. ☒ Deviation with excess emissions [See Title V Permit, 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 discovery of the deviation.
d. ☐ Other Deviation [See Title V Permit, Section K, Condition Nos. 22D & 23]	None	With required semi-annual monitoring reports.

2. The incident was first discovered by: Mark Yeaman (Name) on 08/30/2023 (Date) 03:56 (Time) ○ AM ◉ PM

3. The incident was first reported by: Operator #9 (Name of AQMD Staff Person) on 09/01/2023 (Date) 10:41 (Time) ◉ AM ○ PM

a. ◉ Via Phone

b. ○ In Person

Notification Number (Required): 761237

4. When did the incident actually occur? 08/30/2023 (Date) 11:00 (Time) ◉ AM ○ PM

AQMD USE ONLY				
Received By:		Assigned By:	Inspector:	
Date/Time Received:		Date/Time Assigned:	Date/Time Received Assignment:	
Date Delivered To Team:		Date Reviewed Inspector Report:	Date Inspected Facility:	
Team:	Sector:	Breakdown/Deviation Notification No.	Date Completed Report:	
Recommended Action:	Cancel Notification	Grant Relief	Issue NOV No.	Other:
Final Action:	Cancel Notification	Grant Relief	Issue NOV No.	Other:

5. Has the incident stopped? a. (•) Yes, on: 08/30/2023 (Date) 12:00 (Time) ( ) AM (•) PM b. ( ) No

6. What was the total duration of the incident? 0 (Days) 01 (Hours)

7. For equipment with an operating cycle, as defined in Rule 430 (b)(3)(A), when was the end of the operating cycle during which the incident occurred? _____ (Date) _____ (Time) ( ) AM ( ) PM

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. [X] Violation of Permit Condition(s): Section D, Condition No. A195.4

b. [ ] Violation of AQMD Rule(s): _____

10. 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 attach calculations.)

[ ] VOC _____ lbs [ ] NOx _____ lbs [ ] SOx _____ lbs [ ] H2S _____ lbs

[ ] CO _____ lbs [ ] PM _____ lbs [ ] Other: _____ lbs See Attachment A pollutant

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?

a. ( ) Yes, for: [ ] NOx [ ] SOx b. ( ) No, for: [ ] NOx [ ] SOx

If box 12(b) above is checked, include all information specified in Rule 2004(i)(3)(B) and (C), as applicable.

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.

14. Was the facility operating properly prior to the incident?

a. (•) Yes b. ( ) No, because: _____

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

a. (•) Yes b. ( ) No, because: See Attachment A

16. Has the facility returned to compliance?

a. ( ) No, because: _____

b. (•) Yes (Attach evidence such as emissions calculations, contemporaneous operating logs or other credible evidence.)

Section 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 Title V Facilities ONLY: [X] I also certify under penalty of law that that I am the responsible official for this facility as defined in AQMD Regulation XXX.

1. Signature of Responsible Official:	2. Title of Responsible Official: General Manager of Vernon Public Utilities
3. Print Name: Todd Dusenberry	4. Date: 9-12-2023
5. Phone #: (323) 583-8811	6. Fax #:

7. Address of Responsible Official:

4305 Santa Fe Avenue	Vernon	CA	90058
Street #	City	State	Zip

Attachment A: Additional Form 500-N Descriptions

This attachment presents additional information regarding the ammonia (NH_3) 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_3 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_3 concentration being within the sensitivity of the site's analyzers. NH_3 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_3 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_3 flow, the adjustment was not made quickly enough to bring the one-hour average NH_3 slip below the 5 ppmv limit. The NH_3 slip was back under 5 ppmv starting with the 12:00 PM hour.

Since the most recent NH_3 slip test was conducted on May 16, 2023, Gas Turbine No. 1 has been operating with an NH_3 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_3 slip during testing, there was only a small absolute difference between the site's calculated NH_3 slip and the source tester's reference method calculations, but a high multiplier.

The use of this high NH_3 slip correction factor has resulted in Gas Turbine No. 1 having a much smaller operational window. Any variation in NH_3 flow, in conjunction with this higher factor, increases the probability of an exceedance of the 5 ppmv NH_3 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_3. 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_3 flow through the SCR. Although the operator reduced the NH_3 flow, the adjustment was not made quickly enough to keep the one-hour average NH_3 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_3 Emission Calculations

Date of Data: August 30, 2023

Excess Emissions Mass Determination

Title V Permit Condition No. A195.4: NH_3 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:

$ppmv_{Limit}$	5	ppmv
$MW_{flue\ gas}$	29.303	lb/lb-mol
MW_{NH3}	17.03	lb/lb-mol

DAHS Data						Calculation of NH_3 Emissions	NH_3 Concentration Above Permit Limit	Calculation of NH_3 Emissions Exceedance
Date	Time	$ppmv_{NH3}$	$\dot{m}_{flue\ gas\ dry}$ (lb/hr)	NO_X ppmvdc	$\dot{m}_{SCR\ NH3}$ (lb/hr)	$\dot{m}_{NH3}$ (lb/hr)	$ppmv_{NH3}$	$\dot{m}_{Exceedance}$ (lb/hr) 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.