

DOCKETED	
Docket Number:	08-AFC-03C
Project Title:	Marsh Landing Generating Station Compliance
TN #:	262482
Document Title:	Marsh Landing 2024 CEC Compliance Annual Report Part 2 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

RECEIVED BY
DELTA DIABLO
24
JUL 10 20

Attn: Environmental Compliance Specialist	Jason Yun		
Environmental Specialist Phone	(925) 756-1913	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.

Self-Monitoring Reports (SMRs) (Required)

- Flow Discharge Summary (Review Discharge Permit.)
- Calibration of Effluent Flow Meters; if applicable.
- 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	April 1-June 30, 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	7/10/2024



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

July 10, 2024

Mr. Jason Yun
Delta Diablo
2500 Pittsburg-Antioch Highway
Antioch, CA 94509-1373

**Subject: 2024 Second Quarterly (April 1-June 30) Self-Monitoring Report
Marsh Landing LLC, Marsh Landing Generating Station,
Industrial Wastewater Discharge Permit 0311963-S**

This letter documents the transmittal of the 2024 Second 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:

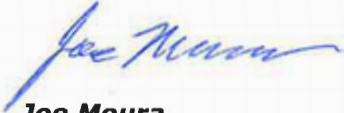
Discussion:

This report is the SMR filed for the station and covers the period from April 1 through June 30, 2024. This report includes monthly flow data and quarterly analytical data required to be collected in 2024. Semiannual analytical data was submitted with the first quarterly report for 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
Marsh Landing LLC
Marsh Landing Generating Station

Attachments

Table 1:	Quarterly Analytical Results for Combined Wastewater (FAC Combined)
Table 2:	April 2024 Monthly Flow Data
Table 3:	May 2024 Monthly Flow Data
Table 4:	June 2024 Monthly Flow Data

Attachment 1:	pH COC
Attachment 2:	Analytical Reports

Table 1
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	FAC Combined
Sample Station Description	Local Limits FAC Combined Wastewater
Reporting Period	April - June 2024
Report Type	Quarterly

Constituent	Sample Date	Permit Limit	Result	Units
Field pH	4/30/2024	6-10	7.3	S.U.
BOD	4/30/2024	-	13	mg/L
COD	4/30/2024	-	26	mg/L
Arsenic	4/30/2024	0.15	0.00037 J	mg/L
Cadmium	4/30/2024	0.1	ND	mg/L
Chromium	4/30/2024	0.5	ND	mg/L
Copper	4/30/2024	0.5	0.012	mg/L
Iron	4/30/2024	-	0.13	mg/L
Lead	4/30/2024	0.5	ND	mg/L
Mercury	4/30/2024	0.003	ND	mg/L
Molybdenum	4/30/2024	-	0.0013	mg/L
Nickel	4/30/2024	0.5	0.003	mg/L
Selenium	4/30/2024	0.25	0.00019J	mg/L
Silver	4/30/2024	0.2	ND	mg/L
Zinc	4/30/2024	1.0	0.052	mg/L
TDS	4/30/2024	-	290	mg/L
TSS	4/30/2024	-	4.40	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
 Monthly 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	Outfall #4
Sample Station Description	Flow Monitoring Structure
Reporting Period	April-24
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuous, measured by flow meter
Sample Date	4/1/2024 - 4/30/2024
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	3,947	20.98	
2	0	0.00	
3	6,810	20.98	
4	3,841	20.09	
5	0	0.00	
6	0	0.00	
7	0	0.00	
8	460	16.17	
9	3,705	20.54	
10	0	0.00	
11	0	0.00	
12	7,575	20.90	
13	10,422	20.17	
14	146	14.02	
15	0	0.00	
16	0	0.00	
17	8	5.54	
18	562	16.42	
19	0	0.00	
20	0	0.00	
21	0	0.00	
22	0	0.00	
23	0	0.00	
24	508	11.63	
25	19,882	20.83	
26	14,050	20.10	
27	0	0.00	
28	1,350	20.12	
29	19,214	20.79	
30	16,720	20.10	

Total Monthly Flow (gal)	109,198	Did flow exceed limits?	NO
Daily Max Flow (gpd)	19,882	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	3,640		

Table 3
 Monthly 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	Outfall #4
Sample Station Description	Flow Monitoring Structure
Reporting Period	May-24
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuous, measured by flow meter
Sample Date	5/1/2024 - 5/31/2024
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	5,918	20.11	
2	4,301	20.07	
3	0	0.00	
4	0	0.00	
5	0	0.00	
6	4,700	20.39	
7	0	0.00	
8	1,857	20.14	
9	8,555	20.08	
10	0	0.00	
11	9,787	20.71	
12	0	0.00	
13	10,994	20.14	
14	5,466	20.08	
15	0	0.00	
16	484	17.61	
17	0	0.00	
18	0	0.00	
19	0	0.00	
20	5,040	21.87	
21	6,361	20.09	
22	477	18.90	
23	9,225	20.27	
24	0	0.00	
25	564	16.76	
26	0	0.00	
27	3,110	21.45	
28	6,459	19.58	
29	5,783	19.61	
30	2,557	19.55	
31	6,605	19.71	

Total Monthly Flow (gal)	98,247	Did flow exceed limits?	NO
Daily Max Flow (gpd)	10,994	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	3,169		

Table 4
 Monthly 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	Outfall #4
Sample Station Description	Flow Monitoring Structure
Reporting Period	June-24
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuous, measured by flow meter
Sample Date	6/1/2024 - 6/30/2043
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	0.00	
2	0	0.00	
3	0	0.00	
4	0	0.00	
5	4,649	19.75	
6	0	0.00	
7	6,318	19.76	
8	3,884	20.92	
9	0	0.00	
10	3,698	19.59	
11	7,587	19.58	
12	0	0.00	
13	427	15.97	
14	4,251	20.65	
15	4,403	20.03	
16	0	0.00	
17	2,472	19.95	
18	5,395	19.59	
19	5,032	19.85	
20	6,154	19.78	
21	15,484	19.58	
22	448	17.97	
23	0	0.00	
24	7,546	20.62	
25	1,600	19.56	
26	5,516	19.80	
27	3,932	19.59	
28	0	0.00	
29	0	0.00	
30	450	14.84	

Total Monthly Flow (gal)	89,248	Did flow exceed limits?	NO
Daily Max Flow (gpd)	15,484	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	2,975		

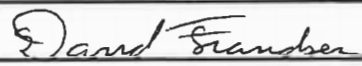
Marsh Landing Generating Station


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	ML-24-057	4/30/24	1250	4/30/24	1250	Wastewater	Grab	7.3
							<i>Method:</i>	SM 4500-H+B
							<i>Unit:</i>	standard
							<i>Reporting Limit:</i>	0.18
							<i>Method Detection Limit:</i>	0.06

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

Environmental Engineer David Frandsen
Signature: 
Date: May 1, 2024

Sampling Technologist: Ryan Robinson
Signature: 
Date: 4/30/24



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2404P44

Report Created for: NRG Energy, LLC

3201 Wilbur Avenue
Antioch, CA 94509

Project Contact: David Frandsen

Project P.O.: 4501914176

Project: Marsh Landing DDSD

Project Location:

Project Received: 04/30/2024

Analytical Report reviewed & approved for release on 05/09/2024 by:

Jena Alfaro

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
Project: Marsh Landing DDSD

WorkOrder: 2404P44

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 % 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
SPK Val	Spike Value

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: 2404P44

Project: Marsh Landing DDSD

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.



Analytical Report

Client: NRG Energy, LLC
Date Received: 04/30/2024 15:15
Date Prepared: 05/01/2024
Project: Marsh Landing DDSD

WorkOrder: 2404P44
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	2404P44-001B	Water	04/30/2024 12:50	WetChem	292849

Analytes	Result	MDL	RL	DF	Date Analyzed
BOD	13	8.0	8.0	4	05/06/2024 14:18

Analyst(s): JRA



Analytical Report

Client: NRG Energy, LLC
Date Received: 04/30/2024 15:15
Date Prepared: 05/07/2024
Project: Marsh Landing DDSD

WorkOrder: 2404P44
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	2404P44-001A	Water	04/30/2024 12:50	SPECTROPHOTOMETER2	293159

Analytes	Result	MDL	RL	DF	Date Analyzed
COD	26	7.1	10	1	05/07/2024 19:24

Analyst(s): IGC



Analytical Report

Client: NRG Energy, LLC
Date Received: 04/30/2024 15:15
Date Prepared: 04/30/2024
Project: Marsh Landing DDSD

WorkOrder: 2404P44
Extraction Method: E200.8
Analytical Method: E200.8
Unit: µg/L

Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2404P44-001E	Water	04/30/2024 12:50	ICP-MS4 131SMPL.d	292803

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Arsenic	0.37	J	0.071	0.50	1	05/01/2024 12:09
Cadmium	ND		0.050	0.50	1	05/01/2024 12:09
Chromium	ND		0.78	2.0	1	05/01/2024 12:09
Copper	12		0.63	1.5	1	05/01/2024 12:09
Iron	130		22	50	1	05/01/2024 12:09
Lead	ND		0.19	0.50	1	05/01/2024 12:09
Mercury	ND		0.031	0.050	1	05/01/2024 12:09
Molybdenum	1.3		0.19	1.0	1	05/01/2024 12:09
Nickel	3.0		0.33	0.50	1	05/01/2024 12:09
Selenium	0.19	J	0.18	0.50	1	05/01/2024 12:09
Silver	ND		0.051	0.50	1	05/01/2024 12:09
Zinc	52		11	20	1	05/01/2024 12:09

Surrogates	REC (%)	Limits
Terbium	111	70-130

Analyst(s): WV



Analytical Report

Client: NRG Energy, LLC
Date Received: 04/30/2024 15:15
Date Prepared: 05/03/2024
Project: Marsh Landing DDSD

WorkOrder: 2404P44
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	2404P44-001C	Water	04/30/2024 12:50	WetChem	293023

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Total Dissolved Solids	290	10.0	10.0	1	05/06/2024 16:35

Analyst(s): JRA



Analytical Report

Client: NRG Energy, LLC
Date Received: 04/30/2024 15:15
Date Prepared: 05/02/2024
Project: Marsh Landing DDSD

WorkOrder: 2404P44
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	2404P44-001D	Water	04/30/2024 12:50	WetChem	292966

Analytes	Result	MDL	RL	DF	Date Analyzed
Total Suspended Solids	4.40	2.00	2.00	2	05/02/2024 15:46

Analyst(s): JME



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 05/01/2024
Date Analyzed: 05/06/2024
Instrument: WetChem
Matrix: Water
Project: Marsh Landing DDSD

WorkOrder: 2404P44
BatchID: 292849
Extraction Method: SM5210B
Analytical Method: SM5210 B
Unit: mg/L
Sample ID: MB/LCS/LCSD-292849

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	220	210	198	113	108	80-120	4.56	16



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2404P44
Date Prepared: 05/07/2024	BatchID: 293159
Date Analyzed: 05/07/2024	Extraction Method: SM5220 D
Instrument: SPECTROPHOTOMETER2	Analytical Method: SM5220 D
Matrix: Water	Unit: mg/L
Project: Marsh Landing DDSD	Sample ID: MB/LCS/LCSD-293159

QC Summary Report for COD

Analyte	MB Result	MDL	RL
COD	ND	7.1	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



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 04/30/2024
Date Analyzed: 05/01/2024
Instrument: ICP-MS4
Matrix: Water
Project: Marsh Landing DDSD

WorkOrder: 2404P44
BatchID: 292803
Extraction Method: E200.8
Analytical Method: E200.8
Unit: µg/L
Sample ID: MB/LCS/LCSD-292803
 2404P44-001EMS/MSD

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Arsenic	ND	0.071	0.50	-	-	-
Cadmium	ND	0.050	0.50	-	-	-
Chromium	ND	0.78	2.0	-	-	-
Copper	ND	0.63	1.5	-	-	-
Iron	ND	22	50	-	-	-
Lead	ND	0.19	0.50	-	-	-
Mercury	ND	0.031	0.050	-	-	-
Molybdenum	ND	0.19	1.0	-	-	-
Nickel	ND	0.33	0.50	-	-	-
Selenium	ND	0.18	0.50	-	-	-
Silver	ND	0.051	0.50	-	-	-
Zinc	ND	11	20	-	-	-
Surrogate Recovery						
Terbium	570			500	113	70-130



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 04/30/2024
Date Analyzed: 05/01/2024
Instrument: ICP-MS4
Matrix: Water
Project: Marsh Landing DDSD

WorkOrder: 2404P44
BatchID: 292803
Extraction Method: E200.8
Analytical Method: E200.8
Unit: µg/L
Sample ID: MB/LCS/LCSD-292803
 2404P44-001EMS/MSD

QC Summary Report for Metals

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Arsenic	54	53	50	108	106	85-115	2.26	20
Cadmium	55	54	50	111	108	85-115	2.76	20
Chromium	55	54	50	110	107	85-115	3.07	20
Copper	56	54	50	112	109	85-115	2.98	20
Iron	5600	5400	5000	112	108	85-115	3.30	20
Lead	54	52	50	107	104	85-115	3.41	20
Mercury	1.3	1.3	1.25	106	105	85-115	1.29	20
Molybdenum	53	52	50	105	104	85-115	1.28	20
Nickel	56	54	50	111	108	85-115	3.08	20
Selenium	55	55	50	111	111	85-115	0.311	20
Silver	53	52	50	106	104	85-115	1.61	20
Zinc	550	540	500	111	108	85-115	2.42	20

Surrogate Recovery

Terbium	570	540	500	115	107	70-130	6.52	20
---------	-----	-----	-----	-----	-----	--------	------	----

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Arsenic	1	56	54	50	ND	112	108	85-115	3.56	20
Cadmium	1	54	53	50	ND	108	106	85-115	1.94	20
Chromium	1	55	52	50	ND	111	105	85-115	5.63	20
Copper	1	67	65	50	12.27	110	105	85-115	3.71	20
Iron	1	5600	5400	5000	128.3	110	106	85-115	3.70	20
Lead	1	54	52	50	ND	108	105	85-115	2.98	20
Mercury	1	1.3	1.3	1.25	ND	106	106	85-115	0.452	20
Molybdenum	1	54	54	50	1.317	106	105	85-115	0.204	20
Nickel	1	58	55	50	2.958	110	104	85-115	4.55	20
Selenium	1	55	54	50	ND	110	108	85-115	2.25	20
Silver	1	51	50	50	ND	102	100	85-115	1.44	20
Zinc	1	600	570	500	51.60	109	105	85-115	3.70	20

Surrogate Recovery

Terbium	1	550	540	500		110	109	70-130	0.723	20
---------	---	-----	-----	-----	--	-----	-----	--------	-------	----

Analyte	DLT Result	DLTRef Val	%D	%D Limit
---------	------------	------------	----	----------

(Cont.)



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 04/30/2024
Date Analyzed: 05/01/2024
Instrument: ICP-MS4
Matrix: Water
Project: Marsh Landing DDSD

WorkOrder: 2404P44
BatchID: 292803
Extraction Method: E200.8
Analytical Method: E200.8
Unit: µg/L
Sample ID: MB/LCS/LCSD-292803
 2404P44-001EMS/MSD

QC Summary Report for Metals

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Arsenic	ND	ND	100	-
Cadmium	ND	ND		-
Chromium	ND	ND		-
Copper	13	12	3.77	-
Iron	ND	130	6.97	-
Lead	ND	ND		-
Mercury	ND	ND		-
Molybdenum	ND	1.3	19.2	-
Nickel	2.9	3.0	3.48	-
Selenium	ND	ND	484	-
Silver	ND	ND		-
Zinc	ND	52	100	-

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



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 05/03/2024
Date Analyzed: 05/06/2024
Instrument: WetChem
Matrix: Water
Project: Marsh Landing DDSD

WorkOrder: 2404P44
BatchID: 293023
Extraction Method: SM2540 C-
Analytical Method: SM2540 C
Unit: mg/L
Sample ID: MB/LCS/LCSD-293023

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	1030	1010	1000	103	101	80-120	2.35	10



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 05/02/2024
Date Analyzed: 05/02/2024
Instrument: WetChem
Matrix: Water
Project: Marsh Landing DDSD

WorkOrder: 2404P44
BatchID: 292966
Extraction Method: SM2540 D
Analytical Method: SM2540 D
Unit: mg/L
Sample ID: MB/LCS/LCSD-292966

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	96.0	100	98	96	80-120	2.06	10



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2404P44

ClientCode: GOA

- WaterTrax
 CLIP
 EDF
 EQulS
 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: 4501914176
Project: Marsh Landing DDSD

Bill to:

Accounts Payable
NRG
112 Telly Street
New Roads, LA 70760
invoices@nrg.com

Requested TATs:

**5 days;
7 days;**

Date Received: **04/30/2024**

Date Logged: **04/30/2024**

Lab ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
2404P44-001	IW-001	Water	4/30/2024 12:50	<input type="checkbox"/>	B	A	E	A	C	D						

Test Legend:

1	BOD_W	2	COD_W	3	METALSMS_TTLC_W	4	PRDisposal Fee
5	TDS_W	6	TSS_W	7		8	
9		10		11		12	

Prepared by: Natalie Zaragoza

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

Work Order: 2404P44
QC Level: LEVEL 2
Date Logged: 4/30/2024

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

WaterTrax CLIP EDF Excel EQulS Email HardCopy ThirdParty J-flag

Table with columns: 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. Rows include 001A, 001B, 001C, 001D, 001E.

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.

2404P44

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: 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: P.O. No.: 4501914176			Plant: Marsh Landing Title: DDSO Phase: Manager: David Frandsen			COD (SM 5220D)	BOD (SM 5210B)	TDS (SM 2540B)	TSS (SM 2540D)
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.					
ML-24-052	4/30/24	1250	DDSD	Quarterly	Wastewater	C-24	IW-001	2	Amber VOAs	43	H ₂ SO ₄ (pH<2, 4°C)	X				
ML-24-053	4/30/24	1250	DDSD	Quarterly	Wastewater	C-24	IW-001	1	HDPE Bottle	1,000	None (ZHS, 4°C)		X			
ML-24-054	4/30/24	1250	DDSD	Quarterly	Wastewater	C-24	IW-001	1	HDPE Bottle	500	None (4°C)			X		
ML-24-055	4/30/24	1250	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								STANDARDTAT (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. *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		30-Apr-24		1250						
Relinquished by: Ryan Robinson 925-864-7701						NRG Energy Services		30-Apr-24		1400						
Received by: Alejandro Murillo						NRG Energy Services		30-Apr-24		1905						
Relinquished by: Alejandro Murillo						NRG Energy Services		30-Apr-24		3:15						
Received by: Lilly Drake						McCampbell Analytical, Inc.		4/30/24		1515						
Relinquished by:										1.4mt						
Received by:																

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: 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: 4501914176 P.O. No.:			Plant: Marsh Landing Title: DDSD Phase: David Frandsen Manager:			Total Metals ¹ (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.	Total Metals ¹ (EPA Method 200.8)			
ML-24-056	4/30/24	1250	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, joe.moura@nrg.com E-mail CC:								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 *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		30-Apr-24		1250					
Relinquished by: Ryan Robinson 925-864-7701						NRG Energy Services		30-Apr-24		1400					
Received by: Alejandro Murillo						NRG Energy Services		30-Apr-24		1405					
Relinquished by: Alejandro Murillo						NRG Energy Services		30-Apr-24		08:15					
Received by:						McC Campbell Analytical, Inc.		4/30/24		1515					
Relinquished by:															
Received by:															



Sample Receipt Checklist

Client Name:	NRG Energy, LLC	Date and Time Received:	4/30/2024 15:15
Project:	Marsh Landing DDSD	Date Logged:	4/30/2024
WorkOrder №:	2404P44	Received by:	Lilly Ortiz
Carrier:	<u>Client Drop-In</u>	Matrix:	
		Logged by:	Natalie Zaragoza

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: 1.9°C	NA <input type="checkbox"/>
ZHS conditional analyses: VOA meets zero headspace requirement (VOCs, TPHg/BTEX, RSK)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>

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: