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January 28, 2022

Dr. Anwar Ali Compliance Project Manager Siting, Transmission and Environmental Protection Division Compliance Monitoring and Enforcement Office California Energy Commission 715 P Street Sacramento, CA 95814 anwar.ali@energy.ca.gov

Subject: 2021 Q4 Compliance Report October 1, 2021 through December 31, 2021 Malburg Generating Station (01-AFC-25C)

Dr. Ali,

Attached please find the Quarterly Compliance Report for the Malburg Generating Station (01-AFC-25C), covering the operational period of October 1, 2021 through December 31, 2021. 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).

Please note that, effective December 14, 2021, the City of Vernon, Public Utilities Department is the new owner and operator of the Malburg Generating Station. A Petition for Change in Ownership was filed with the California Energy Commission on December 15, 2021 (TN #240950). Accordingly, if you have any questions or need more information, please contact Matt Richards, Utilities Operations Manager, at <u>MRichards@cityofvernon.org</u> or (323) 583-8811 x378 moving forward.

Sincerely,

nd W Men

Rich Olsen Assistant General Manager of Generation & Operations City of Vernon, Public Utilities Department

Enclosure: MGS 2021 Q4 Compliance Report

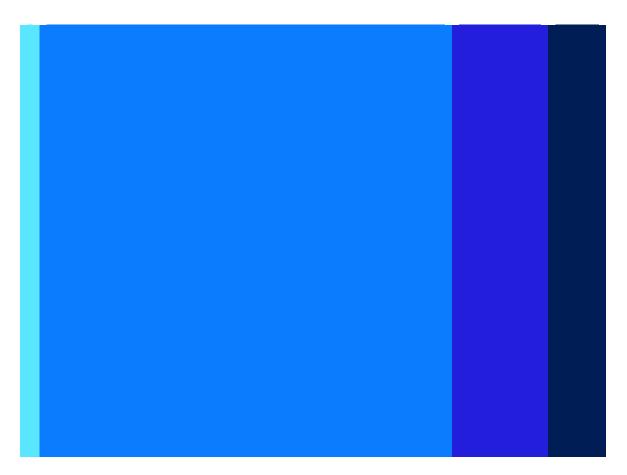
# Malburg Generating Station Quarterly Compliance Report (Fourth Quarter 2021)

Submitted to California Energy Commission

Submitted by City of Vernon, Public Utilities Department

January 28, 2022

Document no: PPS0127221555SJC Revision no: 0



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# Acronyms and Abbreviations

CEC	California Energy Commission's
CEMS	continuous emissions monitoring system
СО	carbon monoxide
COC	Conditions of Certification
CTGs	combustion turbine generators
DAHS	data acquisition and handling system
gr/scf	grains per standard cubic foot
HRSG	heat recovery steam generators
lb/day	pounds per day
lb/hr	pounds per hour
MGS	Malburg Generating Station
NH <sub>3</sub>	ammonia
NOx	nitrogen oxides
PM <sub>10</sub>	10 microns
PM <sub>2.5</sub>	2.5 microns
ppmw	parts per million by weight
QCR	Quarterly Compliance Report
RECLAIM	Regional Clean Air Incentives Market
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 heat recovery steam generators (HRSG), a steam turbine generator (STG), a cooling tower, a diesel-fired emergency firewater pump, and support equipment.

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

# 1.2 Organization of the Quarterly Compliance Report

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

# 2. Required Quarterly Compliance Report Documentation

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

Condition of Certification	Response
AQ-C6	The weekly total dissolved solids (TDS) results for the fourth quarter of 2021 are provided in Appendix A, Table 3; the weekly sample reports collected for the same period are provided in Appendix B. Note that TDS is not sampled during plant outages.
AQ-C7	Daily particulate matter with aerodynamic diameter less than or equal to 10 microns ( $PM_{10}$ ) emissions from cooling tower operation during the fourth quarter of 2021 are provided in Appendix A, Tables 4 through 6. 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 fourth quarter of 2021 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 fourth quarter of 2021, including the duration and date of occurrence, are provided in Appendix C, Table 1.
AQ-C11	All ammonia (NH <sub>3</sub> ), nitrogen oxides (NOx), sulfur oxides (SOx), carbon monoxide (CO), $PM_{10}$ , and volatile organic compound (VOC) emissions from MGS operation during the fourth quarter of 2021 are provided in Appendix A, Table 2. Annual emissions of these same pollutants are provided in Appendix A, Table 1.
AQ-2	Low sulfur diesel fuel was last purchased on March 24, 2021. The fuel purchase record is provided in Appendix D and demonstrates that the fuel does not contain sulfur compounds in excess of 15 parts per million by weight (ppmw).
AQ-3	See the response for COC AQ-2.

Table 2-1. Required Quarterly Compliance Report Documentation

Condition of Certification	Response
AQ-5	Monthly emissions of CO, PM <sub>10</sub> , particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (PM <sub>2.5</sub> ), VOC, and SOx from CTG and duct burner operation during the fourth quarter of 2021 are presented in Appendix A, Tables 8 through 10. Fuel usage for each turbine-duct burner pair is provided in Appendix A, Table 7. 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. Note also that MGS did experience an exceedance of its non- cold startup NOx emissions limit of 51.3 pounds on November 12, 2021. An excess emissions report was filed with the South Coast Air Quality Management District (SCAQMD), as required, and has been included in Appendix E.
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 during normal operations exceeded the emission concentration limit of 2.0 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.
AQ-12	See the response for COC AQ-C11. Additionally, although NH <sub>3</sub> emissions are calculated via the CEMS on an hourly basis, compliance with the specified limit of 5 parts per million (ppm) is demonstrated through annual source testing. The most recent NH <sub>3</sub> compliance source test, performed on March 9 and 10, 2021 with results submitted to the CEC on April 22, 2021, indicated compliance with the emission limits for both CTGs (1.7 ppm for CTG 1 and 1.9 ppm for CTG 2).
AQ-13	See the response for COC AQ-C11. Additionally, the most recent triennial compliance source test, performed in August 2019, 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 (0.69 lb/hr and 0.0003 gr/scf for CTG1 and 1.15 lb/hr and 0.0005 gr/scf for CTG2).
AQ-14	See the response for COC AQ-2.
AQ-15	Annual hours of operation for the diesel-fired emergency firewater pump are provided in Appendix A, Table 11. As shown, the annual hours for maintenance and testing do not exceed 50 hours and the total annual operational hours do not exceed 200 hours.
AQ-27	See the response for COC AQ-5. As shown, fuel consumption per turbine-duct burner pair does not exceed the specified limit of 405 million cubic feet per month.
AQ-32	The NOx Regional Clean Air Incentives Market (RECLAIM) annual emission allocation information for the MGS facility, received from the SCAQMD for the compliance year, is provided in Appendix F.
AQ-36	See the responses for COC AQ-5 and AQ-6.

Malburg Generating StationQuarterly Compliance Report (Fourth Quarter 2021)

# Appendix A MGS Emission Calculations

# Malburg Generating Station Quarterly Compliance Report Appendix A, Tables 1 & 2

### Reporting Period: Quarter 4 2021

## Table 1. Annual Emissions - Calendar Year 2021

Source	Annual Emissions (Ib/year) <sup>1</sup>					
Source	NOx <sup>2</sup>	СО	VOC	SOx	PM <sub>10</sub> /PM <sub>2.5</sub>	$NH_3^{3}$
CTG 1 & Duct Burner	16,963	6,070	3,609	660	14,103	5,499
CTG 2 & Duct Burner	18,193	5,789	3,783	688	14,749	7,373
Cooling Tower					509	
Diesel Firewater Pump	130	28.2	10.4	5.81	9.27	
Total	35,285	11,887	7,402	1,353	29,371	12,871

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

<sup>2</sup> Annual NOx emissions are as submitted to SCAQMD, based on previous quarter submittals and the 4th Quarter

'U1\_U2MonthlyRECLAIMNOxSummaryByDay' RegPerfect Report.

<sup>3</sup> Annual NH<sub>3</sub> emissions obtained from 'All\_MonthlySummary\_SCRPerformance' RegPerfect Report.

#### Table 2. Quarterly Emissions - October 1, 2021 through December 31, 2021

Source	Quarterly Emissions (lb/quarter)					
	NOx	CO	VOC	SOx	PM <sub>10</sub> /PM <sub>2.5</sub>	NH <sub>3</sub>
CTG 1 & Duct Burner	4,433	1,528	962	176	3,761	1,957
CTG 2 & Duct Burner	4,435	1,418	953	173	3,708	2,174
Cooling Tower					133	
Diesel Firewater Pump	28.9	6.28	2.31	1.29	2.06	
Total	8,898	2,952	1,917	351	7,604	4,131

# Malburg Generating Station Quarterly Compliance Report Appendix A, Table 3

Reporting Period: Quarter 4 2021

Table 3. Cooling Tower Total Dissolved Solids (TDS) Sampling Results <sup>1</sup>

Sampli		
Start Date	End Date	TDS (ppm)
9/26/2021	10/2/2021	4,540
10/3/2021	10/9/2021	4,820
10/10/2021	10/16/2021	4,320
10/17/2021	10/23/2021	4,530
10/24/2021	10/30/2021	4,780
10/31/2021	11/6/2021	4,480
11/7/2021	11/13/2021	4,640
11/14/2021	11/20/2021	4,720
11/21/2021	11/27/2021	4,800
11/28/2021	12/4/2021	4,920
12/5/2021	12/11/2021	Outage
12/12/2021	12/18/2021	4,340
12/19/2021	12/25/2021	4,400
12/26/2021	1/1/2022	4,480

<sup>1</sup> 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 4

#### Reporting Period: October 2021

# 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	Per		
	Start Date	End Date	TDS (ppm)
9/28/2021	9/26/2021	10/2/2021	4,540
10/5/2021	10/3/2021	10/9/2021	4,820
10/11/2021	10/10/2021	10/16/2021	4,320
10/19/2021	10/17/2021	10/23/2021	4,530
10/25/2021	10/24/2021	10/30/2021	4,780
11/3/2021	10/31/2021	11/6/2021	4,480

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

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

#### Constants

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

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

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

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

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

	Circulation Rate		PM <sub>10</sub> Emissions	Above 6.2 lb/day PM <sub>10</sub>
Date	(gal/day) <sup>1</sup>	TDS (ppm)	(lb/day)	Limit? <sup>2</sup>
10/1/2021	38,880,000	4,540	1.47	No
10/2/2021	38,880,000	4,540	1.47	No
10/3/2021	38,880,000	4,820	1.56	No
10/4/2021	38,880,000	4,820	1.56	No
10/5/2021	38,880,000	4,820	1.56	No
10/6/2021	38,880,000	4,820	1.56	No
10/7/2021	38,880,000	4,820	1.56	No
10/8/2021	38,880,000	4,820	1.56	No
10/9/2021	38,880,000	4,820	1.56	No
10/10/2021	38,880,000	4,320	1.40	No
10/11/2021	38,880,000	4,320	1.40	No
10/12/2021	38,880,000	4,320	1.40	No
10/13/2021	38,880,000	4,320	1.40	No
10/14/2021	38,880,000	4,320	1.40	No
10/15/2021	38,880,000	4,320	1.40	No
10/16/2021	38,880,000	4,320	1.40	No
10/17/2021	38,880,000	4,530	1.47	No
10/18/2021	38,880,000	4,530	1.47	No
10/19/2021	38,880,000	4,530	1.47	No
10/20/2021	38,880,000	4,530	1.47	No
10/21/2021	38,880,000	4,530	1.47	No
10/22/2021	38,880,000	4,530	1.47	No
10/23/2021	38,880,000	4,530	1.47	No
10/24/2021	38,880,000	4,780	1.55	No
10/25/2021	38,880,000	4,780	1.55	No
10/26/2021	38,880,000	4,780	1.55	No
10/27/2021	38,880,000	4,780	1.55	No
10/28/2021	38,880,000	4,780	1.55	No
10/29/2021	38,880,000	4,780	1.55	No
10/30/2021	38,880,000	4,780	1.55	No
10/31/2021	38,880,000	4,480	1.45	No

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

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

### Malburg Generating Station Quarterly Compliance Report Appendix A, Table 5

#### Reporting Period: November 2021

# 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	Pe	TDS (ppm)	
Sample Date	Start Date End Date		i bo (ppiii)
11/3/2021	10/31/2021	11/6/2021	4,480
11/8/2021	11/7/2021	11/13/2021	4,640
11/15/2021	11/14/2021	11/20/2021	4,720
11/23/2021	11/21/2021	11/27/2021	4,800
11/29/2021	11/28/2021	12/4/2021	4,920

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

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

#### Constants

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

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

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

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

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

	Circulation Rate		PM <sub>10</sub> Emissions	Above 6.2 lb/day PM <sub>10</sub>
Date	(gal/day) <sup>1</sup>	TDS (ppm)	(lb/day)	Limit? <sup>2</sup>
11/1/2021	38,880,000	4,480	1.45	No
11/2/2021	38,880,000	4,480	1.45	No
11/3/2021	38,880,000	4,480	1.45	No
11/4/2021	38,880,000	4,480	1.45	No
11/5/2021	38,880,000	4,480	1.45	No
11/6/2021	38,880,000	4,480	1.45	No
11/7/2021	38,880,000	4,640	1.50	No
11/8/2021	38,880,000	4,640	1.50	No
11/9/2021	38,880,000	4,640	1.50	No
11/10/2021	38,880,000	4,640	1.50	No
11/11/2021	38,880,000	4,640	1.50	No
11/12/2021	38,880,000	4,640	1.50	No
11/13/2021	38,880,000	4,640	1.50	No
11/14/2021	38,880,000	4,720	1.53	No
11/15/2021	38,880,000	4,720	1.53	No
11/16/2021	38,880,000	4,720	1.53	No
11/17/2021	38,880,000	4,720	1.53	No
11/18/2021	38,880,000	4,720	1.53	No
11/19/2021	38,880,000	4,720	1.53	No
11/20/2021	38,880,000	4,720	1.53	No
11/21/2021	38,880,000	4,800	1.56	No
11/22/2021	38,880,000	4,800	1.56	No
11/23/2021	38,880,000	4,800	1.56	No
11/24/2021	38,880,000	4,800	1.56	No
11/25/2021	38,880,000	4,800	1.56	No
11/26/2021	38,880,000	4,800	1.56	No
11/27/2021	38,880,000	4,800	1.56	No
11/28/2021	38,880,000	4,920	1.59	No
11/29/2021	38,880,000	4,920	1.59	No
11/30/2021	38,880,000	4,920	1.59	No

<sup>1</sup> Maximum daily circulation rate conservatively used to estimate PM<sub>10</sub> emissions when the cooling tower is operated for any part of the day. Circulation rate is zero for days the cooling tower is not operated at all. <sup>2</sup> Daily emissions limit established in COC AQ-C7.

### Malburg Generating Station Quarterly Compliance Report Appendix A, Table 6

#### Reporting Period: December 2021

# 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	Pe	TDS (ppm)	
Sample Date	Start Date	End Date	
11/29/2021	11/28/2021	12/4/2021	4,920
Outage <sup>1</sup>	12/5/2021	12/11/2021	Outage
12/14/2021	12/12/2021	12/18/2021	4,340
12/21/2021	12/19/2021	12/25/2021	4,400
12/28/2021	12/26/2021	1/1/2022	4,480

<sup>1</sup> Outage beginning on 12/6/21 and ending on 12/10/21 prevented sampling during this period.

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

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

#### Constants

Parameter	Value
Circulation Rate per	12 500
Pump (gal/min) <sup>1</sup>	13,500
Number of Pumps	2
Total Circulation Rate	27,000
(gal/min)	27,000
Water Density (lb/gal)	8.334
Drift Factor (%) <sup>2</sup>	0.0005
Correction Factor	0.0
(unitless) <sup>3</sup>	0.2
1	

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

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

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

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

	Circulation Rate		PM <sub>10</sub> Emissions	Above 6.2 lb/day PM <sub>10</sub>
Date	(gal/day) <sup>1</sup>	TDS (ppm) <sup>2</sup>	(lb/day)	Limit? <sup>3</sup>
12/1/2021	38,880,000	4,920	1.59	No
12/2/2021	38,880,000	4,920	1.59	No
12/3/2021	38,880,000	4,920	1.59	No
12/4/2021	38,880,000	4,920	1.59	No
12/5/2021	38,880,000	4,920	1.59	No
12/6/2021	38,880,000	4,920	1.59	No
12/7/2021	0	Outage	0.00	No
12/8/2021	0	Outage	0.00	No
12/9/2021	0	Outage	0.00	No
12/10/2021	38,880,000	4,340	1.41	No
12/11/2021	38,880,000	4,340	1.41	No
12/12/2021	38,880,000	4,340	1.41	No
12/13/2021	38,880,000	4,340	1.41	No
12/14/2021	38,880,000	4,340	1.41	No
12/15/2021	38,880,000	4,340	1.41	No
12/16/2021	38,880,000	4,340	1.41	No
12/17/2021	38,880,000	4,340	1.41	No
12/18/2021	38,880,000	4,340	1.41	No
12/19/2021	38,880,000	4,400	1.43	No
12/20/2021	38,880,000	4,400	1.43	No
12/21/2021	38,880,000	4,400	1.43	No
12/22/2021	38,880,000	4,400	1.43	No
12/23/2021	38,880,000	4,400	1.43	No
12/24/2021	38,880,000	4,400	1.43	No
12/25/2021	38,880,000	4,400	1.43	No
12/26/2021	38,880,000	4,480	1.45	No
12/27/2021	38,880,000	4,480	1.45	No
12/28/2021	38,880,000	4,480	1.45	No
12/29/2021	38,880,000	4,480	1.45	No
12/30/2021	38,880,000	4,480	1.45	No
12/31/2021	38,880,000	4,480	1.45	No

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

<sup>2</sup> Outage prevented sampling for the 12/5/21 through 12/11/21 period. Results from nearest sampling period used to calculate emissions from operation on 12/5/21 through 12/6/21 and 12/10/21 through 12/11/21.
 <sup>3</sup> Daily emissions limit established in COC AQ-C7.

#### Malburg Generating Station Quarterly Compliance Report Appendix A, Tables 7, 8, 9 & 10

#### Reporting Period: Quarter 4 2021

#### Table 7. Monthly Turbine-Duct Burner Fuel Flow

	Oct	October		ember	December	
Source	Source Fuel Flow Above 405 (MMscf/month) <sup>1</sup> MMscf/month Limit? <sup>2</sup>		Fuel Flow         Above 405           (MMscf/month) <sup>1</sup> MMscf/month Limit?		Fuel Flow (MMscf/month) <sup>1</sup>	Above 405 MMscf/month Limit? <sup>2</sup>
CTG 1 & Duct Burner	234	No	209	No	183	No
CTG 2 & Duct Burner	235	No	202	No	180	No

<sup>1</sup> Fuel flow data obtained from 'U1/U2\_MonthlySummary\_MassEmissionsAndFuel' RegPerfect Report.

<sup>2</sup> Monthly fuel flow limit is per Condition of Certification (COC) AQ-27.

#### Table 8. Monthly Emissions - October 2021

Source	Monthly Emissions (Ib/month) <sup>1</sup>							
Source	NOx <sup>2</sup>	CO	VOC	SOx	PM <sub>10</sub> /PM <sub>2.5</sub>	$NH_3^{3}$		
CTG 1 & Duct Burner	1,628	540	359	65.8	1,406	760		
CTG 2 & Duct Burner	1,648	512	363	66.0	1,412	817		
Monthly Emission Limits <sup>4</sup>	N/A	7,633	3,236	227	4,876	N/A		
Exceeds Limit?	N/A	No	No	No	No	N/A		

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

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

<sup>3</sup> Monthly NH<sub>3</sub> emissions data obtained from 'All\_MonthlySummary\_SCRPerformance' RegPerfect Report.

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

#### Table 9. Monthly Emissions - November 2021

Source	Monthly Emissions (lb/month) <sup>1</sup>							
Source	NOx <sup>2</sup>	CO	VOC	SOx	PM <sub>10</sub> /PM <sub>2.5</sub>	$NH_3^{3}$		
CTG 1 & Duct Burner	1,491	502	321	58.7	1,254	714		
CTG 2 & Duct Burner	1,496	465	312	56.7	1,214	791		
Monthly Emission Limits <sup>4</sup>	N/A	7,633	3,236	227	4,876	N/A		
Exceeds Limit?	N/A	No	No	No	No	N/A		

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

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

<sup>3</sup> Monthly NH<sub>3</sub> emissions data obtained from 'All\_MonthlySummary\_SCRPerformance' RegPerfect Report.

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

#### Table 10. Monthly Emissions - December 2021

Source	Monthly Emissions (lb/month) <sup>1</sup>							
Source	NOx <sup>2</sup>	CO	VOC	SOx	PM <sub>10</sub> /PM <sub>2.5</sub>	NH <sub>3</sub> <sup>3</sup>		
CTG 1 & Duct Burner	1,314	486	282	51.6	1,101	483		
CTG 2 & Duct Burner	1,291	441	278	50.5	1,082	565		
Monthly Emission Limits <sup>4</sup>	N/A	7,633	3,236	227	4,876	N/A		
Exceeds Limit?	N/A	No	No	No	No	N/A		

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

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

<sup>3</sup> Monthly NH<sub>3</sub> emissions data obtained from 'All\_MonthlySummary\_SCRPerformance' RegPerfect Report.

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

Malburg Generating Station Quarterly Compliance Report Appendix A, Table 11

Reporting Period: Quarter 4 2021

#### Methodology

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

#### **Emission Factors**

Pollutant	Emission Factor (Ib/Mgal)	Reference
NOx	469	Title V Permit
CO	102	SCAQMD Default Combustion Emission Factors (AER, January 2022)
VOC	37.5	SCAQMD Default Combustion Emission Factors (AER, January 2022)
SOx	21	SCAQMD Default Combustion Emission Factors (AER, January 2022)
PM <sub>10</sub> /PM <sub>2.5</sub>	33.5	SCAQMD Default Combustion Emission Factors (AER, January 2022)

#### Table 11. Monthly Turbine-Duct Burner Fuel Flow

Month	Monthl	y Hours of Operation	ation <sup>1</sup>	Fuel Usage		Monthly Emissions (lb/month)				
WORLIN	Maintenance	Testing	Emergency	(gal/month) <sup>2</sup>	NOx	CO	VOC	SOx	PM <sub>10</sub> /PM <sub>2.5</sub>	
January	0.0	2.4	0.0	26.9	12.6	2.74	1.01	0.56	0.90	
February	0.0	1.5	0.0	16.8	7.88	1.71	0.63	0.35	0.56	
March	0.0	2.1	0.0	23.5	11.0	2.40	0.88	0.49	0.79	
April	0.0	2.1	0.0	23.5	11.0	2.40	0.88	0.49	0.79	
May	0.0	2.1	0.0	23.5	11.0	2.40	0.88	0.49	0.79	
June	0.0	2.4	0.0	26.9	12.6	2.74	1.01	0.56	0.90	
July	0.0	2.1	0.0	23.5	11.0	2.40	0.88	0.49	0.79	
August	0.0	2.5	0.0	28.0	13.1	2.86	1.05	0.59	0.94	
September	0.0	2.0	0.0	22.4	10.5	2.28	0.84	0.47	0.75	
October	0.0	2.0	0.0	22.4	10.5	2.28	0.84	0.47	0.75	
November	0.0	2.0	0.0	22.4	10.5	2.28	0.84	0.47	0.75	
December	0.0	1.5	0.0	16.8	7.88	1.71	0.63	0.35	0.56	
Total	0.0	24.7	0.0	276.6	130	28.2	10.4	5.81	9.27	
Annual Limit	for Maintenance and T	esting <sup>3</sup>	50							
	Total Annual Limit <sup>3</sup>		200							

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

Exceeds Limits?

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

No

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

Appendix B Cooling Tower Blowdown Reports



October 04, 2021

Tom Barnhart Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Report No.: 2109310 Project Name: Malburg Generating Station Weekly

Dear Tom Barnhart,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on September 28, 2021.

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

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

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

Project Manager



Page 2 of 2

Report Date: 10/04/21

PLS Report No.: 2109310

Submitted: 09/28/21

File #:74548

Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Attn: Tom Barnhart

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

Project: Malburg Generating Station Weekly

Analyte	Result	s Flag	D.F.	Units	PQL	Prep	o/Test Met	hod	Prepared	Anal	zed	Ву	Batch
Total Dissolved Solids	4540		1	mg/L	5.0		SM	2540C	09/30/21	10/0	1/21	dd	BJ10110
			Q	uality	Contro	ol Data							
						Spike	Source		%REC		RPD		
Analyte		Result	PQL	l	Jnits	Level	Result	%REC	Limits	RPD	Limit	Q	ualifier
Batch BJ10110													
Blank		Prepared: 0	9/30/21	Analyzed	: 10/01/	21							
Total Dissolved Solids		ND	5.0	ſ	ng/L								
LCS		Prepared: 0	9/30/21	Analyzed	: 10/01/	21							
Total Dissolved Solids		52.0	5.0	ı	ng/L	50.00		104	80-120				
Duplicate Source	2109310-01	Prepared: O	9/30/21	Analyzed	: 10/01/	21							
Total Dissolved Solids		4560	5.0	ſ	ng/L		4540			0.329	5		

### **Notes and Definitions**

 NA
 Not Applicable

 ND
 Analyte NOT DETECTED at or above the detection limit

 NR
 Not Reported

 MDL
 Method Detection Limit

 PQL
 Practical Quantitation Limit

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

Rick Owen Parties

Authorized Signature(s)

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CLIENT	NAME:	COLOR	ADO ENERGY MGMT.	PROJE	CT N	AME/NC	).	MALB	URG GI	ENERAT	TING S	TATION						, AIRBILL NO:
ADDRE	ss:	2715 E. 5	oth ST. VERNON CA 90058							10000 (11) - T		ANA	LYSES	REQU	JEST	ED		COOLER TEMP: <u>ル</u> ジャ
PROJEC	T MANA	GER	TOM BARNHART	PHONE	NO:	1-702-413	3-2525	FAX I	NO:									PRESERVED:
SAMPL	ER NAMI	E:	JOHN BARIE	SIGNA	TURE	: 7												REMARKS:
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UST PR	OJECT:	Y N	GLOBAL ID#:															
SAMPLE	DATE	TIME	SAMPLE DESCRIPTION		MA	TRIX		TAT	CONT	AINER								SAMPLE CONDITIONS/
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																By:		Date:
SPECIA	L INSTR	UCTION	:															



October 12, 2021

Tom Barnhart Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Report No.: 2110032 Project Name: Malburg Generating Station

Dear Tom Barnhart,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on October 05, 2021.

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.

Alla Project 4 Manage



# **Certificate of Analysis**

Page 2 of 2

Colorado Energy Management 4963 Soto St. Vernon, CA 90058 File #:74548 Report Date: 10/12/21 Submitted: 10/05/21 PLS Report No.: 2110032

Attn: Tom Barnhart

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

Project: Malburg Generating Station

Analyte	Results	Flag	D.F.	Units	PQL	Prep	/Test Method	Prepared	Analyzed	By	Batch
Total Dissolved Solids	4820		1	mg/L	5.0	-	SM 2540C	10/07/21	10/08/21	dd	BJ1080
			Q	uality	Contro	ol Data					
						Spike	Source	%REC	RPD	)	
Analyte	Resi	ult	PQL		Units	Level	Result %REC	Limits	RPD Limi	t (	Jualifier
Batch BJ10805											
Blank	Preț	ared: 10	/07/21	Analyzed	l: 10/08/	21					
Total Dissolved Solids	ND	)	5.0		mg/L						

Total Dissolved	Solids	47.0	5.0	mg/L	50.00	94.0	80-120			
Duplicate	Source: 2110032-01	Prepared: 1	.0/07/21 Ana	lyzed: 10/08	/21					
Total Dissolved		4970	5.0	mg/L		4820		2.89	5	

# Notes and Definitions

Prepared: 10/07/21 Analyzed: 10/08/21

NA Not Applicable

LCS

ND Analyte NOT DETECTED at or above the detection limit

NR Not Reported

MDL Method Detection Limit

PQL Practical Quantitation Limit

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

Fick Doven

Authorized Signature(s)

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		AB S	ERVICE	(213) 74	5-5312	FAX (213	3] 745-63	72					F	ILE NO.	:	· • /	LAB	PAGE: _/_ OF_/ NO.:_2[[0032
CLIENT	NAME:	COLOR	ADO ENERGY MGMT.	PROJE	CT N	AME/NC	).	MALB	URG GH	NERAT	TING S	TATIO		.0.NO.				AIRBILL NO:
ADDRE	SS:	2715 E. 5	50th ST. VERNON CA 90058									AN	ALYS	ES REC	UEST	TED	r	COOLER TEMP: $13^{2}$
PROJEC	T MANA	GER	TOM BARNHART	PHONE	NO:	1-702-413	3-2525	FAX	NO:									PRESERVED:
SAMPL	ER NAMI	E:	JOHN BARIE	SIGNA	rure	:	25-	-										REMARKS:
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ID	SAMPLED	SAMPLED	SAMILE DESCRIPTION	WATER	SOIL	SLUDGE	OTHER		#	TYPE	TDS							CONTAINER/COMMENTS
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SPECIA	L INSTR	UCTION	:															



October 19, 2021

Tom Barnhart Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Report No.: 2110082 Project Name: Malburg Generating Station Weekly

Dear Tom Barnhart,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on October 11, 2021.

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

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

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

Project Manager



# **Certificate of Analysis**

Page 2 of 2

Report Date: 10/19/21

PLS Report No.: 2110082

Submitted: 10/11/21

File #:74548

Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Attn: Tom Barnhart

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

Project: Malburg Generating Station Weekly

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Analyte	×	lesults	Flag	D.F.	Units	PQL	Pre	p/Test Met		· · · · · · · · · · · · · · · · · · ·				
Total Dissolv	ved Solids	4320		1	mg/L	5.0	-	SM	2540C	10/14/21	10/1	5/21	dđ	BJ11502
				Qı	uality	Contro	ol Data	Ì						
							Spike	Source		%REC		RPD		
Analyte		Resu	lt	PQL		Units	Level	Result	%REC	Limits	RPD	Limit	Q	Jalifier
Batch BJ11502	•							a an an an a						
Biank		Prep	ared: 10,	/14/21	Analyzed	: 10/15/2	21							
Total Dissolved	d Solids	ND		5.0		mg/L								
LCS		Prep	ared: 10,	14/21	Analyzed	: 10/15/2	21							
Total Dissolved	d Solids	51.0	)	5.0		mg/L	50.00		102	80-120				
Duplicate	Source: 2110082-01	L Prep	ared: 10,	/14/21	Analyzed	: 10/15/2	21							
Total Dissolved	d Solids	4430	)	5.0		mg/L		4320			2,32	5		
Duplicate	Source: 2110113-10	) Prep	ared: 10	14/21	Analyzed	: 10/15/:	21							
Total Dissolved	d Solids	1020	)	5.0		mg/L		1020			0.0489	5		

#### Notes and Definitions

NA Not Applicable

ND Analyte NOT DETECTED at or above the detection limit

NR Not Reported

MDL Method Detection Limit

PQL Practical Quantitation Limit

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

Rick Owen Parlie

Authorized Signature(s)

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CLIENT	NAME:	COLOR	ADO ENERGY MGMT.		PROJE	CT N	AME/NO	).	MALB	URG G	ENERAT	TING S	TATION	Wee P.C	D.NO.			2.10	AIRBILL NO:
ADDRE	SS:	2715 E. 5	oth ST. VERNON CA 90	)58									ANA	LYSE	S REQ	UEST	TED		COOLER TEMP: 1.12
PROJEC	T MANA	GER	TOM BARNHART		PHONE	NO:	1-702-41	3-2525	FAX	NO:			- (i - )						PRESERVED:
SAMPL	ER NAMI	E:	JOHN BARIE		SIGNA	TURE	: K	<b>`</b>											REMARKS:
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October 25, 2021

Tom Barnhart Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Report No.: 2110205 Project Name: Malburg Generating Station Weekly

Dear Tom Barnhart,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on October 19, 2021.

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

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

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

Project Manager



# **Certificate of Analysis**

Page 2 of 2

Report Date: 10/25/21

PLS Report No.: 2110205

Submitted: 10/19/21

File #:74548

Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Attn: Tom Barnhart Phone: (323) 476-3626 FAX:(323) 476-3640

Project: Malburg Generating Station Weekly

Analyte	Results	Flag	D.F.	Units	POL	Prep/T	est Method	Prepared	Analyzed	By	Batch
Total Dissolved Solids	4530		1	mg/L	5.0	*	SM 2540C	10/21/21	10/22/21	dd	BJ12222

					Spike	Source		%REC		RPD	
Analyte		Result	PQL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch BJ12222				n de le neder Nation de nederle							
Blank		Prepared: 10	)/21/21 Ana	lyzed: 10/22	2/21						
Total Dissolved	1 Solids	ND	5.0	mg/L							
LCS		Prepared: 10	0/21/21 Ana	lyzed: 10/22	2/21						
Total Dissolved	1 Solids	52.0	5.0	mg/L	50.00		104	80-120			
Duplicate	Source: 2110205-01	Prepared: 10	0/21/21 Ana	lyzed: 10/22	2/21						
Total Dissolved	1 Solids	4490	5.0	mg/L		4530			0.813	5	

#### Notes and Definitions

NA Not Applicable

ND Analyte NOT DETECTED at or above the detection limit

NR Not Reported

MDL Method Detection Limit

PQL Practical Quantitation Limit

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

Fick Owen Par Ue

Authorized Signature(s)

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CLIENT	NAME:	COLOR	ADO ENERGY MGMT.		PROJE	CT N	AME/NO	).	MALB	URG GI	ENERAT	FING S	TATIO	n F	P.O.NO.				AIRBILL NO:
ADDRES	S:	2715 E. 5	0th ST. VERNON CA 9005	58									AN	ALYS	SES RE	QUES	FED		COOLER TEMP: $13^{2}$
PROJEC	T MANA	GER	TOM BARNHART		PHONE	NO:	1-702-413	3-2525	FAX I	NO:									PRESERVED:
SAMPLE	R NAMI	Ð:	JOHN BARIE		SIGNA	TURE	: Xr	~											REMARKS:
TAT (Tu	rn-Aroun	ıd-Time):	0=Same Day; 1=24 Hour:	; 2=4	8Hour;	(ETC	.) N=Nor	mal											
CONTAI	NER TY	PES: B=B	rass; E=Encore/Easy Drav	w; P=	=Plastic;	G=G	lass; V=	VOA V	/ial; (	O=Othe	er								
UST PRO	DJECT:	Y N	GLOBAL ID#:			### <b>-</b> -													
SAMPLE	DATE	TIME	SAMPLE DESCRIPTIO	ON		MA	TRIX	1	TAT	CONT	AINER								SAMPLE CONDITIONS/
D	SAMPLED	SAMPLED			WATER	SOIL	SLUDGE	OTHER		#	TYPE	TDS						<u> </u>	CONTAINER/COMMENTS
	bigit.	1025	COOLING TOWER BLOWDO	WN	х				N	1	Р	X							
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al	-	ignature&	-	Ć	· ·	•	Signature Uto An		ا ـ آم	xe Tan	aka /	Date	: 7 <sup>.2</sup> 1	1,	Time: /火				DISPOSITION eturned to client? Yes No
Relinquis	hed by (S	ignature&	Name):				Signature					Date	:	•	Time:		1		vill not be stored over 30 days, onal storage time is requested
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November 02, 2021

Tom Barnhart Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Report No.: 2110244 Project Name: Malburg Generating Station Weekly

Dear Tom Barnhart,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on October 25, 2021.

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

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

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

Project Manager



# **Certificate of Analysis**

Page 2 of 2

Report Date: 11/02/21

PLS Report No.: 2110244

Submitted: 10/25/21

File #:74548

Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Attn: Tom Barnhart

Phone: (323) 476-3626

FAX:(323) 476-3640

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tower	Blowdown Wat	ter (211	0244-0	1) Samp	led: 10,	/25/21 08	:10 Received:	10/25/21 0	8:10		
Analyte	Results	Flag	D.F.	Units	PQL	Prep/	Test Method	Prepared	Analyzed	Ву	Batch
Total Dissolved Solids	4780		1	mg/L	5.0	+	SM 2540C	10/28/21	10/29/21	dd	BK10122
			Qu	uality (	Contro	ol Data					

		ing to the party			Spike	Source		%REC		RPD	
Analyte		Result	PQL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch BK10122	<b></b>										
Blank		Prepared:	10/28/21 Ana	lyzed: 10/29	9/21						
Total Dissolved Solids		ND	5.0	mg/L							
LCS		Prepared: 10/28/21 Analyzed: 10/29/			9/21						
Total Dissolved Solids		50.0	5.0	mg/L	50.00		100	80-120			
Duplicate	Source: 2110244-01	Prepared:	10/28/21 Ana	lyzed: 10/29	9/21						
Total Dissolved Solids		4650	5.0	mg/L		4780			2.93	5	

#### **Notes and Definitions**

Not Applicable NA

ND Analyte NOT DETECTED at or above the detection limit

Not Reported NR

MDL Method Detection Limit

Practical Quantitation Limit PQL

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

Fick Oven Parkin

Authorized Signature(s)

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05216212			ERVICE											FIL	E NO.:			LAB	NO.: 200044
CLIENT	NAME:	COLOR	ADO ENERGY MGMT.		PROJE	CT N	AME/NO	).	MALB	URG GI	ENERAT	TING S	TATIO	Weer P.O	.NO.				AIRBILL NO:
ADDRE	SS:	2715 E. 5	oth ST. VERNON CA 900	58								-	AN	ALYSES	REQ	UEST	ED		COOLER TEMP: 1.2
PROJEC	CT MANA	GER	TOM BARNHART		PHONE	NO:	1-702-41	3-2525	FAX	NO:									PRESERVED:
SAMPL	ER NAMI	E:	JOHN BARIE		SIGNA	TURE	: J	12	-										REMARKS:
TAT (Tu	rn-Arour	nd-Time):	0=Same Day; 1=24 Hou	r; 2=	48Hour;	(ETC	.) N=Nor	mal											
CONTA	INER TY	PES: B=B	Brass; E=Encore/Easy Dra	ıw; P	=Plastic:	G=G	lass; V=	VOA V	'ial; (	)=Oth	er								
UST PR	OJECT:	Y N	GLOBAL ID#:																
SAMPLE	DATE	TIME	SAMPLE DESCRIPTI	ON		MA	TRIX		TAT	CONT	AINER								SAMPLE CONDITIONS/
ID	SAMPLED	SAMPLED			WATER	SOIL	SLUDGE	OTHER		#	TYPE	TDS							CONTAINER/COMMENTS
	122521	2810	COOLING TOWER BLOWDO	OWN	X				Ν	1	P_	x							
				2															
															-	1			
											1								_
Relinqui	shed by (S	ignature&	Name):	/	Receive	d by (S	Signature	& Nam	e).	L		Date:	t	Tin	ne:		SAM	PLE	DISPOSITION
K	8	5m Ari		1			anatt			upe Ta									turned to client? Yes No
Relinqui		ignature&		7			<b>GHUUU</b> Signature					Date:		// ) Tin	ne:		1		ill not be stored over 30 days,
Kennqui	shed by (S	ignaturea	Ivallie).	/	Receive		Agnature	œ Ivaiii	c).			Date		TIII	ic.				anal storage time is requested
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ann ar	T INIONE	LOPION							_				_		_		By:	_	Date:
SPECIA	L INSTR	UCTION						*2											



November 11, 2021

Tom Barnhart Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Report No.: 2111071 Project Name: Malburg Generating Station

Dear Tom Barnhart,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on November 03, 2021.

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.

Project Manager



Page 2 of 2

Report Date: 11/11/21

PLS Report No.: 2111071

Submitted: 11/03/21

File #:74548

Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Attn: Tom Barnhart

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

Project: Malburg Generating Station

Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	Ву	Batch
Total Dissolved Solids	4480		1	mg/L	5.0	- SM 25400	11/09/21	11/10/21	dd	BK1104
			O	iality (	Contro	l Data				

Analyte		Result	PQL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch BK1104	4										
Błank		Prepared: 1	1/09/21 Ana	alyzed: 11/10	)/21					(, ) - Co ( 12 - 13 - 13 - 13 - 13 - 13 - 13 - 13 -	
Total Dissolve	d Solids	ND	5.0	mg/L							
LCS		Prepared: 1	1/09/21 Ana	lyzed: 11/10	)/21						
Total Dissolve	d Solids	53.0	5.0	mg/L	50.00		106	80-120			
Duplicate	Source: 2111104-01	Prepared: 1	1/09/21 Ana	lyzed: 11/10	)/21						
Total Dissolve	d Solids	4610	5.0	mg/L		4640			0.469	5	

#### **Notes and Definitions**

NA Not Applicable

ND Analyte NOT DETECTED at or above the detection limit

NR Not Reported

MDL Method Detection Limit

PQL Practical Quantitation Limit

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

Rick Doven . lier la

Authorized Signature(s)

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CLIENT	'NAME:	COLOR	ADO ENERGY MGMT.	PROJE	<u>CT</u> N	AME/NO	).	MALE	BURG GI	ENERAT	TING S	TATIO	N P.C	.NO.				AIRBILL NO:
ADDRES	SS:	2715 E. 5	50th ST. VERNON CA 90058									AN	ALYSE	S REQ	UEST	ED		COOLER TEMP: 1-3 -
PROJEC	CT MANA	GER	TOM BARNHART	PHONE	NO:	1-702-413	3-2525	FAX	NO:									PRESERVED:
SAMPLI	ER NAMI	E:	JOHN BARIE	SIGNA	TURE	: P												REMARKS:
TAT (Tu	rn-Arour	nd-Time):	0=Same Day; 1=24 Hour; 2=4															
			Brass; E=Encore/Easy Draw; P					/ial: (	)=Othe	er								
			GLOBAL ID#:						2									
SAMPLE	DATE	TIME	SAMPLE DESCRIPTION			TRIX		TAT	CONT	AINER								SAMPLE CONDITIONS/
ID	SAMPLED	SAMPLED		WATER	SOIL	SLUDGE	OTHER		#	TYPE	TDS							CONTAINER/COMMENTS
	11321 0	Brs	COOLING TOWER BLOWDOWN	х				N	1	P	x							
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	shed by (S Torm	ignature&	Name):			Signature			e Tanal		Date: /1/3 -:		Tin 1/3.5	ne:	1			DISPOSITION turned to client? Yes No
Relinquis	shed by (S	ignature&	Name):			Signature					Date:		Tin	ne:				ill not be stored over 30 days, anal storage time is requested
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SPECIA	L INSTR	UCTION	:															



November 12, 2021

Tom Barnhart Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Report No.: 2111104 Project Name: Malburg Generating Station Weekly

Dear Tom Barnhart,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on November 08, 2021.

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.

Project Manager



Page 2 of 2

Report Date: 11/12/21

PLS Report No.: 2111104

Submitted: 11/08/21

File #:74548

Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Attn: Tom Barnhart

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

Project: Malburg Generating Station Weekly

Analyte	Re	sults	Flag	D.F.	Units	PQL	Prep	o/Test Meth	hod	Prepared	Analy	/zed	Ву	Batch
Total Dissolved Sol	lids 40	640		1	mg/L	5.0	-	SM	2540C	11/09/21	11/1	0/21	dd	BK1104
				Q	uality	Contro	ol Data							
							Spike	Source		%REC		RPD		
Analyte		Resul	t	PQL		Units	Level	Result	%REC	Limits	RPD	Limít	Q	ualifier
Batch BK11044										netres Green				
Blank		Prepa	red: 11/	09/21	Analyzed	: 11/10/	21		<u></u>		``			
Total Dissolved Solids		ND		5.0	1	mg/L								
LCS		Prepa	red: 11/	09/21	Analyzed	1: 11/10/	21							
Total Dissolved Solids		53.0		5.0	i	mg/L	50.00		106	80-120				
Duplicate S	ource: 2111104-01	Prepa	red: 11/	09/21	Analyzed	l: 11/10/2	21							

#### **Notes and Definitions**

mg/L

4640

5.0

NA Not Applicable

Total Dissolved Solids

ND Analyte NOT DETECTED at or above the detection limit

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

4610

Rik Daven Parlier

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Authorized Signature(s)

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CLIENT	NAME:	COLOR	ADO ENERGY MGMT.	PROJE	CT N	AME/NC	).	MALB	URG GE	INERAT	FING S	TATIC	)N	P.O.N	0.			AIRBILL NO:
ADDRES	SS:	2715 E. 5	0th ST. VERNON CA 90058									AN	ALY	SES R	EQU	EST	ED	 COOLER TEMP: <u>/·0°</u> 2⁄
PROJEC	T MANA	GER	TOM BARNHART	PHONE	NO:	1-702-413	3-2525	FAX	NO:									PRESERVED:
SAMPLI	ER NAMI	E:	JOHN BARIE	SIGNA	TURE	: E												REMARKS:
TAT (Tu	rn-Aroun	ıd-Time):	0=Same Day; 1=24 Hour; 2=4	8Hour;	(ETC	.) N=Nor	mal											
CONTA	INER TY	PES: B=B	Brass; E=Encore/Easy Draw; P	=Plastic	; G=G	lass; V=	VOA V	'ial; (	D=Othe	r								
i	DJECT:	Y N	GLOBAL ID#:															
SAMPLE	DATE	TIME	SAMPLE DESCRIPTION		MA	TRIX	I	TAT	CONT	AINER	s							SAMPLE CONDITIONS/
m	SAMPLED	SAMPLED		WATER	SOIL	SLUDGE	OTHER		#	ТҮРЕ	TDS							CONTAINER/COMMENTS
	11-221	0905	COOLING TOWER BLOWDOWN	Х				N	1	P	X							
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Relinquis		ignature&	Name):			Signature		e):			Date:			Time:				ill not be stored over 30 days,
Relinquis	shed by (S	ignature&	Name):	Receive	d by (S	Signature	& Nam	e):			Date:	:		Time:				onal storage time is requested ne requested:days, Date:
SPECIA	L INSTR	UCTION	=														<u> </u>	



November 22, 2021

Tom Barnhart Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Report No.: 2111172 Project Name: Malburg Generating Station Weekly

Dear Tom Barnhart,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on November 15, 2021.

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.

Project Manager



			Ce	rtifica	ate of	Analy	/sis			Page 2	of 2		
Colorado Energy Management 4963 Soto St. Vernon, CA 90058									R	ubmitted	548 ite: 11/2 i: 11/15, ort No.:	/21	
Attn: Tom Barnhart	Pho	one: (323	3) 476-3	3626	FAX:(3	23) 476-	3640		E.	Lo Rep			
Project: Malburg Generating St	ation We	ekly											
Sample ID: Cooling Tower Blowdo	wn Wat	er (2111	172-0	1) Sam	oled: 11	/15/21	10:45 R	eceived:	11/15/21	10:45			
Analyte	Results	Flag	D.F.	Units	PQL	Pre	p/Test Met	hod	Prepared	Anal	yzed	Ву	Batch
Total Dissolved Solids	4720		1	mg/L	5.0	-	SM	2540C	11/18/21	11/1	9/21	dd	BK1190:
			Qı	uality	Contro	ol Data	Ì						
						Spike	Source		%REC		RPD		
Analyte	Resi	llt	PQL		Units	Level	Result	%REC	Limits	RPD	Limit	Q	ualifier
Batch BK11901													
Blank	Prep	ared: 11/	18/21 /	Analyzed	: 11/19/	21							
Total Dissolved Solids	ND		5.0		mg/L								
LCS	Prep	ared: 11/	18/21	Analyzed	: 11/19/	21							
Total Dissolved Solids	49.0	)	5.0		mg/L	50.00		<del>9</del> 8.0	80-120				
Duplicate Source: 2111172-0	1 Prep	ared: 11/	18/21 /	Analyzed	: <b>11/19/</b>	21							
			5.0		mg/L		4720			1.53	5		

### **Notes and Definitions**

NA Not Applicable

ND Analyte NOT DETECTED at or above the detection limit

NR Not Reported

MDL Method Detection Limit

PQL. Practical Quantitation Limit

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

Fick Owen Parlin

Authorized Signature(s)

CLIENT	NAME:	COLORA	ADO ENERGY MGMT.	PROJE	CT N	AME/NO	).	MALB	URG GE	NERAT	ING S	TATION		.NO.			AB NO.: 11172
ADDRES	s:	2715 E. 5	0th ST. VERNON CA 90058									ANA	LYSES	S REQ	UEST	ED	COOLER TEMP: /_/@
ROJEC	T MANA	GER	TOM BARNHART	PHONE	NO:	1-702-41	3-2525	FAX N	10:								PRESERVED:
SAMPLE	R NAME		JOHN BARIE	SIGNA	TURE	: E	/										REMARKS:
FAT (Tu	m-Aroun	d-Time):	<b>0=Same Day; 1=24 Hour; 2=</b> 4	8Hour;	(ETC.	.) N=Nor	mal										
CONTAI	NER TYI	PES: B=B	rass; E=Encore/Easy Draw; P	=Plastic;	; G=G	lass; V=	VOA V	vial; (	)=Othe	r							
JST PRC	JECT:	Y N	GLOBAL ID#:			* -==											
SAMPLE	DATE	TIME	SAMPLE DESCRIPTION		MA	ATRIX		TAT	CONTA	AINER							SAMPLE CONDITIONS
1D	SAMPLED	SAMPLED		WATER	SOIL	SLUDGE	OTHER		#	TYPE	TDS			_			CONTAINER/COMMEN
	1.15.21	1045	COOLING TOWER BLOWDOWN	Х				Ν	1	Р	х						
					ļ												
Relinquis	hed by (Si	gnature&	Name):	Receive	d by (S	Signature	& Nam	e):			Date:		Tin	ne:		SAMP	LE DISPOSITION
R	とう	gnature&		Hut	ti tu	i Hu	THE	<u>ad</u> alu	pe Tar	naka (	1-15	ry .	1/2	>		1. Samp	les returned to client? Yes No
		gnature&		Receive	d by (£	Signature	& Nam	e):			Date:		Tin	ne:	_	2. Samp	les will not be stored over 30 day
-					Ũ											unless a	dditional storage time is requeste
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			//•		/ (-	9		,								Ву:	Date:



December 03, 2021

Tom Barnhart Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Report No.: 2111260 Project Name: Malburg Generating Station Weekly

Dear Tom Barnhart,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on November 23, 2021.

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.

Project Manager



Page 2 of 2

Colorado Energy Management 4963 Soto St. Vernon, CA 90058 File #:74548 Report Date: 12/03/21 Submitted: 11/23/21 PLS Report No.: 2111260

Attn: Tom Barnhart Phone: (323) 476-3626 FAX:(323) 476-3640

Project: Malburg Generating Station Weekly

Sample ID: Cooling Tower I	Blowdown Wal	ter (211	1260-0	1) Samp	led: 11,	/23/21 08	3:10 Received:	11/23/21 0	8:10	•	a muspak
Analyte	Results	Flag	D.F.	Units	PQL	Prep/	Test Method	Prepared	Analyzed	Ву	Batch
Total Dissolved Solids	4800		1	mg/L	5.0	-	SM 2540C	11/30/21	12/01/21	dd	BL10232
			Q	uality (	Contro	ol Data					

Analyte		Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch BL10232	2										
Blank		Prepared: 1	1/30/21 Ana	lyzed: 12/01	/21						
Total Dissolved	d Solids	ND	5.0	mg/L							
LCS		Prepared: 1	.1/30/21 Ana	alyzed: 12/01	/21						
Total Dissolved	d Solids	53.0	5.0	mg/L	50.00		106	80-120			
Duplicate	Source: 2111282-01	Prepared: 1	.1/30/21 Ana	alyzed: 12/01	/21						
Total Dissolved	d Solids	4920	5.0	mg/L		4920			0.102	5	

### **Notes and Definitions**

NA Not Applicable

ND Analyte NOT DETECTED at or above the detection limit

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)

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	S P d		ERVICE CHA 781 East Was	hington B (213) 74	lvd., La 5-5312	is Angeles FAX (213	s, CA 900 3) 745-63	121 172			~ ~ ~ ~	- 2 -		I	DATE	://<	341	F	PAGE: OF
THE P	" Bu/					•	•							FILE	10.:			LAB	NO:11/110
CLIENT	NAME:	COLOR	ADO ENERGY MGMT.	PROJE	CT N	AME/NO	).	MALBU	RG GENEI	RATING S	TATION	WEEKL	Y	P.O.N	0.				AIRBILL NO:
ADDRES	SS:	2715 E. 5	50th ST. VERNON CA 90058									AN		SES F	EQU	EST	ED		COOLER TEMP: 14 2
PROJEC	T MANA	GER	TOM BARNHART	PHONE	NO:	1-702-413	3-2525	FAX	NO:										PRESERVED:
SAMPLI	ER NAMI	E:	JOHN BARIE	SIGNA	TURE	:													REMARKS:
TAT (Tu	rn-Arour	nd-Time):	0=Same Day; 1=24 Hour; 2=4	48Hour;	(ETC	.) N=Nor	mal			:									
CONTA	INER TY	PES: B=E	Brass; E=Encore/Easy Draw; P	=Plastic	; G=G	lass; V=	-VOA V	'ial; (	)=Othe	er									
UST PR	OJECT:	Y N	GLOBAL ID#:					-	_										
SAMPLE	DATE	TIME	SAMPLE DESCRIPTION		MA	TRIX	r	TAT	CONT	AINER									SAMPLE CONDITIONS/
Ъ	SAMPLED	SAMPLED		WATER	SOIL	SLUDGE	OTHER		#	туре	TDS							[	CONTAINER/COMMENTS
	1134	JBID	COOLING TOWER BLOWDOWN	x				N	1	Р	X				$ \rightarrow $				
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		nn Bar		the	-	took .			e Tana	aka /	132	/	10	45			1. Sam	nples re	eturned to client? Yes No
		lignature&		Receive	d by (	ignature	& Nam	e):		,	Date			Time:			2. San	noles w	ill not be stored over 30 days,
rtonnqui	med of (o		· · · · · · · · · · · · · · · · · · ·			Ċ		-).											onal storage time is requested
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SPECIA	LINSTP	UCTION	•														124,		
			•																



December 03, 2021

Tom Barnhart Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Report No.: 2111282 Project Name: Malburg Generating Station Weekly

Dear Tom Barnhart,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on November 29, 2021.

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.

Project Manager



Page 2 of 2

Report Date: 12/03/21

PLS Report No.: 2111282

Submitted: 11/29/21

File #:74548

Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Attn: Tom Barnhart

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

Project: Malburg Generating Station Weekly

Analyte	Results	Flag	D.F.	Units	PQL	Prep/	Test Method	Prepared	Analyzed	Ву	Batch
Total Dissolved Solids	4920		1	mg/L	5.0	-	SM 2540C	11/30/21	12/01/21	dđ	BL10232

Avertie		<b>D</b>	501	Uluiba	Spike	Source	%REC	%REC	RPD	RPD Limit	Oualifier
Analyte		Result	PQL	Units	Level	Result	MREC.		RPD	LIIIII	Qualmer
Batch BL10232											
Blank		Prepared: 1	L1/30/21	Analyzed: 12/01	/21						
Total Dissolved	l Solids	ND	5.0	mg/L							
LCS		Prepared: :	L1/30/21	Analyzed: 12/01	/21						
Totai Dissolved	l Solids	53.0	5.0	mg/L	50.00		106	80-120			
Duplicate	Source: 2111282-01	Prepared:	1/30/21	Analyzed: 12/01	/21						
Total Dissolved	l Solids	4920	5,0	mg/L		4920			0.102	5	

#### **Notes and Definitions**

NA Not Applicable

ND Analyte NOT DETECTED at or above the detection limit

NR Not Reported

MDL Method Detection Limit

PQL Practical Quantitation Limit

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

Fick Owen Parlier

Authorized Signature(s)

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		OS	ERVICE CHA 781 East Was	hington B	lvd., Lo		5, CA 900	21		11.51	J NI	υ <b>γ</b> υι		DATE	: <u>112</u>	721	PA	AGE:OF]
N.IME /		AR 2	EKVICE	[EIJ] (4)	5 3312	rws fers	'j ( - J ( J )	• •					FILE	NO.:		]		NO.: 411282
CLIENT	NAME:	COLOR	ADO ENERGY MGMT.	PROJE	CT N	AME/NO	).	MALBU	RG GENEI	RATING S	FATION	WEEKLY	P.O.	NO.				AIRBILL NO:
ADDRES	S:	2715 E. 5	0th ST. VERNON CA 90058									ANA	LYSES	REQU	JEST	ED	·······	COOLER TEMP: <u>/-/<sup>.0</sup>0</u>
PROJEC	T MANA	GER			-	1-702-41		FAX N	NO:				Ī		:		]	PRESERVED:
SAMPLE	ER NAMI	2:	JOHN BARIE	SIGNA	FURE	:	-											REMARKS:
TAT (Tu	rn-Aroun	d-Time):	0=Same Day; 1=24 Hour; 2=4	48Hour;	(ETC	) N=Nor	mal											
CONTA	NER TY	PES: B=B	Brass; E=Encore/Easy Draw; P	=Plastic	G=G	lass; V=	VOA V	'ial; C	)=Oth	er								
	DJECT:		GLOBAL ID#:															
SAMPLE	DATE	TIME	SAMPLE DESCRIPTION		MA	TRIX		TAT	CONT	Т	Š							SAMPLE CONDITIONS/
10	SAMPLED	SAMPLED	1	WATER	SOIL	SLUDGE	OTHER		#	TYPE	TDS			<u> </u>				CONTAINER/COMMENTS
	til 29/21	UCHU	COOLING TOWER BLOWDOWN	X			}	N	1	P	X							
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Relinquis	/	ignature& ← ∧		Receive	d by (S	Signature	& Nam	e): edalu		. //	Date:		Tim	_				DISPOSITION
		EmB		ytt	tatta	te fi	ute	adalu	ipe iai	naka/ l				70		1	•	urned to client? Yes No
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		· ·.														1	•	nal storage time is requested
Relinquis	shed by (S	ignature&	Name):	Receive	d by (	Signature	& Nam	e):			Date		Tim	e:	•.	· •,	age tim	e requested:days,
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SPECIA	L INSTR	UCTION														••••	 	
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December 28, 2021

Tom Barnhart Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Report No.: 2112229 Project Name: Malburg Generating Station Weekly

Dear Tom Barnhart,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on December 14, 2021.

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.

Project Manager



gy Management 058 nhart urg Generating Stati		one: (323								le #:745			
urg Generating Stat		one: (323							Su	eport Da ubmitted <b>LS Repo</b>	: 12/14	/21	
-	ion We		3) 476	3626	FAX:(3	23) 476-3	3640		•				
		ekly											
ng Tower Blowdow	n Wat	er (2112	229-0	l) Samp	oled: 12	/14/21 0	8:40 Re	ceived:	12/14/21	08:40			
Re	sults	Flag	D.F.	Units	PQL	Prep	/Test Met	lod	Prepared	Analy	/zed	Ву	Batch
olids 4	340		1	mg/L	5.0	-	SM	2540C	12/15/21	12/16	6/21	VC	BL11712
			Qı	Jality	Contro	ol Data							
	Reci	d <b>h</b>	PUL		Inite	Spike	Source	%.DEC	%REC	חסק	RPD	0	Jalifier
				e e e									
	Prep	ared: 12/	15/21	Analyzed	: 12/16/	21	ania contractor			<u>era presi Suipu suip</u>			
ds	-		5.0	•									
	Prep	ared: 12/	15/21 /	Analyzed	: 12/16/	21							· · · · · ·
ds	49.0	)	5.0	ŗ	ng/L	50.00		98.0	80-120				
Source: 2112229-01	Ргер	ared: 12/	15/21 /	Analyzed	: 12/16/	21							
is	414(	)	5.0	r	ng/L		4340			4.72	5		
Reported	r above t	he detectio		es and	Defin	itions_	_	A	1 11 / /	<u>Hima</u>	r nfl/	1	-
	Re olids 4: ds ds Source: 2112229-01 ds Applicable lyte NOT DETECTED at o	Results         olids       4340         olids       4340         Results       Results         Results       Results         Is       ND         Source:       2112229-01       Prep         Is       4140         Applicable       Iteration of the ported       Results	Results     Flag       olids     4340       Result       Result       Prepared: 12/       Is       Applicable       lyte NOT DETECTED at or above the detection       Reported	Results         Flag         D.F.           olids         4340         1           QL         QL           Result         PQL           Result         PQL           Is         ND         5.0           Prepared:         12/15/21           Is         49.0         5.0           Source:         2112229-01         Prepared:         12/15/21           Is         4140         5.0           ND         5.0         Note           Applicable         Its or above the detection limit         Reported	Results       Flag       D.F.       Units         olids       4340       1       mg/L         Quality       Quality       Quality         Result       PQL       I         Result       PQL       I         MD       5.0       r         Prepared:       12/15/21       Analyzed         Is       MD       5.0       r         Source:       2112229-01       Prepared:       12/15/21       Analyzed         Is       4140       5.0       r         Applicable       Intersection limit       Reported       Intersection limit	Results       Flag       D.F.       Units       PQL         olids       4340       1       mg/L       5.0         Quality       Control         Result       PQL       Units         Prepared: 12/15/21       Analyzed: 12/16/         MD       5.0       mg/L         Prepared: 12/15/21       Analyzed: 12/16/         MD       5.0       mg/L         Source: 2112229-01         Prepared: 12/15/21       Analyzed: 12/16/         Is       4140       5.0         Motes and Defin         Applicable         lyte NOT DETECTED at or above the detection limit         Reported	Results       Flag       D.F.       Units       PQL       Prep         olids       4340       1       mg/L       5.0       -         Quality       Control       Data       Quality       Control       Data         Spike         Result       PQL       Units       Level         Prepared: 12/15/21       Analyzed: 12/16/21         Is       ND       5.0       mg/L         Prepared: 12/15/21       Analyzed: 12/16/21         Is       ND       5.0       mg/L         Source: 2112229-01         Prepared: 12/15/21       Analyzed: 12/16/21         Is       4140       5.0       mg/L         Notes and Definitions         Applicable         Ive NOT DETECTED at or above the detection limit         Reported	Results       Flag       D.F.       Units       PQL       Prep/Test Meth         olids       4340       1       mg/L       5.0       -       SM I         Quality       Control       Data       Quality       Spike       Source         Result       PQL       Units       Level       Result         Prepared:       12/15/21       Analyzed:       12/16/21         Its       ND       5.0       mg/L       Model         Prepared:       12/15/21       Analyzed:       12/16/21         Its       49.0       5.0       mg/L       50.00         Source:       2112229-01       Prepared:       12/15/21       Analyzed:       12/16/21         Its       4140       5.0       mg/L       4340       4340         Notes and Definitions         Applicable       Ive NOT DETECTED at or above the detection limit       -       -         Reported       -       -       -       -	Results       Flag       D.F.       Units       PQL       Prep/Test Method         olids       4340       1       mg/L       5.0       -       SM 2540C         Quality       Control       Data       Spike       Source         Result       PQL       Units       Level       Result       %REC         Prepared: 12/15/21         MD       5.0       mg/L         Prepared: 12/15/21         Motes       mg/L       98.0         Source: 2112229-01         Prepared: 12/15/21       Analyzed: 12/16/21         Is       4140       5.0       mg/L       4340         Motes       Applicable         Notes and Definitions         Applicable         Motes       Advise of the detection limit         Reported	Results       Flag       D.F.       Units       PQL       Prep/Test Method       Prepared         olids       4340       1       mg/L       5.0       -       SM 2540C       12/15/21         Quality Control Data       Quality Control Data       Spike       Source       %REC       MREC         Result       PQL       Units       Level       Result       %REC       Limits         Prepared: 12/15/21 Analyzed: 12/16/21         ds       ND       5.0       mg/L       MREC       MREC         Prepared: 12/15/21 Analyzed: 12/16/21         ds       49.0       5.0       mg/L       MREC       MREC         Source: 2112229-01       Prepared: 12/15/21 Analyzed: 12/16/21         ls       4140       5.0       mg/L       4340       4340         Motes and Definitions         Applicable       Notes and Definitions       MAMAN	olids         4340         1         mg/L         5.0         -         SM 2540C         12/15/21         12/16           Quality Control Data         Spike         Source         %REC         MREC         Limits         RPD           Prepared:         12/15/21         Analyzed:         12/16/21         12/15/21         12/15/21         12/16           Prepared:         12/15/21         Analyzed:         12/16/21         %REC         Limits         RPD           Its         ND         5.0         mg/L         .         .         .           Prepared:         12/15/21         Analyzed:         12/16/21         .         .           Its         ND         5.0         mg/L         .         .         .           Source:         2112229-01         Prepared:         12/15/21         Analyzed:         12/16/21         .         .           Is         4140         5.0         mg/L         4340         4.72           Notes and Definitions         .         .         .         .         .           Applicable         .         .         .         .         .         .           Motes and Definitions         . <th< td=""><td>Results       Flag       D.F.       Units       PQL       Prep/Test Method       Prepared       Analyzed         olids       4340       1       mg/L       5.0       -       SM 2540C       12/15/21       12/16/21         Quality       Control       Data       -       SM 2540C       12/15/21       12/16/21         Quality       Control       Data       Spike       Source       %REC       RPD       Limit         Prepared: 12/15/21       Analyzed: 12/16/21       Level       Result       %REC       Limits       RPD       Limit         MD       5.0       mg/L       -</td><td>Results       Flag       D.F.       Units       PQL       Prep/Test Method       Prepared       Analyzed       By         olids       4340       1       mg/L       5.0       -       SM 2540C       12/15/21       12/16/21       vc         QUality       Control       Data       Spike       Source       %REC       RPD       Limit       Quality       Quality       Quality       Control       Data       Spike       Source       %REC       RPD       Limit       Quality       Quality</td></th<>	Results       Flag       D.F.       Units       PQL       Prep/Test Method       Prepared       Analyzed         olids       4340       1       mg/L       5.0       -       SM 2540C       12/15/21       12/16/21         Quality       Control       Data       -       SM 2540C       12/15/21       12/16/21         Quality       Control       Data       Spike       Source       %REC       RPD       Limit         Prepared: 12/15/21       Analyzed: 12/16/21       Level       Result       %REC       Limits       RPD       Limit         MD       5.0       mg/L       -	Results       Flag       D.F.       Units       PQL       Prep/Test Method       Prepared       Analyzed       By         olids       4340       1       mg/L       5.0       -       SM 2540C       12/15/21       12/16/21       vc         QUality       Control       Data       Spike       Source       %REC       RPD       Limit       Quality       Quality       Quality       Control       Data       Spike       Source       %REC       RPD       Limit       Quality       Quality

POL. Practical Quantitation Limit

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

Authorized Signature(s)

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CLIENT	NAME:	COLOR	ADO ENERGY MGMT.		PROJE	CT N	AME/NO	).	MALBU	RG GENEI	RATING S	TATION	WEEK	LY	P.O.	NO.				AIRBILL NO:
ADDRE	SS:	2715 E. 5	0th ST. VERNON CA 900	58									Al	NAL	YSES	REQ	UEST	ED		ן:קייב ≢נט COOLER TEMP: וַ-יינ
PROJEC	CT MANA	GER	TOM BARNHART	1	PHONE	NO:	1-702-41	3-2525	FAX	NO:	_									PRESERVED:
SAMPL	ER NAM	E:	JOHN BARIE	5	SIGNA	TURE	: F	-												REMARKS:
TAT (Tu	rn-Arour	nd-Time):	0=Same Day; 1=24 Hour	; 2=4	8Hour;	(ETC	.) N=Nor	mal			2									
CONTA	INER TY	PES: B=B	srass; E=Encore/Easy Dra	w; P=	Plastic	; G=0	alass; V=	VOA V	<sup>7</sup> ial; (	O=Othe	er									
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SAMPLE	DATE	TIME	SAMPLE DESCRIPTION	N		MA	TRIX		TAT	CONT	AINER	~								SAMPLE CONDITIONS/
ID	SAMPLED	SAMPLED		_	WATER	SOIL	SLUDGE	OTHER		#	TYPE	TDS					<u> </u>		<u> </u>	CONTAINER/COMMENTS
	14:4-21	OUN	COOLING TOWER BLOWDO	WN	Х				N	1	Р	X		<u> </u>		<u> </u>	<u> </u>		<u> </u>	
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<u> </u>										dalup	<u>.</u>							<u> </u>		
Relinquis		ignature&		/	Receive	d by (S	Signature	& Name	e): [][	EC 14	1 2021	Date:		$\sim$	Time			SAM	IPLE	DISPOSITION
JV	- Je	mBape		-(	1	/	Hum			ive La	b Ser	vice		$(\bigcirc$	120	D		1. San	nples re	eturned to client? Yes No
Relinquis	shed by (S	ignature&	Name):	I	Receive	d by (§	Signature	& Name	e):			Date:	ē		Time	:		2. San	nples v	vill not be stored over 30 days,
																		unless	additi	onal storage time is requested
Relinquis	shed by (S	ignature&	Name):	I	Receive	d by (S	Signature	& Name	e):			Date:			Time	:		3. Stor	rage tir	me requested:days,
L												_						By:		Date:
SPECIA	L INSTR	UCTION:																		
PRESE	RVATIVE	1-HNO3	2-H2SO4 3-HCL 4- ZINC	ACET	ATE 5-	NaOH	1 6-NH4	BUFFE	R 7-	OTHER	3	2								



January 03, 2022

Tom Barnhart Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Report No.: 2112401 Project Name: Malburg Generating Station Weekly

Dear Tom Barnhart,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on December 21, 2021.

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.

Project Manager



Page 2 of 2

Report Date: 01/03/22

PLS Report No.: 2112401

Submitted: 12/21/21

File #:74548

Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Attn: Tom Barnhart

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

Project: Malburg Generating Station Weekly

	ep/Test Method	Prepared	Analyzed	Ву	Batch
Solids 4400 1 mg/L 5.0 -	SM 2540C	12/27/21	12/28/21	VC	BL1282
Solids 4400 1 mg/L 5.0 - Quality Control Dat		12/27/21	12/28/21	VC	

Analyte		Result	PQL	Units	Level	Result	%REC	Limits	RPD	Limit Ç	ualifier
Batch BL1282	)										
Blank		Prepared: 1	2/27/21 Ana	alyzed: 12/28	8/21						
Total Dissolve	d Solids	ND	5.0	mg/L							
LCS		Prepared: 1	2/27/21 Ana	alyzed: 12/28	8/21						
Total Dissolve	d Solids	51.0	5.0	mg/L	50.00		102	80-120			
Duplicate	Source: 2112401-01	Prepared: 1	2/27/21 Ana	alyzed: 12/28	8/21						
Total Dissolve	d Solids	4190	5,0	mg/L		4400			4.70	5	

### Notes and Definitions

NA Not Applicable

ND Analyte NOT DETECTED at or above the detection limit

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 Parlein

Authorized Signature(s)

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rahul.		OS AB S	TIVE FRVICE CHA 781 East Was	hington B	lvd., Lo	STOD os Angeles FAX (213	s, CA 900	21	NAI	LYSI	S RI	CQUE		DATE: NO.:			PAGE: OF B NO.: ///////
CLIENT	NAME:	COLOR	ADO ENERGY MGMT.	PROJE	CT N	AME/NO	<b>.</b>	MALDI	DC CENE	RATING S	TATION	WEEKIN	P.O.				Part
ADDRES			Oth ST. VERNON CA 90058	TROJE		AIVID/144		MALDU	KG GENE	KATING 5	TATION			REQUI	STEI		AIRBILL NO: 46
	T MANA		TOM BARNHART	PHONE	NO:	1-702-41	3.7575	FAX							20101	, 	PRESERVED:
SAMPLI		-				: ~		TAAT	10.				-				REMARKS:
			0=Same Day; 1=24 Hour; 2=4				~										REMARKS:
			Brass; E=Encore/Easy Draw; P					ial: (	)-Oth								14 - C
			GLOBAL ID#:				VUA	Ial, C	)-0110	-1							
SAMPLE	DATE	TIME	SAMPLE DESCRIPTION			TRIX		TAT	CONT	AINER							SAMPLE CONDITIONS/
ID	SAMPLED	SAMPLED		WATER	SOIL	SLUDGE	OTHER	-	2 #	TYPE	TDS						CONTAINER/COMMENTS
	12-21-21	083-	COOLING TOWER BLOWDOWN	х				N	1	Р	x						
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		÷								1		1					
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									-	1							5, 1
			29	3.													30 54
Relinquis	hed by (S	ignature& ॐ	Name):	Receive	d by (S	ignature	& Name Guad	e): alupe	Tanal	ka /	Date:		Time				E DISPOSITION returned to client? Yes No
Relinquis	hed by (S	ignature&	Name):	Receive	d by (S	Signature		e):			Date:		Time	:			will not be stored over 30 days, ional storage time is requested
Relinquis	hed by (S	ignature&	Name):	Receive	d by (S	ignature	& Nam	e):	-		Date:		Time	e:	3. By		me requested:days,
		UCTION: 1-HNO3	2-H2SO4 3-HCL 4- ZINC ACE	TATE 5-	NaOH	i 6-NH4	BUFFE	R 7- (	OTHEI	R							

\* <sup>\*\*</sup>



January 04, 2022

Tom Barnhart Colorado Energy Management 4963 Soto St. Vernon, CA 90058

Report No.: 2112481 Project Name: Malburg Generating Station Weekly

Dear Tom Barnhart,

This report contains the analytical results for the sample(s) received under chain of custody(s) by Positive Lab Service on December 28, 2021.

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.

Project Manager



Page 2 of 2

Colorado Energy Management 4963 Soto St. Vernon, CA 90058 File #:74548 Report Date: 01/04/22 Submitted: 12/28/21 PLS Report No.: 2112481

Attn: Tom Barnhart Phone: (323) 476-3626 FAX:(323) 476-3640

Project: Malburg Generating Station Weekly

Analyte	Results	Flag	D.F.	Units	PQL	Prep/Test Method	Prepared	Analyzed	Ву	Batch
Total Dissolved Solids	4480		1	mg/L	5.0	- SM 2540C	12/29/21	12/30/21	VC	BA20320
lotal Dissolved Solids	4480		່∩	uality (			12/23/21	14/ 30/ 21	ve	1 <b>.</b> 77 (4.

Analyte		Result	PQL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifier
Batch BA2032	6										
Blank		Prepared: 1	2/29/21 Ana	lyzed: 12/30	/21						
Total Dissolve	d Solids	ND	5.0	mg/L+							
LCS		Prepared: 1	.2/29/21 Ana	lyzed: 12/30	/21						
Total Dissolve	d Solids	48.0	5.0	mg/L	50.00		96.0	80-120			
Duplicate	Source: 2112494-02	Prepared: 1	.2/29/21 Ana	alyzed: 12/30	/21						
Total Dissolve	d Solids	50.0	5.0	mg/L		48.0			4.08	5	

#### **Notes and Definitions**

NA Not Applicable

ND Analyte NOT DETECTED at or above the detection limit

NR Not Reported

MDL Method Detection Limit

PQL Practical Quantitation Limit

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

Fick Owen Parlier

Authorized Signature(s)

		OS	ERVICE CHA	ningten B	lvd., Lo	STOD s Angeles	, CA 900	21	NAL	<b>YSI</b>	S RI	EQU	JEST		DATE:			PA	\GE:	_ OF
<u>alaí</u>	<b>L</b> /	<b>VB</b> SI	ERVICE	(213) 74	5-5312	FAX (213	) 745-63	72					]		NO.:			AB N	vo.:_ ·⊋	11248Ø1
CLIENT	NAME:	COLOR	ADO ENERGY MGMT.	PROJE	CT N.	AME/NC	).	MALBUI	RG GENEJ	RATING S	TATION	WEEKI	X	P.O.N	0.			/	AIRBILL N	
ADDRES	SS:	2715 E. 5	0th ST. VERNON CA 90058									AN	ALY	SES F	REQUE	STE	D		COOLER T	EMP: <u>032</u>
PROJEC	T MANA	GER	TOM BARNHART	PHONE	NO:	1-702-413	3-2525	FAX N	NO:									1	PRESERVE	D:
SAMPLI	ER NAMI	C:	JOHN BARIE	SIGNA	TURE	:												)	REMARKS:	
TAT (Tu	rn-Aroun	d-Time):	0=Same Day; 1=24 Hour; 2=4	8Hour;	(ETC.	) N=Nor	mal													
CONTA	INER TY	PES: B=B	Brass; E=Encore/Easy Draw; P	=Plastic	G=G	lass; V=	-VOA V	'ial; (	)=Othe	er										
UST PR	DJECT:	Y N	GLOBAL ID#:															Ļ		
SAMPLE	DATE	TIME	SAMPLE DESCRIPTION		MA I	TRIX	r	TAT	CONT	AINER	~ ~							5	SAMPLE C	ONDITIONS/
Ð	SAMPLED	SAMPLED		WATER	SOIL	SLUDGE	OTHER		#	TYPE	TDS								CONTAINE	R/COMMENTS
	12:24 ju	6750	COOLING TOWER BLOWDOWN	X				N	1	Р	X									
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Relinquis	shed by (S Tru		Name):	Receive	opby (S	Signature	& Nam BJ.		iorre	7	Date			Time: ろぐ					DISPOSIT	
Relinqui	shed by (S	ignature&	Name):	Receive	d by (s	Signature					Date			Time:		1	•			d over 30 days, ne is requested
Relinqui	shed by (S	ignature&	Name):	Receive	d by (S	Signature	& Nam	e):			Date	:		Time	:	3		ge time	e requested:	days,
SPECIA	L INSTR	UCTION																		

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

Appendix C Operation Logs

	Combustion Turbi	Malburg Generating S Appendix C, Table ne Generator (CTG) Sta During Quarter 4, 2 CTG 1	e 1 rtup and Shutdown E	vents
Date	Event Type	Event Start	Event End	Duration (hrs:min)
10/4/2021	Trip	23:05	23:05	0:00
10/5/2021	Hot Start	01:21	02:27	1:06
11/11/2021	Shutdown	11/10/21-23:56	11/11/21-00:13	0:17
11/12/2021	Warm Start	17:23	18:37	1:14
12/6/2021	Shutdown	12/5/21-23:58	12/6/21-00:06	0:08
12/10/2021	Cold Start	21:01	22:27	1:26
		CTG 2		
Date	Event Type	Event Start	Event End	Duration (hrs:min)
10/4/2021	Trip	23:05	23:05	0:00
10/5/2021	Hot Start	03:19	04:30	1:11
11/10/2021	Shutdown	11/9/21-23:59	11/10/21-00:07	0:08
11/11/2021	Warm Start	18:35	N/A	Unsuccessful <sup>1</sup>
11/11/2021	Shutdown	19:19	19:23	0:04
11/12/2021	Warm Start	12:57	14:27	1:30
12/5/2021	Shutdown	18:01	18:09	0:08
12/10/2021	Cold Start	12/10/21-23:53	12/11/21-01:15	1:22

<sup>1</sup> CTG 2 had to be shutdown (controlled) due to a failed HP steam temperature probe at the Steam Turbine Generator admission.

		Appen Diesel Firewate	enerating Station dix C, Table 2 er Pump Testing Times Quarter 4, 2021		
Date	Time (hh:mm)	Start Hours	End Hours	Event Type	Hours of Operation
10/3/2021	23:20	325.3	325.8	Testing	0.50
10/11/2021	0:06	325.8	326.3	Testing	0.50
10/17/2021	20:33	326.3	326.7	Testing	0.40
10/24/2021	22:22	326.7	326.8	Testing	0.10
10/27/2021	11:00	326.8	327.3	Testing	0.50
11/7/2021	21:21	327.3	327.8	Testing	0.50
11/14/2021	19:18	327.8	328.3	Testing	0.50
11/21/2021	22:45	328.3	328.8	Testing	0.50
11/28/2021	22:25	328.8	329.3	Testing	0.50
12/12/2021	23:10	329.3	329.8	Testing	0.50
12/19/2021	20:17	329.8	330.3	Testing	0.50
12/26/2021	21:22	330.3	330.8	Testing	0.50

Appendix D Diesel Fuel Oil Purchase Records



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

#### PLEASE REMITALL PAYMENTS TO: P.O. BOX 14237 ORANGE, CA 92863-1237

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

01-0001084 ACCT NO (Bill-to):

COLORADO ENERGY MANAGEMENT LLC ATTN: ACCOUNTS PAYABLE 4963 S. SOTO STREET VERNON, CA 90058 (323) 476-3622

### Invoice

#### INVOICE: 1837355-IN

INVOICE DATE: 3/29/2021 DUE DATE: 4/28/2021 SHIP DATE: 3/29/2021

SHIP VIA: 924

Page 1 of 1

ORDER DATE: 3/24/2021 ORDER NUMBER: 1837355 CUSTOMER PO: MGS21780 TERMS: N30

SALEPERSON: Todd Cripps 714-938-5714

01-0001084 1L ACCT NO (Ship-to)

COLORADO ENERGY MGMT-VERNON 4963 SOTO STREET VERNON, CA 90058

ITEM CODE		ITEM DESCRIPTION	QUANTITY	QUANTITY DELIVERED	PACKAGE DESCRIPTION	EXTENDED QTY	UNIT PRICE	EXT PRICE
CH253090981D05 5	CH GST 2 25309098		2 Whse:	2.00 101	55 G DR	110.00	18.58000	2,043.80
422D055	NON TAX PENALTY 15 PPM O	RB ULS DIESEL ABLE USE ONLY - FOR TAXABLE USE IR LESS SULFUR - MAY UP TO 5% BIODIESEL	2 Whse:	2.00 101	55 G DR	110.00	3.95000	434.50
Federal Lust							0.00100	0.11
Federal Oil Spill							0.00214	0.24
CA - AB 32 - DSL	CA - AB 32 - DSL						0.00828	0.91
							3.96142	435.76
DRUMDEPOSITC 001	DRUMDEPOSITC DRUM DEPOSIT FEE		4 Whse:	4.00 101	MISC CHRG	4.00	25.00000	100.00
/FUELC	HLUBE	FUEL SURCHARGE LUE	ES					9.92
/RCFLL	JBE	REG COMPLIANCE FEE	LUBES					12.95
MSRTNDRMC001 RETURN DRUM		0	-4.00	MISC CHRG	4.00-	15.00000	60.00-	
			Whse:	101				

Save time, pay online! View invoices, make payments and more. Sign up for the Customer Portal today. Email: creditinguiries@scfuels.com or Call 888-SCFuels	Net Invoice: Less Discount:	2,542.43 0.00
Ext. 6017 or login to Customer Portal: https://customerportal.scfuels.com	Freight:	0.00
24-hour Emergency Response Call CHEMTREC: 800-424-9300	Sales Tax:	256.52
	Invoice Total:	2,798.95

- 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.

www.scfuels.com

Parts

# PO 21780



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

ACCT NO (Bill-to): 01-0001084

COLORADO ENERGY MANAGEMENT LLC ATTN: ACCOUNTS PAYABLE 4963 S. SOTO STREET **VERNON, CA 90058** (323) 476-3622

ACCT NO (Ship-to) 01-0001084 1L COLORADO ENERGY MGMT-VERNON 4963 SOTO STREET VERNON, CA 90058 (323) 476-3632

HM	ITEM CODE	ITEM DESCRIPTION	QTY ORDERED	QTY DEL	PACKAGE DESC	EXTENDED QTY		
	CH253090981D05 5	CH GST 2300 ISO 32 253090981	2.00	4	55 G DR	110.00 GALS		
X	NA1993, DIESEL	FUEL, 3 PG III / CARGO TANK		1				
12	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	*	
	DRUMDEPOSITC 001	DRUM DEPOSIT FEE	4.00	2	MISC CHRG	4.00 EACH		
	FUELCHLUBE	FUEL SURCHARGE LUBES						
	RCFLUBE	REG COMPLIANCE FEE LUBES						

4 enty

**Received** in INFOR 3-29-2 129 121 Date Rec'd by 3 Gordon Print Name **Driver's Signature** TRUCK # B/L # FOR COMPANY USE ONLY RT TF OP D.O.T. HAZARDOUS MATERIALS PLACARD PROVIDED BY SHIPPER CARRIER COMPLETED ARRIVED 37 AM DATE AM DATE THIS IS TO CERTIFY THAT THE ABOVE NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION. DESTINATION UNLOADING PM PM DRUM CREDIT FOR CHEMICAL EMERGENCY created by:crippsto www.scfuels.com

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

ver. SCF20210324

partial

#### ORDER NUMBER: 1837355

DATE: 3/24/2021

TERMS: N30 SALES REP: Todd Cripps PHONE: 714-938-5714

> PO#: MGS21780 SHIP DATE: 3/29/2021

> > ROM: SHIP VIA:

WHSE: 101

# Appendix E Excess Emission Reports

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



From:	10/01/2021 00	00 <b>To:</b> 1	2/31/2021 23	:59 Facility Name:	Malburg Generating Station
Generated:	01/06/2022 18	56		Location:	Vernon, California
Tag Name:	U1_CO_LbPerHr_	_1M		SI = SampleInvalid, * =	= Excess Emission
Total Opera	ting Time:	2,047.6	55 Hours		
Non-Operati	ng Time: 160.35	Hours	Report Time:	2,208.00 Hours	

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

No excess emissions were found in the reporting period.

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

		-			
From:	10/01/2021 00:	00 <b>то:</b> 1	2/31/2021 23	:59 Facility Name:	Malburg Generating Station
Generated:	01/06/2022 18:	56		Location:	Vernon, California
Tag Name:	U1_CO_LbPerHr_	1M		<pre>SI = SampleInvalid, *</pre>	= Excess Emission
	5	2,047.0	55 Hours		
Non-Operati	ng Time: 160.35	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:	10/01/2021 00:	00 <b>то:</b>	12/31/2021 23	:59 Facility Name:	Malburg Generating Station				
Generated:	01/06/2022 19:	10		Location:	Vernon, California				
Tag Name:	U1_NOXRECLM_Lb	PerHr_1M		SI = SampleInvalid, * =	SI = SampleInvalid, * = Excess Emission				
Total Opera	ting Time:	2,047	.65 Hours						
Non-Operati	ng Time: 160.35	Hours	Report Time:	2,208.00 Hours					

Unit Operation									
E	vent Period			Reason	Action				
Duration in Begin/EndDuration in Minute(s)Limit		Code - Description	Code - Description						

No excess emissions were found in the reporting period.



# Startup/Shutdown Excess Emissions Report

# U1 NOx Startup/Shutdown

From:	10/01/2	021 00:	00 <b>To:</b>	12/31/2021	23:59	Faci	lity Nam	Malburg	Generating	Station
Generated:	01/06/2	022 19:	10			Loca	tion:	Vernon,	California	
Tag Name:	U1_NOXRECLM_LbPerHr_1M					SI = SampleInvalid, * = Excess Emission				
Total Operating Time: 2,047.65 Hours				rs						
Non-Operati	ng Time:	160.35	Hours	Report Ti	me: 2,20	08.00	Hours			

No invalid events were found in the reporting period.



# Startup/Shutdown Excess Emissions Report

# U1 VOC Startup/Shutdown

From:	10/01/2021 00:	00 <b>To:</b>	12/31/2021 23	:59 Facility Name:	: Malburg Generating Station
Generated:	01/06/2022 19:	12		Location:	Vernon, California
Tag Name:	U1_VOC_LbPerHr	_1M		<pre>SI = SampleInvalid, *</pre>	= Excess Emission
Total Opera	ting Time:	2,047	7.65 Hours		
Non-Operati	ng Time: 160.35	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

10/01/2021 00:00 To: 12/31/2021 From: **Generated:** 01/06/2022 19:12 U1\_VOC\_LbPerHr\_1M Tag Name: Total Operating Time: 2,047.65 Hours Non-Operating Time: 160.35 Hours Report Time: 2,208.00 Hours

No invalid events were found in the reporting period.

1 23:59	Facility Name:	Malburg	Generating Sta	ation
	Location:	Vernon,	California	
	<pre>SI = SampleInvalid, * =</pre>	Excess Emission	I.	



HEDRDT

POWER

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

 From:
 10/01/2021 00:00
 To:
 12/31/2021 23:59
 Facility Name:

 Generated:
 01/26/2022 11:46
 Location:

Malburg Generating Station Vernon, California



Tag Name:U1\_CONormal\_Ppmvdc\_1HTotal Operating Time:2,051.00 Hour(s)Non-Operating Time:157.00 Hour(s)Report Time:2,208.00 Hour(s)Report Time:2,208.00 Hour(s)

No Exclusions Allowed

Total Operating Time:	2,051.00 Hour(s)
Total Duration (Online only):	0.00 Hour(s)
Time in exceedance as a percentage of operating time:	0.00 %
Time in compliance as a percentage of operating time:	100.00 %

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

 From:
 10/01/2021 00:00
 To:
 12/31/2021 23:59
 Facility Name:

 Generated:
 01/06/2022 19:03
 Location:

Malburg Generating Station Vernon, California



Tag Name:U1\_NOxNormal\_Ppmvdc\_1HTotal Operating Time:2,051.00 Hour(s)Non-Operating Time:157.00 Hour(s)Report Time:2,208.00 Hour(s)Report Time:2,208.00 Hour(s)

No Exclusions Allowed

Total Operating Time:	2,051.00 Hour(s)
Total Duration (Online only):	0.00 Hour(s)
Time in exceedance as a percentage of operating time:	0.00 %
Time in compliance as a percentage of operating time:	100.00 %

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

10/01/2021 00:00 To: 12/31/2021 23:59 Facility Name: From: **Generated:** 01/06/2022 19:07

Malburg Generating Station Vernon, California



U1\_VOCNorma1\_Ppmvdc\_1H Tag Name: Total Operating Time: 2,051.00 Hour(s) Non-Operating Time: 157.00 Hour(s) Report Time: 2,208.00 Hour(s)

No Exclusions Allowed

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

Total Operating Time:	2,051.00 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 %

Location:

# Quad K Excess Emissions Report

#### U1 NOX 4-Hour Events

From:10/01/2021 00:00To:12/31/2021 23:59Generated:01/06/2022 19:09

9 Facility Name: Location:

Malburg Generating Station Vernon, California



Tag Name:U1\_NOx4H\_Ppmvdc\_1HTotal Operating Time:2,051.00 Hour(s)Non-Operating Time:157.00 Hour(s)Report Time:2,208.00 Hour(s)Report Time:2,208.00 Hour(s)

No Exclusions Allowed

Total Operating Time:	2,051.00 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



Non-Operating Time: 190.00 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

oz co startup/shutuown Events	SE
From: 10/01/2021 00:00 To: 12/31/2021 23:59 Facility Name: Malburg Generating Station	HEDROT
Generated: 01/06/2022 18:58 Location: Vernon, California	
Tag Name:       U2_CO_LbPerHr_1M       SI = SampleInvalid, * = Excess Emission	
Total Operating Time: 2,018.00 Hours	
Non-Operating Time: 190.00 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:	10/01/2021 00:00	To:	12/31/2021 23:59	Facility Name:	Malburg	Generating	Station
Generated:	01/06/2022 19:11			Location:	Vernon,	California	
Tag Name:	U2_NOxRECLM_LbPer	Hr_1N	1	<pre>SI = SampleInvalid, * =</pre>	Excess Emissio	n	
		2 010					

Total Operating Time:2,018.00HoursNon-Operating Time:190.00HoursReport Time:2,208.00

Unit Operation Event Period Reason Action Duration in Minute(s) Lb/Event Code - Description Code - Description Begin/End Limit 11/12/2021 12:57 11/12/2021 14:26 51.3 90 51.5 \* Warm Start - Gas

Total Duration of Excess Emission	90	Minute(s)
Time of Excess Emission as a percentage of operating time	0.07	%
Time in compliance as percentage of operating time	99.93	%



# Startup/Shutdown Excess Emissions Report

## U2 NOx Startup/Shutdown

From:	10/01/2021 00:	00 <b>To:</b>	12/31/2021 23	59 Facility Name	: Malburg	Generating Station
Generated:	01/06/2022 19:	11		Location:	Vernon,	California
Tag Name:	U2_NOXRECLM_Lb	PerHr_1M		SI = SampleInvalid, *	= Excess Emission	1
Total Operating Time: 2,018.00 Hours						
Non-Operati	ng Time: 190.00	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



 Unit Operation

 Event Period
 Reason
 Action

 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:	10/01/2021 00:	00 <b>To:</b> 12/3	1/2021 23:59	Facility Name:	Malburg	Generating Station
Generated:	01/06/2022 19:	12		Location:	Vernon,	California
Tag Name:	U2_VOC_LbPerHr	_1M		<pre>SI = SampleInvalid, * =</pre>	Excess Emission	1
Total Operating Time: 2,018.00 Hours						
Non-Operati	ng Time: 190.00	Hours R	eport Time: 2,	208.00 Hours		

No invalid events were found in the reporting period.





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

 From:
 10/01/2021 00:00
 To:
 12/31/2021 23:59
 Facility Name:

 Generated:
 01/26/2022 11:47
 Location:

Malburg Generating Station Vernon, California



Tag Name:U2\_CONormal\_Ppmvdc\_1HTotal Operating Time:2,024.00 Hour(s)Non-Operating Time:184.00 Hour(s)Report Time:2,208.00 Hour(s)Report Time:2,208.00 Hour(s)

No Exclusions Allowed

Total Operating Time:	2,024.00 Hour(s)
Total Duration (Online only):	0.00 Hour(s)
Time in exceedance as a percentage of operating time:	0.00 %
Time in compliance as a percentage of operating time:	100.00 %

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

 From:
 10/01/2021 00:00
 To:
 12/31/2021 23:59
 Facility Name:

 Generated:
 01/26/2022 11:44
 Location:

Malburg Generating Station Vernon, California



Tag Name:U2\_NOxNormal\_Ppmvdc\_1HTotal Operating Time:2,024.00 Hour(s)Non-Operating Time:184.00 Hour(s)Report Time:2,208.00 Hour(s)Report Time:2,208.00 Hour(s)

No Exclusions Allowed

Total Operating Time:	2,024.00 Hour(s)
Total Duration (Online only):	0.00 Hour(s)
Time in exceedance as a percentage of operating time:	0.00 %
Time in compliance as a percentage of operating time:	100.00 %

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

 From:
 10/01/2021 00:00
 To:
 12/31/2021 23:59
 Facility Name:

 Generated:
 01/26/2022 11:45
 Location:

Malburg Generating Station Vernon, California



Tag Name:U2\_VOCNormal\_Ppmvdc\_1HTotal Operating Time:2,024.00 Hour(s)Non-Operating Time:184.00 Hour(s)Report Time:2,208.00 Hour(s)Report Time:2,208.00 Hour(s)

No Exclusions Allowed

Total Operating Time:	2,024.00 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:10/01/2021 00:00To:12/31/2021 23:59Generated:01/06/2022 19:09

9 Facility Name: Location:

Malburg Generating Station Vernon, California



Tag Name: U2\_NOx4H\_Ppmvdc\_1H Total Operating Time: 2,024.00 Hour(s) Non-Operating Time: 184.00 Hour(s) Report Time: 2,208.00 Hour(s)

No Exclusions Allowed

Total Operating Time:	2,024.00 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 %



#### 22 November 2021

South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765 ATTN: Christian Fielding

Subject:500-N ReportFacility ID #:155474Source:Malburg Generating Station

On behalf of the owner of the Malburg Generating Station, Bicent (California) Malburg LLC, Heorot Power Management is submitting this 500-N report for the November 12, 2021, deviation with excess emissions.

Please don't hesitate to contact me at (303) 607-5590 or kmccormack@heorotpower.com if you have any questions or need additional information.

Sincerely,

-Zle-

Kyle McCormack Senior Manager of Environmental

South C AQN	Form 50 Title V - *This written re calling AOMD	Deviations, Emergen	verbally report certain types of incidents. Verbal re	ports may be made by	Mail To: SCAQMD- Compliance & Enforcement P.O. Box 4941 Diamond Bar, CA 91765-0941 Tel: (909) 396-3385 www.aqmd.gov
	on I - Operator I	Information			
	•	Name of Operator That Appears On Per			able On Permit Or Invoice Issued By
Bio	cent (California	a) Malburg, LLC	AQMD	):	155474
3. Add (whe	ress: ere incident occurred)	4963 S. Soto Street	Street Address		
		Vernon	0''		90058
			City	State	Zip
	ing Address: fferent from Item 3)		Street Address		
			City	State	Zip
5. Prov	/ide the name, title, a	and phone number of the person to co	ontact for further information:		
	Kyl	e McCormack	Sr. Manager of Environmenta	al (32	3) 775-3873
	,	Name	Title		Phone #
Section	on II - Reporting	g of Breakdowns, Deviations, a	and Emergencies		
	written notification	is to report a(n):			
Тур	e of Incident		Verbal Report Due*	Written Report Due	
a. [	Emergency under	r Rule 3002(g)	Within 1 hour of discovery	Within 2 working days exceeded.	s from when the emission limit was
b. [	Breakdown under     Rule 430 (No     Rule 2004 (F     Rule 218 (No     [See Rule 21	on-RECLAIM) RECLAIM) on-RECLAIM)	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	breakdown is correcte start of the breakdow granted.	4 - Within 7 calendar days after ed, but no later than 30 days from n, unless a written extension is equired semi-annual reports.
c. [	Deviation with exo [See Title V Perm	cess emissions it, 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 disc	covery of the deviation.
d. [		it, Section K, Condition Nos. 22D & 23]	None	With required semi-a	nnual monitoring reports.
		scovered by: Thomas Barnha	rton	11/12/2021 Date	O6:00 ○ AM Time ○ PM
3. The	incident was first re	ported by: <u>Operator #5</u>	of AQMD Staff Person	11/15/2021 Date	<u>10:01</u>
b. (	<ul> <li>Via Phone</li> <li>In Person</li> <li>an did the incident action</li> </ul>	44/42/202	Notification Number	(Required): <u>677596</u>	0
	Received By:		Assigned By:	Inspector:	
	Date/Time Received	1:	Date/Time Assigned:	Date/Time Re	eceived Assignment:
	Date Delivered To T	eam:	Date Reviewed Inspector Report:	Date Inspecte	ed Facility:
	Team:	Sector:	Breakdown/Deviation Notification No.	Date Complet	
ONLY	Recommended Activ	on: Cancel Notification Gra	I	Other:	
	Final Action:		nt Relief Issue NOV No	Other:	

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5.	Has the incident stopped? a. • Yes, •	on: Date		(	02:27 Time	○ AM ● PM	<b>b.</b> 🔿 No	
6.	What was the total duration of the incider	nt?0			01			
		Day			Hours			
7.	For equipment with an operating cycle, as when was the end of the operating cycle of							O AM
8.	Describe the incident and identify each pi equipment and attach additional pages as See Attachment A		application	n, or device number)	Date affected. Atta	ch photos (w	Time hen available) of th	O PM e affected
9.	The incident may have resulted in a:         a. X         Violation of Permit Condition(s):	A99.6 NOX Startu	p Limit 5	51.3				
	<b>b.</b> Violation of AQMD Rule(s):							
10.	What was the probable cause of the incid See Attachment A	ent? Attach additional pages	as necess	sary.				
11.	Did the incident result in excess emission			ollowing and attach ca	lculations.)			
		🗙 NOx51	.500 <sub>lbs</sub>	SOx		lbs	☐ H2S	lbs
13. 14. 15. 16.	□ C0							
	rtify under penalty of law that based on int other materials are true, accurate, and co		ifter reason	able inquiry, the stat	tements and in	formation in f	his document and	in all attachments
For	Title V Facilities ONLY: 🔀 I also certif	fy under penalty of law that th	nat I am the	responsible official	for this facility	as defined in	AQMD Regulation	XXX.
1. S	ignature of Responsible Official:	$\mathcal{O}$		2. Title of Responsi	ble Official:			
	Y.	Hallidan	1.		Chief	Operatin	g Officer	
3. P	rint Name: Douglas H			4. Date:		11/22/202	21	
5. P	hone #:			6. Fax #:				
	(410) 770-	-9500						
7. A	ddress of Responsible Official: 9 Federal S	Street		Easto	on	MD	21	601
Stre	et #		City	/		State	Zip	

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#### **AQMD Form 500-N**

Facility Name: Bicent California Malburg

11/23/2021, Attachment "A" - Page 1 of 1

Facility ID: 155474

# 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.

On the afternoon of November 12, at 14:27, CTG Unit 2 (Device ID D36) experienced a CO lbs. excess emission during a non-cold startup event. The non-cold startup began at 12:57, which followed a 17.5-hour offline period. Normal operations resumed at 14:28. The NOx startup value of 51.5 lbs. was in excess of the limitation of 51.3 lbs. Permit Condition A99.6

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

The Steam Turbine Generator (STG) had been offline for 37 hours prior to this start, there was an attempted restart the previous day in which the STG experienced a forced outage preventing the successful start of unit 2 on 11/11/2021. The 37-hour offline time, combined with cool ambient temperatures the previous night had allowed the process too cool to temperatures typical of a "cold-start". During the start-up sequence the gas turbine load was reduced and held at a lower than typical load of 10mw (elevated NOx) for a longer than typical "non-cold start" duration to facilitate the cold start-up of the Steam Turbine.

# 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.

A procedural change has been implemented. The change will require that in the event of a start-up under similar conditions, the Gas Turbine load will be held at 5 MW for 15 minutes, currently the unit is held at 5 mw for 20 minutes to facilitate HRSG heat soaking before increasing to 12 mw (lower loads have higher raw NOx). Also, notes have been added to the procedure to warn against reducing load below 12 MW during the start sequence.

# Appendix F MGS RECLAIM Annual Emission Allocation Information



# FACILITY PERMIT TO OPERATE BICENT (CALIFORNIA) MALBURG LLC

#### SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION

The annual allocation of NOx RECLAIM Trading Credits (RTCs) for this facility is calculated pursuant to Rule 2002. Total NOx emission shall not exceed such annual allocations unless the operator obtains RTCs corresponding to the facility's increased emissions in compliance with Rules 2005 and 2007.

The level of Starting Allocation plus Non-Tradable Credits used to determine compliance with Rule 2005(c)(4) and applicability of Rule 2005(e) - Trading Zone Restrictions is listed on the last page of this Section.

The following table lists the annual allocations that were issued to this facility and the amounts of RTCs held by this facility on the day of printing this Section.

#### **RECLAIM POLLUTANT ANNUAL ALLOCATION (POUNDS)**

Ye Begin (month/	End	Zone	NOx RTC Initially Allocated	NOx RTC <sup>1</sup> Holding as of 08/12/2021 (pounds)	Non-Tradable Non-Usable RTCs (pounds)
7/2018	6/2019	Coastal	28480	13236	940
1/2019	12/2019	Coastal	0	4651	940
7/2019	6/2020	Coastal	28480	4728	940
1/2020	12/2020	Coastal	0	21279	1854
7/2020	6/2021	Coastal	28480	33527	1854
1/2021	12/2021	Coastal	0	35409	1881
7/2021	6/2022	Coastal	28480	19397	1881
1/2022	12/2022	Coastal	0	15663	3735
7/2022	6/2023	Coastal	28480	15663	3734
1/2023	12/2023	Coastal	0	15663	0
7/2023	6/2024	Coastal	28480	15663	0
1/2024	12/2024	Coastal	0	15663	0
7/2024	6/2025	Coastal	28480	15663	0
1/2025	12/2025	Coastal	0	15663	0
7/2025	6/2026	Coastal	28480	15663	0
1/2026	12/2026	Coastal	0	15663	0
7/2026	6/2027	Coastal	28480	15663	0
-					

#### Footnotes:

This number may change due to pending trades, emissions reported under Quarterly Certification
of Emissions Report (QCER) and Annual Permit Emission Program (APEP) Report required
pursuant to Rule 2004, or deductions made pursuant to Rule 2010(b). The most recent total RTC
information can be obtained from the District's RTC Listing.

2. The use of such credits is subject to restrictions set forth in paragraph (f)(1) of Rule 2002.



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# FACILITY PERMIT TO OPERATE BICENT (CALIFORNIA) MALBURG LLC

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Ye Begin (month	End	Zone	NOx RTC Initially Allocated	NOx RTC <sup>1</sup> Holding as of 08/12/2021 (pounds)	Non-Tradable Non-Usable RTCs (pounds)
1/2027	12/2027	Coastal	0	15663	0
7/2027	6/2028	Coastal	28480	15663	0
1/2028	12/2028	Coastal	0	15663	0
7/2028	6/2029	Coastal	28480	15663	0
1/2029	12/2029	Coastal	0	15663	0
7/2029	6/2030	Coastal	28480	15663	0
1/2030	12/2030	Coastal	0	15663	0
7/2030	6/2031	Coastal	28480	15663	0
1/2031	12/2031	Coastal	0	15663	0
7/2031	6/2032	Coastal	28480	15663	0
1/2032	12/2032	Coastal	0	15663	0
7/2032	6/2033	Coastal	28480	15663	0
1/2033	12/2033	Coastal	0	15663	0
7/2033	6/2034	Coastal	28480	15663	0
1/2034	12/2034	Coastal	0	15663	0
7/2034	6/2035	Coastal	28480	15663	0
1/2035	12/2035	Coastal	0	15663	0

#### Footnotes:

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# FACILITY PERMIT TO OPERATE BICENT (CALIFORNIA) MALBURG LLC

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The following table lists the annual allocations that were issued to this facility and the amounts of RTCs held by this facility on the day of printing this Section.

#### **RECLAIM POLLUTANT ANNUAL ALLOCATION (POUNDS)**

Ye Begin (month/		Zone	NOx RTC Initially Allocated	NOx RTC <sup>1</sup> Holding as of 08/12/2021 (pounds)	Non-Tradable Non-Usable RTCs (pounds)
7/2035	6/2036	Coastal	28480	15663	0
1/2036	12/2036	Coastal	0	15663	0

#### Footnotes:

<sup>1.</sup> This number may change due to pending trades, emissions reported under Quarterly Certification of Emissions Report (QCER) and Annual Permit Emission Program (APEP) Report required pursuant to Rule 2004, or deductions made pursuant to Rule 2010(b). The most recent total RTC information can be obtained from the District's RTC Listing.

<sup>2.</sup> The use of such credits is subject to restrictions set forth in paragraph (f)(1) of Rule 2002.