

DOCKETED	
Docket Number:	08-AFC-03C
Project Title:	Marsh Landing Generating Station Compliance
TN #:	262484
Document Title:	Marsh Landing 2024 CEC Compliance Annual Report Part 4 of 5
Description:	Annual Compliance Operations Report
Filer:	David Frandsen
Organization:	NRG
Submitter Role:	Applicant
Submission Date:	3/27/2025 2:40:10 PM
Docketed Date:	3/27/2025



Industrial User Report Checklist And Certification Statement Form

Attn:	Miracle Odurukwe		
Environmental Compliance Specialist			
Environmental Specialist	Phone	(925) 756-1929	Fax (925) 756-1961
Industrial User Facility Name	Marsh Landing LLC		
Duly Authorized Representative Name	Joe Moura		
Duly Authorized Representative Phone	925-779-6685		

This Industrial User Report Checklist and Certification Statement Form shall be submitted with all Self-Monitoring Reports (SMRs), as specified by the Wastewater Discharge Permit issued by Delta Diablo, hereinafter referred to as the District. When submitting Self-Monitoring Reports, check all that are applicable.

RECEIVED

Self-Monitoring Reports (SMRs) (Required)

JAN 10 2025

☒ Flow Discharge Summary (Review Discharge Permit.)

☐ Calibration of Effluent Flow Meters; if applicable.

DELTA DIABLO

☒ Monitoring Results – all required tests completed, results reviewed, results included

Quality Assurance/Quality Control (QA/QC) and Chain-of-Custody (COC) (Review Discharge Permit):

☒ pH (field-grab) (shall be analyzed within 15 minutes of sample collection).

Results, collection time, analysis time and Technician's Initials shall be reported in the comments section of the respective COC. The pH meter shall be accurate and reproducible to 0.1 pH unit with a range of 0 to 14 and equipped with a temperature-compensation adjustment (Standard methods).

☐ Cyanide samples were tested for oxidizers and preserved with Sodium Hydroxide (NaOH).
This shall be reported in the comments section on the respective COC, if applicable.

☒ Selenium lab analysis by EPA Method 200.8 by Reaction Mode: if applicable.

☐ Total Phenolics lab analysis by EPA Method 420.4: if applicable.

☒ All sample analysis for regulatory compliance reporting shall be completed by an ELAP certified Laboratory.

☒ Certification Statement included (see attached)

☐ Other requested data _____



Industrial User Report Checklist And Certification Statement Form

Violations (if applicable)

- ☐ All wastewater discharge violations are reported during this period:
- ☐ The District was contacted within 24- hours of becoming aware of the violation.
Date: _____
- ☐ A follow-up resample was completed. Date: _____
- ☐ Corrective actions implemented to resolve violation (Please explain in writing)
- ☐ Significant Non-Compliance (SNC) Status Review

Please circle the review period *: **January – June** and **July -December**.

The SIU shall conduct a SNC review for the previous completed period * prior to the Self-monitoring Report (SMR) due date. Examples: A October SMR due date, the SNC review period is **January – June** or an April SMR due date, the SNC review period is **July – December**.

The SNC definition can be found in 40 CFR 403.8.

- a) Chronic SNC= >66% of a regulated parameter in violation during six-month Period *.
- b) Technical Review Criteria (TRC) SNC = >33% of a regulated pollutant during a six-month period* equals or exceeds the product of the daily maximum limit or the average limit multiplied by the applicable TRC factor (1.4 for BOD, TSS and Oil/Grease and 1.2 for all other regulated pollutants except pH).

☐ Is the SIU in SNC (as defined in a and/or b) for this period*? Yes ☐, No ☐; If yes, for what period? _____. Please report the SNC status to the District in the SMR and include corrective actions to resolve the SNC classification.

☐ Other violations – i.e., reporting, spills to sewer, or prohibited discharges

All violations will be discussed in the cover letter of the Self-Monitoring Report.

☐ Significant Changes

Anticipated changes that may alter the nature, quality, or volume of the wastewater discharged. Planned changes shall be submitted at least 90 days prior to implementation, and shall include a detailed description of this change.



Industrial User Report Checklist And Certification Statement Form

Certification Statement

Industrial User Facility Name

Marsh Landing LLC

Industrial User Facility Address

3201-C Wilbur Avenue, Antioch, CA 94509

Duly Authorized Representative Phone

925-779-6685

Indicate Period Covered by This Report

October 1-December 31, 2024

Certification Statement:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations (40 CFR 403.6).

Duly Authorized Representative Signature

Duly Authorized Representative Print

Joe Moura

Date

1-10-25



Marsh Landing LLC
Marsh Landing Generating Station
3201-C Wilbur Avenue (shipping)
PO Box 1687 (mailing)
Antioch, CA 94509

January 8, 2025

Mr. Miracle Odurukwe
Delta Diablo
2500 Pittsburg-Antioch Highway
Antioch, CA 94509-1373

**Subject: 2024 Fourth Quarterly (October 1-December 31) Self-Monitoring Report
NRG Marsh Landing, LLC, Marsh Landing Generating Station,
Industrial Wastewater Discharge Permit 0311963-S**

This letter documents the transmittal of the 2024 Fourth Quarterly Self-Monitoring Report (SMR).

Compliance Statement (choose one):

- ☒ There were no violations of waste discharge requirements during the reporting period.
- ☐ The following violation(s) of waste discharge requirements occurred during the reporting period, as described below:

Discussion:

This report is the SMR filed for the station and covers the period from October 1 through December 31, 2024. This report includes monthly flow data and quarterly analytical data required to be collected in 2024. Data are summarized in the attached tables.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions, please contact Mr. David Frandsen, Environmental Specialist at david.frandsen@nrg.com or call 925.779.6695.

Sincerely,



Joe Moura

Plant Manager

NRG Marsh Landing, LLC

Marsh Landing Generating Station

Attachments

Table 1:	Quarterly Results for Combined Wastewater (FAC Combined)
Table 2:	October 2024 Monthly Flow Data
Table 3:	November 2024 Monthly Flow Data
Table 4:	December 2024 Monthly Flow Data

Attachment 1: pH COC

Attachment 2: Analytical Reports

Table 1 - Quarterly Analytical Results
Quarterly Results for Combined Wastewater (FAC Combined)

Industrial User Name	Marsh Landing LLC
Location	Marsh Landing Generating Station
Permit Number	0311963-S
SIC	4911
Address	3201-C Wilbur Avenue
	Antioch CA 94509

Sample Station Location	IW-001
Sample Station Description	Local Limits FAC Combined Wastewater
Reporting Period	October - December 2024
Report Type	Quarterly

Constituent	Sample Date	Permit Limit	Result	Units
Field pH	10/30/2024	6-10	7.4	S.U.
BOD	10/30/2024	-	13	mg/L
COD	10/30/2024	-	66	mg/L
Arsenic	10/30/2024	0.15	0.00064	mg/L
Cadmium	10/30/2024	0.1	0.000081 J	mg/L
Chromium	10/30/2024	0.5	0.00091 J	mg/L
Copper	10/30/2024	0.5	0.051	mg/L
Iron	10/30/2024	-	0.61	mg/L
Lead	10/30/2024	0.5	0.00036 J	mg/L
Mercury	10/30/2024	0.003	ND	mg/L
Molybdenum	10/30/2024	-	0.0016	mg/L
Nickel	10/30/2024	0.5	0.0041	mg/L
Selenium	10/30/2024	0.25	0.00024J	mg/L
Silver	10/30/2024	0.2	ND	mg/L
Zinc	10/30/2024	1.0	0.011	mg/L
TDS	10/30/2024	-	408	mg/L
TSS	10/30/2024	-	37.6	mg/L

J = The reported concentration is an estimated value.

mg/L = Milligrams per liter

ND = Not detected at or above the laboratory Method Detection Limit or Reporting Limit.

S.U. = Standard units

Table 2
October Flow Data

Industrial User Name	Marsh Landing LLC
Location	Marsh Landing Generating Station
Permit Number	0311963-S
SIC	4911
Address	3201-C Wilbur Avenue
	Antioch CA 94509
Sample Station Location	SouthWestt Corner of Admin Building
Sample Station Description	Flow Monitoring Structure
Reporting Period	October, 2024
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuously Measured (Rosemount 8705 Flanged Magnetic Flow Meter)
Sample Date	10/1/2024 - 10/31/2024
Permit Limits (s.u.)	NTE 30,240 gpd. NTE 21 gpm +10% (23.1 gpm) for 15 consecutive minutes or 30 minutes in a 24-hour period

Day	Total Flow (gpd)	Instantaneous Max (gpm)	Minutes per Day of Flow exceeding 23.1 gpm
1	7,485	19.87	
2	9,884	19.58	
3	26,308	20.00	
4	28,076	19.78	
5	8,071	19.70	
6	8,695	19.73	
7	28,083	19.61	
8	28,080	19.59	
9	27,198	19.65	
10	2,186	19.57	
11	-	0.00	
12	-	0.00	
13	-	0.00	
14	4,585	19.83	
15	-	0.00	
16	-	0.00	
17	-	0.00	
18	384	15.74	
19	-	0.00	
20	-	0.00	
21	5,030	20.85	
22	-	0.00	
23	439	15.02	
24	7,876	21.28	
25	22	3.37	
26	-	0.00	
27	-	0.00	
28	-	0.00	
29	17,915	29.74	2
30	12,500	19.58	
31	-	0.00	

Total Monthly Flow (gal)	222,818	Did flow exceed limits?	NO
Daily Max Flow (gpd)	28,083	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	7,188		

Table 3
November Flow Data

Industrial User Name	Marsh Landing LLC
Location	Marsh Landing Generating Station
Permit Number	0311963-S
SIC	4911
Address	3201-C Wilbur Avenue
	Antioch CA 94509
Flow Station Location	SouthWestt Corner of Admin Building
Flow Station Description	Flow Monitoring Structure
Reporting Period	November, 2024
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuously Measured (Rosemount 8705 Flanged Magnetic Flow Meter)
Sample Date	11/1/2024 - 11/30/2024
Permit Limits (s.u.)	NTE 30,240 gpd. NTE 21 gpm +10% (23.1 gpm) for 15 consecutive minutes or 30 minutes in a 24-hour period

Day	Total Flow (gpd)	Instantaneous Max (gpm)	Minutes per Day of Flow exceeding 23.1 gpm
1	-	0.00	
2	-	0.00	
3*	-	0.00	
4	4,332	16.29	
5	20,902	20.20	
6	5,477	19.08	
7	-	0.00	
8	-	0.00	
9	425	16.74	
10	-	0.00	
11	-	0.00	
12	4,087	20.84	
13	-	0.00	
14	-	0.00	
15	-	0.00	
16	-	0.00	
17	486	15.97	
18	-	0.00	
19	4,141	20.64	
20	7,285	20.25	
21	-	0.00	
22	4,915	19.11	
23	9,006	19.09	
24	3,876	20.49	
25	447	16.11	
26	-	0.00	
27	-	0.00	
28	-	0.00	
29	2,277	20.95	
30	10,972	19.30	

* - Nov 3rd Includes 25 hours of flow data -- Time Change

Total Monthly Flow (gal)	78,628	Did flow exceed limits?	NO
Daily Max Flow (gpd)	20,902	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	2,621		

Table 4
December Flow Data

Industrial User Name	Marsh Landing LLC
Location	Marsh Landing Generating Station
Permit Number	0311963-S
SIC	4911
Address	3201-C Wilbur Avenue
	Antioch CA 94509
Flow Station Location	SouthWestt Corner of Admin Building
Flow Station Description	Flow Monitoring Structure
Reporting Period	December, 2024
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuously Measured (Rosemount 8705 Flanged Magnetic Flow Meter)
Sample Date	12/1/2024 - 12/31/2024
Permit Limits (s.u.)	NTE 30,240 gpd. NTE 21 gpm +10% (23.1 gpm) for 15 consecutive minutes or 30 minutes in a 24-hour period

Day	Total Flow (gpd)	Instantaneous Max (gpm)	Minutes per Day of Flow exceeding 23.1 gpm
1	-	0.00	
2	5,234	20.87	
3	1,045	19.05	
4	-	0.00	
5	-	0.00	
6	-	0.00	
7	-	0.00	
8	-	0.00	
9	374	13.36	
10	-	0.00	
11	3,836	20.19	
12	9,413	19.13	
13	-	0.00	
14	14,023	19.28	
15	438	15.75	
16	-	0.00	
17	-	0.00	
18	2,834	20.34	
19	6,873	19.40	
20	4,818	20.28	
21	5,044	19.13	
22	-	0.00	
23	6,683	19.24	
24	1,601	19.07	
25	4,042	20.63	
26	-	0.00	
27	5,231	19.21	
28	-	0.00	
29	3,565	20.31	
30	6,473	20.38	
31	-	0.00	

Total Monthly Flow (gal)	81,527	Did flow exceed limits?	NO
Daily Max Flow (gpd)	14,023	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	2,630		

Marsh Landing Generating Station

Reported to:
Environmental Engineer

NPDES Monthly Analytical Report

Sample Point	Sample Number	Sample Date	Sample Collection Time	Date Analyzed	pH Analysis Time	Sample Medium	Sample Type (Grab)	pH
IW-001	ML24-117	10/30/24	0935	10/30/24	0935	Wastewater	Grab	7.4
						Method:		SM 4500-H+B
						Unit:		standard
						Reporting Limit:		0.18
						Method Detection Limit:		0.06

SM = Standard Method; ppm = parts per million; mg/L = milligrams per liter; N/A = not applicable

Environmental Engineer David Frandsen

Signature:

Date:

David Frandsen

Oct. 30, '24

Sampling Technologist: Ryan Robinson

Signature:

Date:

Ryan Robinson

10/30/24



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2410M48

Report Created for: NRG Energy, LLC

3201 Wilbur Avenue
Antioch, CA 94509

Project Contact: David Frandsen

Project P.O.: 4501929995

Project: Marsh Landing DDS Quarterly

Project Location:

Project Received: 10/30/2024

Analytical Report reviewed & approved for release on 11/06/2024 by:

Tracy Babjar
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in a case narrative.





Glossary of Terms & Qualifier Definitions

Client: NRG Energy, LLC

WorkOrder: 2410M48

Project: Marsh Landing DDSD Quarterly

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
CCV	Continuing Calibration Verification.
CCV REC (%)	% recovery of Continuing Calibration Verification.
CPT	Consumer Product Testing not NELAP Accredited
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
LCS2	Second LCS for the batch. Spike level is lower than that for the first LCS; applicable to method 1633.
LQL	Lowest Quantitation Level
MB	Method Blank
MB IS/SS % Rec	% Recovery of Internal Standard or Surrogate in Method Blank, if applicable
MB SS % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit ¹
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NA	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit ²
RPD	Relative Percent Difference
RRT	Relative Retention Time
RSD	Relative Standard Deviation
SNR	Surrogate is diluted out of the calibration range

¹ MDL is the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results. Definition and Procedure for the Determination of the Method Detection Limit, Revision 2, 40CFR, Part 136, Appendix B, EPA 821-R-16-006, December 2016. Values are based upon our default extraction volume/amount and are subject to change.

² RL is the lowest level that can be reliably determined within specified limits of precision and accuracy during routine laboratory operating conditions. (The RL cannot be lower than the lowest calibration standard used in the initial calibration of the instrument and must be greater than the MDL.) Values are based upon our default extraction volume/amount and are subject to change.



Glossary of Terms & Qualifier Definitions

Client: NRG Energy, LLC

WorkOrder: 2410M48

Project: Marsh Landing DDSD Quarterly

SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TNTC	"Too Numerous to Count;" greater than 250 colonies observed on the plate.
TZA	TimeZone Net Adjustment for sample collected outside of MAI's Coordinated Universal Time (UTC). (Adjustment for Daylight Saving is not accounted.)
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

Analytical Qualifiers

J Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.

Quality Control Qualifiers

F10 MS/MSD outside control limits. Physical or chemical interferences exist due to sample matrix.
F12 PDS outside control limits. Physical or chemical interferences exist due to sample matrix.



Analytical Report

Client: NRG Energy, LLC
Date Received: 10/30/2024 10:45
Date Prepared: 10/30/2024
Project: Marsh Landing DDSD Quarterly

WorkOrder: 2410M48
Extraction Method: SM5210B
Analytical Method: SM5210 B
Unit: mg/L

Biochemical Oxygen Demand (BOD)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2410M48-001B	Water	10/30/2024 09:35	WetChem	305066

Analytes	Result	MDL	RL	DF	Date Analyzed
BOD	13	8.0	8.0	4	11/04/2024 13:34

Analyst(s): JME



Analytical Report

Client: NRG Energy, LLC
Date Received: 10/30/2024 10:45
Date Prepared: 10/31/2024
Project: Marsh Landing DDSD Quarterly

WorkOrder: 2410M48
Extraction Method: SM5220 D
Analytical Method: SM5220 D
Unit: mg/L

Chemical Oxygen Demand (COD) as mg O₂ /L

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
IW-001	2410M48-001A	Water	10/30/2024 09:35		SPECTROPHOTOMETER2	305101

Analytes	Result	MDL	RL	DF	Date Analyzed
COD	66	4.8	10	1	10/31/2024 15:14

Analyst(s): AHE



Analytical Report

Client: NRG Energy, LLC
Date Received: 10/30/2024 10:45
Date Prepared: 10/31/2024
Project: Marsh Landing DDSD Quarterly

WorkOrder: 2410M48
Extraction Method: E200.8
Analytical Method: E200.8
Unit: mg/L

Metals

Client ID	Lab ID	Matrix	Date Collected			Instrument	Batch ID
IW-001	2410M48-001E	Water	10/30/2024 09:35			ICP-MS4 116SMPL.d	305154

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Arsenic	0.00064		0.000077	0.00050	1	11/01/2024 11:15
Cadmium	0.000081	J	0.000061	0.00050	1	11/01/2024 11:15
Chromium	0.00091	J	0.00033	0.0020	1	11/01/2024 11:15
Copper	0.051		0.00063	0.0015	1	11/01/2024 11:15
Iron	0.61		0.021	0.050	1	11/01/2024 11:15
Lead	0.00036	J	0.00021	0.00050	1	11/01/2024 11:15
Mercury	ND		0.000026	0.000050	1	11/01/2024 11:15
Molybdenum	0.0016		0.00018	0.00050	1	11/01/2024 11:15
Nickel	0.0041		0.00024	0.00050	1	11/01/2024 11:15
Selenium	0.00024	J	0.00017	0.00050	1	11/01/2024 11:15
Silver	ND		0.000058	0.00050	1	11/01/2024 11:15
Zinc	0.099		0.011	0.020	1	11/01/2024 11:15

Surrogates	REC (%)	Limits
Terbium	108	70-130

Analyst(s): AL



Analytical Report

Client: NRG Energy, LLC
Date Received: 10/30/2024 10:45
Date Prepared: 11/04/2024
Project: Marsh Landing DDSD Quarterly

WorkOrder: 2410M48
Extraction Method: SM2540 C-
Analytical Method: SM2540 C
Unit: mg/L

Total Dissolved Solids

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
IW-001	2410M48-001C	Water	10/30/2024 09:35		WetChem	305300

Analytes	Result	MDL	RL	DF	Date Analyzed
Total Dissolved Solids	408	10.0	10.0	1	11/05/2024 11:16

Analyst(s): JME



Analytical Report

Client: NRG Energy, LLC
Date Received: 10/30/2024 10:45
Date Prepared: 11/05/2024
Project: Marsh Landing DDSQ Quarterly

WorkOrder: 2410M48
Extraction Method: SM2540 D
Analytical Method: SM2540 D
Unit: mg/L

Total Suspended Solids

Client ID	Lab ID	Matrix	Date Collected			Instrument	Batch ID
IW-001	2410M48-001D	Water	10/30/2024 09:35			WetChem	305331

Analytes	Result	MDL	RL	DF	Date Analyzed
Total Suspended Solids	37.6	2.00	2.00	2	11/05/2024 10:06

Analyst(s): JME



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 10/30/2024

Date Analyzed: 11/04/2024

Instrument: WetChem

Matrix: Water

Project: Marsh Landing DDSQ Quarterly

WorkOrder: 2410M48

BatchID: 305066

Extraction Method: SM5210B

Analytical Method: SM5210 B

Unit: mg/L

Sample ID: MB/LCS/LCSD-305066

QC Summary Report for BOD

Analyte	MB Result	MDL	RL			
BOD	ND	2.0	2.0	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
BOD	170	170	198	85	85	84-115	0.297	16



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 10/31/2024
Date Analyzed: 10/31/2024
Instrument: SPECTROPHOTOMETER2
Matrix: Water
Project: Marsh Landing DDSD Quarterly

WorkOrder: 2410M48
BatchID: 305101
Extraction Method: SM5220 D
Analytical Method: SM5220 D
Unit: mg/L
Sample ID: MB/LCS/LCSD-305101
2410M48-001AMS/MSD

QC Summary Report for COD

Analyte	MB Result	MDL	RL			
COD	ND	4.8	10	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
COD	96	96	100	96	96	90-110	0	20

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
COD	1	150	150	100	66.00	82	82	80-120	0	20



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 10/31/2024

Date Analyzed: 11/01/2024

Instrument: ICP-MS4

Matrix: Water

Project: Marsh Landing DDSQ Quarterly

WorkOrder: 2410M48

BatchID: 305154

Extraction Method: E200.8

Analytical Method: E200.8

Unit: µg/L

Sample ID: MB/LCS/LCSD-305154
2410M48-001EMS/MSD
2410M48-001EPDS

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB IS/SS %REC	MB IS/SS Limits
Arsenic	ND	0.077	0.50	-	-	-
Cadmium	ND	0.061	0.50	-	-	-
Chromium	ND	0.33	2.0	-	-	-
Copper	ND	0.63	1.5	-	-	-
Iron	ND	21	50	-	-	-
Lead	ND	0.21	0.50	-	-	-
Mercury	ND	0.026	0.050	-	-	-
Molybdenum	ND	0.18	0.50	-	-	-
Nickel	ND	0.24	0.50	-	-	-
Selenium	ND	0.17	0.50	-	-	-
Silver	ND	0.058	0.50	-	-	-
Zinc	ND	11	20	-	-	-
Surrogate Recovery						
Terbium	550			500	110	70-130

(Cont.)

CA ELAP 1644 • NELAP 4033ORELAP



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 10/31/2024
Date Analyzed: 11/01/2024
Instrument: ICP-MS4
Matrix: Water
Project: Marsh Landing DDSD Quarterly

WorkOrder: 2410M48
BatchID: 305154
Extraction Method: E200.8
Analytical Method: E200.8
Unit: µg/L
Sample ID: MB/LCS/LCSD-305154
2410M48-001EMS/MSD
2410M48-001EPDS

QC Summary Report for Metals

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Arsenic	55	54	50	110	108	85-115	2.03	20
Cadmium	54	54	50	108	107	85-115	1.08	20
Chromium	54	53	50	109	107	85-115	1.51	20
Copper	55	54	50	110	108	85-115	1.70	20
Iron	5500	5400	5000	109	108	85-115	1.24	20
Lead	53	53	50	107	105	85-115	1.41	20
Mercury	1.3	1.4	1.25	104	108	85-115	4.22	20
Molybdenum	52	51	50	103	102	85-115	1.30	20
Nickel	54	54	50	108	107	85-115	1.12	20
Selenium	56	54	50	112	108	85-115	3.11	20
Silver	52	51	50	104	102	85-115	1.70	20
Zinc	560	550	500	113	110	85-115	1.91	20

Surrogate Recovery

Terbium	540	540	500	109	108	70-130	1.03	20
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Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Arsenic	1	58	58	50	0.0006360	116	116	75-125	0.221	20
Cadmium	1	55	55	50	ND	111	109	75-125	1.16	20
Chromium	1	55	56	50	ND	110	111	75-125	1.43	20
Copper	1	110	110	50	0.05088	212,F10	220,F10	75-125	3.71	20
Iron	1	6100	6100	5000	0.6059	122	122	75-125	0.0833	20
Lead	1	58	55	50	ND	116	111	75-125	4.21	20
Mercury	1	1.3	1.2	1.25	ND	102	100	75-125	2.45	20
Molybdenum	1	59	56	50	0.001596	119	112	75-125	6.35	20
Nickel	1	58	59	50	0.004112	117	118	75-125	0.719	20
Selenium	1	56	57	50	ND	112	113	75-125	1.40	20
Silver	1	56	52	50	ND	112	103	75-125	7.71	20
Zinc	1	650	660	500	0.09911	130,F10	132,F10	75-125	1.37	20

Surrogate Recovery

Terbium	1	600	550	500		119	110	75-125	8.28	20
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Analyte	PDS Result	SPK Val	SPKRef Val	PDS %REC	PDS Limits
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(Cont.)

CA ELAP 1644 • NELAP 4033ORELAP



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 10/31/2024

Date Analyzed: 11/01/2024

Instrument: ICP-MS4

Matrix: Water

Project: Marsh Landing DDSD Quarterly

WorkOrder: 2410M48

BatchID: 305154

Extraction Method: E200.8

Analytical Method: E200.8

Unit: µg/L

Sample ID: MB/LCS/LCSD-305154
2410M48-001EMS/MSD
2410M48-001EPDS

QC Summary Report for Metals

Analyte	PDS Result	SPK Val	SPKRef Val	PDS %REC	PDS Limits
Copper	100	50	0.05088	207,F12	75-125
Zinc	630	500	0.09911	126,F12	75-125

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Arsenic	ND	0.00064	12.4	-
Cadmium	ND	ND	100	-
Chromium	ND	ND	100	-
Copper	0.052	0.051	1.65	-
Iron	0.59	0.61	3.28	-
Lead	ND	ND	100	-
Mercury	ND	ND		-
Molybdenum	ND	0.0016	0.689	-
Nickel	0.0037	0.0041	9.90	-
Selenium	ND	ND	100	-
Silver	ND	ND		-
Zinc	ND	0.099	0.291	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 11/04/2024

Date Analyzed: 11/05/2024

Instrument: WetChem

Matrix: Water

Project: Marsh Landing DDSD Quarterly

WorkOrder: 2410M48

BatchID: 305300

Extraction Method: SM2540 C-

Analytical Method: SM2540 C

Unit: mg/L

Sample ID: MB/LCS/LCSD-305300

QC Summary Report for Total Dissolved Solids

Analyte	MB Result	MDL	RL			
Total Dissolved Solids	ND	10.0	10.0	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Total Dissolved Solids	1040	1050	1000	104	105	80-120	0.382	10



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 11/05/2024

Date Analyzed: 11/05/2024

Instrument: WetChem

Matrix: Water

Project: Marsh Landing DDSD Quarterly

WorkOrder: 2410M48

BatchID: 305331

Extraction Method: SM2540 D

Analytical Method: SM2540 D

Unit: mg/L

Sample ID: MB/LCS/LCSD-305331

QC Summary Report for Total Suspended Solids

Analyte	MB Result	MDL	RL			
Total Suspended Solids	ND	1.00	1.00	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Total Suspended Solids	98.0	93.0	100	98	93	80-120	5.24	10



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2410M48

ClientCode: GOA

☐ WaterTrax

☐ CLIP

☐ EDF

☐ EQuIS

☐ Dry-Weight

☒ Email

☐ HardCopy

☐ ThirdParty

☒ J-flag

☐ Detection Summary

☐ Excel

Report to:

David Frandsen
NRG Energy, LLC
3201 Wilbur Avenue
Antioch, CA 94509
(925) 427-3479 FAX: (925) 779-6679

Email: David.Frandsen@nrg.com
cc/3rd Party: joe.moura@nrg.com; james.robinson@nrg.
PO: 4501929995
Project: Marsh Landing DDSD Quarterly

Bill to:

Accounts Payable
NRG
112 Telly Street
New Roads, LA 70760
invoices@clearwayenergy.coupahost.co

Requested TATs:

5 days;
7 days;

Date Received: 10/30/2024

Date Logged: 10/30/2024

Lab ID	ClientSampleID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
2410M48-001	IW-001	Water	10/30/2024 09:35	<input type="checkbox"/>	B	A	E	A	C	D						

Test Legend:

1	BOD_W
5	TDS_W
9	

2	COD_W
6	TSS_W
10	

3	METALSMS_TTLC_W(PPM)
7	
11	

4	PRDisposal Fee
8	
12	

Prepared by: Gemma Gomez

Comments: Use QUOTE 234501 for any Marsh Landing projects to get correct analyte list. Always report in mg/L.

NOTE: Soil samples are discarded 60 days after receipt unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: NRG ENERGY, LLC
Client Contact: David Frandsen
Contact's Email: David.Frandsen@nrg.com

Project: Marsh Landing DDSD Quarterly

Work Order: 2410M48

QC Level: LEVEL 2

Date Logged: 10/30/2024

Comments: Use QUOTE 234501 for any Marsh Landing projects to get correct analyte list. Always report in mg/L.

☐ WaterTrax ☐ CLIP ☐ EDF ☐ Excel ☐ EQUIS ☒ Email ☐ HardCopy ☐ ThirdParty ☒ J-flag

LabID	ClientSampID	Matrix	Test Name	Cont./ Comp.	Bottle & Preservative	U**	Head Space	Dry- Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	Sub Out
001A	IW-001	Water	SM5220D (COD)	2	aVOA w/ H2SO4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/30/2024 9:35	5 days	11/6/2024	Present	<input type="checkbox"/>	<input type="checkbox"/>
001B	IW-001	Water	SM5210B (BOD)	1	500mL HDPE, unprsv.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/30/2024 9:35	7 days	11/8/2024	Present	<input type="checkbox"/>	<input type="checkbox"/>
001C	IW-001	Water	SM2540C (TDS)	1	500mL HDPE, unprsv.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/30/2024 9:35	5 days	11/6/2024	Present	<input type="checkbox"/>	<input type="checkbox"/>
001D	IW-001	Water	SM2540D (TSS)	1	1L HDPE, unprsv.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/30/2024 9:35	5 days	11/6/2024	Present	<input type="checkbox"/>	<input type="checkbox"/>
001E	IW-001	Water	E200.8 (Metals) <Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Mercury, Molybdenum, Nickel, Selenium, Silver, Zinc>	1	250mL HDPE w/ HNO3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/30/2024 9:35	5 days	11/6/2024	Present	<input type="checkbox"/>	<input type="checkbox"/>

NOTES: * STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- ISM prep requires 5 to 10 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 6 to 11 days from sample submission). Due date listed on WO summary will not accurately reflect the time needed for sample preparation.

- Organic extracts are held for 40 days before disposal; Inorganic extract are held for 30 days.

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.




U** = An unpreserved container was received for a method that suggests a preservation in order to extend hold time for analysis.

2410M48

Chain of Custody

Page 1 of 2-Quarterly

Marsh Landing Generating Station
3201-C Wilbur Avenue, P.O. Box 1687, Antioch, CA 94509
Phone: (925) 779-6500 Fax: (925) 779-6679

SAMPLES SUBMITTED TO							SEND INVOICE TO		PROJECT				ANALYSIS REQUEST			
Laboratory: McC Campbell Analytical, Inc. ELAP Cert. No. 1644 Address: 1534 Willow Pass Road, Pittsburg, CA 94565-1701 Phone/Fax: 925.252.9262/ 925.252.9269							Company: Marsh Landing LLC Attention: Accounts Payable Address: invoices@clearenergy.com P.O. No.: 4501929995		Plant: Marsh Landing Title: DDSD Phase: Quarterly Manager: David Frandsen				COD (SM 5220D)	BOD (SM 5210B)	TDS (SM 2540B)	TSS (SM 2540D)
Sample Number	Sample Date	Sample Collection Time	Regulatory Driver	Regulatory Frequency	Sample Medium	Sample Type	Sample Description	Number	Type	Volume (each, mL)	Preserv.					
ML-24-112	10/30/24	0935	DDSD	Quarterly	Wastewater	C-24	IW-001	2	Amber VOAs	43	H ₂ SO ₄ (pH<2, 4°C)	X				
ML-24-113	10/30/24	0935	DDSD	Quarterly	Wastewater	C-24	IW-001	1	HDPE Bottle	1,000	None (ZHS, 4°C)		X			
ML-24-114	10/30/24	0935	DDSD	Quarterly	Wastewater	C-24	IW-001	1	HDPE Bottle	500	None (4°C)			X		
ML-24-115	10/30/24	0935	DDSD	Quarterly	Wastewater	C-24	IW-001	1	Poly	1,000	None				X	
												HOLDING TIME:	28 days	48 hours	7 days	7 days
REPORTING			LABORATORY NOTES RE: SAMPLE RECEIPT/CONDITION					DIRECTIONS FOR LABORATORY								
Original to: David Frandsen Title: Environmental Specialist/Engineer Address: P.O. Box 1687 Antioch, CA 94509 E-mail: david.frandsen@nrg.com E-mail CC: james.robinson@nrg.com E-mail CC: joe.moura@nrg.com E-mail CC: ryan.robinson@nrg.com								STANDARD TAT (5-day). Establish calibration standards so Minimum Level (ML) value is the lowest calibration standard, the lowest quantifiable concentration or Reporting Limit (RL). Report "Detected, but Not Quantified" (DNQ) with estimated J-flagged concentrations below the RL and include method detection limits (MDLs) in report. Please report all results with the units of mg/L. RESULTS AND PRICING PER QUOTE ID: 234501 *Include sample description with client sample number ID.								
PRINTED NAME & PHONE NUMBER			SIGNATURE		COMPANY		DATE		TIME							
Sampled by: Ryan Robinson 925-864-7701					NRG Energy Services		10/30/24		0935							
Relinquished by: RYAN ROBINSON					NRG Energy Services		10/30/24		1045							
Received by: Lilly O'Connell					McC Campbell Analytical, Inc.		10/30/24		1045							
Relinquished by:																
Received by:																
Relinquished by:																
Received by:																

2410 M48


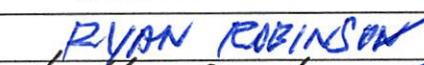

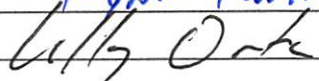

Chain of Custody

Page 2 of 2-Quarterly

Marsh Landing Generating Station

3201-C Wilbur Avenue, P.O. Box 1687, Antioch, CA 94509

Phone: (925) 779-6500 Fax: (925) 779-6679

SAMPLES SUBMITTED TO						SEND INVOICE TO		PROJECT				ANALYSIS REQUEST			
Laboratory: McCampbell Analytical, Inc. ELAP Cert. No. 1644 Address: 1534 Willow Pass Road, Pittsburg, CA 94565-1701 Phone/Fax: 925.252.9262/ 925.252.9269						Company: Marsh Landing LLC Attention: Accounts Payable Address: invoices@clearenergy.com P.O. No.: 4501929995		Plant: Marsh Landing Title: DDSD Phase: Quarterly Manager: David Frandsen				Total Metals¹ (EPA Method 200.8)			
SAMPLE INFORMATION								CONTAINER INFORMATION							
Sample Number	Sample Date	Sample Collection Time	Regulatory Driver	Regulatory Frequency	Sample Medium	Sample Type	Sample Description	Number	Type	Volume (each, mL)	Preserv.				
ML24-116	10/30/24	0935	DDSD	Quarterly	Wastewater	C-24	IW-001	1	HDPE Bottle	250	HNO3 (pH<2)	X			
HOLDING TIME: 28 days															
REPORTING			LABORATORY NOTES RE: SAMPLE RECEIPT/CONDITION					DIRECTIONS FOR LABORATORY							
Original to: David Frandsen Title: Environmental Specialist/Engineer Address: P.O. Box 1687 Antioch, CA 94509 E-mail: david.frandsen@nrg.com E-mail CC: james.robinson@nrg.com E-mail CC: joe.moura@nrg.com E-mail CC: ryan.robinson@nrg.com								STANDARD TAT (5-day). Establish calibration standards so Minimum Level (ML) value is the lowest calibration standard, the lowest quantifiable concentration or Reporting Limit (RL). Report "Detected, but Not Quantified" (DNQ) with estimated J-flagged concentrations below the RL and include method detection limits (MDLs) in report. 1. Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Mercury, Nickel, Molybdenum, Selenium (reaction mode), Silver, Zinc Please report all results with the units of mg/L. RESULTS AND PRICING PER QUOTE ID: 234501 *Include sample description with client sample number ID.							
PRINTED NAME & PHONE NUMBER			SIGNATURE			COMPANY			DATE			TIME			
Sampled by: Ryan Robinson 925-864-7701						NRG Energy Services			10/30/24			0935			
Relinquished by: 						NRG Energy Services			10/30/24			1045			
Received by: 						McCampbell Analytical, Inc.			10/30/24			1045			
Relinquished by:															
Received by:															
Relinquished by:															
Received by:															



Sample Receipt Checklist

Client Name: NRG Energy, LLC
Project: Marsh Landing DDSD Quarterly

Date and Time Received: 10/30/2024 10:45

Date Logged: 10/30/2024

Received by: Lilly Ortiz

Logged by: Gemma Gomez

WorkOrder №: 2410M48 Matrix: Water
Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 0.5°C	NA <input type="checkbox"/>
ZHS conditional analyses: VOA meets zero headspace requirement (VOCs, TPHg/BTEX, RSK)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	NA <input type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	NA <input type="checkbox"/>

pH Lot#: HC446507

Lot Expiration: 1/31/2028

UCMR Samples:

pH tested and acceptable upon receipt (200.7: ≤2; 533: 6 - 8; 537.1: 6 - 8)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt (<0.1mg/L) [not applicable to 200.7]?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Comments: