

DOCKETED	
Docket Number:	08-AFC-03C
Project Title:	Marsh Landing Generating Station Compliance
TN #:	255387-2
Document Title:	Marsh Landing 2023 CEC Compliance Annual Report Part 2 of 4
Description:	Annual Compliance Operations Report
Filer:	David Frandsen
Organization:	NRG
Submitter Role:	Applicant
Submission Date:	3/29/2024 4:39:32 PM
Docketed Date:	3/29/2024



Industrial User Report Checklist And Certification Statement Form

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, 2023

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	7/10/2023



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

July 10, 2023

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

**Subject: 2023 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 2023 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, 2023. This report includes monthly flow data and quarterly analytical data required to be collected in 2023. Semiannual analytical data was submitted with the first quarterly report for 2023. 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 2023 Monthly Flow Data
Table 3:	May 2023 Monthly Flow Data
Table 4:	June 2023 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 2023
Report Type	Quarterly

Constituent	Sample Date	Permit Limit	Result	Units
Field pH	4/20/2023	6-10	7.1	S.U.
BOD	4/20/2023	-	2.3	mg/L
COD	4/20/2023	-	14	mg/L
Arsenic	4/20/2023	0.15	0.00038 J	mg/L
Cadmium	4/20/2023	0.1	ND	mg/L
Chromium	4/20/2023	0.5	0.0011	mg/L
Copper	4/20/2023	0.5	0.0035	mg/L
Iron	4/20/2023	-	0.12	mg/L
Lead	4/20/2023	0.5	ND	mg/L
Mercury	4/20/2023	0.003	ND	mg/L
Molybdenum	4/20/2023	-	0.0012	mg/L
Nickel	4/20/2023	0.5	0.0032	mg/L
Selenium	4/20/2023	0.25	ND	mg/L
Silver	4/20/2023	0.2	ND	mg/L
Zinc	4/20/2023	1.0	0.062	mg/L
TDS	4/20/2023	-	230	mg/L
TSS	4/20/2023	-	1.4	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-23
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuous, measured by flow meter
Sample Date	4/1/2023 - 4/30/2023
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	5,184	19.63	
3	0	0.00	
4	3,630	19.75	
5	3,964	19.76	
6	0	0.00	
7	5,500	19.65	
8	4,004	19.66	
9	0	0.00	
10	499	16.13	
11	0	0.00	
12	0	0.00	
13	0	0.00	
14	0	0.00	
15	0	0.00	
16	0	0.00	
17	471	14.96	
18	13,130	21.90	
19	17,813	19.78	
20	13,173	20.00	
21	17,004	19.61	
22	0	0.00	
23	0	0.00	
24	9,793	19.73	
25	546	19.59	
26	0	0.00	
27	0	0.00	
28	8,159	20.64	
29	15,755	19.64	
30	0	0.00	

Total Monthly Flow (gal)	118,624	Did flow exceed limits?	NO
Daily Max Flow (gpd)	17,813	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	3,954		

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-23
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuous, measured by flow meter
Sample Date	5/1/2023 - 5/31/2023
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	10,273	19.60	
4	475	18.72	
5	4,805	19.87	
6	0	0.00	
7	0	0.00	
8	0	0.00	
9	5,626	38.57	4
10	624	19.58	
11	0	0.00	
12	4,027	19.65	
13	448	19.53	
14	476	21.35	
15	17,946	20.24	
16	926	20.70	
17	12,483	19.64	
18	3,517	19.85	
19	0	0.00	
20	458	18.90	
21	0	0.00	
22	1,777	19.74	
23	12,911	19.62	
24	4,231	19.69	
25	7,300	19.56	
26	0	0.00	
27	3,920	20.11	
28	0	0.00	
29	0	0.00	
30	0	0.00	
31	4,627	22.87	

Total Monthly Flow (gal)	96,850	Did flow exceed limits?	NO
Daily Max Flow (gpd)	17,946	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	3,124		

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-23
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuous, measured by flow meter
Sample Date	6/1/2023 - 6/30/2023
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	6,146	19.60	
3	4,233	19.56	
4	0	0.00	
5	438	18.53	
6	6,140	19.66	
7	1,604	19.56	
8	0	0.00	
9	0	0.00	
10	0	0.00	
11	0	0.00	
12	5,206	19.72	
13	6,456	19.58	
14	0	0.00	
15	0	0.00	
16	397	17.35	
17	6,457	19.74	
18	5,034	19.57	
19	4,597	19.63	
20	6,593	19.58	
21	1,254	19.66	
22	8,507	19.64	
23	0	0.00	
24	0	0.00	
25	0	0.00	
26	2,785	19.67	
27	7,759	19.64	
28	8,779	26.75	14
29	0	0.00	
30	10,883	19.66	

Total Monthly Flow (gal)	93,269	Did flow exceed limits?	NO
Daily Max Flow (gpd)	10,883	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	3,109		

Marsh Landing Generating Station

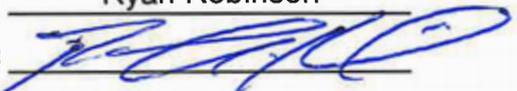
Reported to:
Environmental Engineer

NPDES Monthly Analytical Report

Sample Point	Sample Number	Sample Date (m/d/y)	Sample Collection Time	Date Analyzed (m/d/y)	pH Analysis Time	Sample Medium	Sample Type (Grab)	pH
Method:								SM
Unit:								4500-H+B
Reporting Limit:								standard
Method Detection Limit:								0.18
FAC Combined Waste Water	ML-23-040	4/20/23	1330	4/20/23	1330	Wastewater	Grab	7.1

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

Environmental Engineer David Frandsen
Signature: 
Date: April 21, 23

Sampling Technologist: Ryan Robinson
Signature: 
Date: 20-Apr-23



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2304E96

Report Created for: NRG Energy, LLC

3201 Wilbur Avenue
Antioch, CA 94509

Project Contact: David Frandsen

Project P.O.: 4501914176

Project: Marsh Landing DDS; Quarterly

Project Received: 04/21/2023

Analytical Report reviewed & approved for release on 04/28/2023 by:

Christine Askari
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: 2304E96

Project: Marsh Landing DDSD; Quarterly

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
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
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
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting limit ²
RPD	Relative Percent Difference
RRT	Relative Retention Time
RSD	Relative Standard Deviation
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure

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.

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.)



Glossary of Terms & Qualifier Definitions

Client: NRG Energy, LLC

WorkOrder: 2304E96

Project: Marsh Landing DDSD; Quarterly

TEQ Toxicity Equivalents

TZA TimeZone Net Adjustment for sample collected outside of MAI's UTC.

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

WorkOrder: 2304E96

Date Received: 04/21/2023 8:30

Extraction Method: SM5210B

Date Prepared: 04/21/2023

Analytical Method: SM5210 B

Project: Marsh Landing DDS; Quarterly

Unit: mg/L

Biochemical Oxygen Demand (BOD)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2304E96-001B	Water	04/20/2023 12:30	WetChem	268145

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
BOD	2.3	2.0	2.0	1.02	04/26/2023 16:16

Analyst(s): JRA



Analytical Report

Client: NRG Energy, LLC

WorkOrder: 2304E96

Date Received: 04/21/2023 8:30

Extraction Method: SM5220 D

Date Prepared: 04/24/2023

Analytical Method: SM5220 D-1997

Project: Marsh Landing DDS; Quarterly

Unit: mg/L

Chemical Oxygen Demand (COD) as mg O₂ /L

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2304E96-001A	Water	04/20/2023 12:30	SPECTROPHOTOMETER2	268290

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
COD	14	8.2	10	1	04/24/2023 15:53

Analyst(s): IGC



Analytical Report

Client: NRG Energy, LLC

WorkOrder: 2304E96

Date Received: 04/21/2023 8:30

Extraction Method: E200.8

Date Prepared: 04/21/2023

Analytical Method: E200.8

Project: Marsh Landing DDSD; Quarterly

Unit: mg/L

Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2304E96-001E	Water	04/20/2023 12:30	ICP-MS6 163SMPL.d	268141

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Arsenic	0.00038	J	0.000074	0.00050	1	04/24/2023 13:45
Cadmium	ND		0.000043	0.00050	1	04/24/2023 13:45
Chromium	0.0011		0.00028	0.00050	1	04/24/2023 13:45
Copper	0.0035		0.00075	0.0015	1	04/24/2023 13:45
Iron	0.12		0.026	0.050	1	04/24/2023 13:45
Lead	ND		0.00019	0.00050	1	04/24/2023 13:45
Mercury	ND		0.000033	0.000050	1	04/24/2023 13:45
Molybdenum	0.0012		0.00013	0.00050	1	04/24/2023 13:45
Nickel	0.0032		0.00033	0.00050	1	04/24/2023 13:45
Selenium	ND		0.00016	0.00050	1	04/24/2023 13:45
Silver	ND		0.000092	0.00050	1	04/24/2023 13:45
Zinc	0.062		0.014	0.020	1	04/24/2023 13:45

Surrogates	REC (%)	Limits
Terbium	106	70-130

Analyst(s): MIG



Analytical Report

Client: NRG Energy, LLC

WorkOrder: 2304E96

Date Received: 04/21/2023 8:30

Extraction Method: SM2540 C-1997

Date Prepared: 04/26/2023

Analytical Method: SM2540 C-1997

Project: Marsh Landing DDS; Quarterly

Unit: mg/L

Total Dissolved Solids

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2304E96-001C	Water	04/20/2023 12:30	WetChem	268460

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Total Dissolved Solids	230	10.0	10.0	1	04/27/2023 13:35

Analyst(s): JRA



Analytical Report

Client: NRG Energy, LLC

WorkOrder: 2304E96

Date Received: 04/21/2023 8:30

Extraction Method: SM2540 D-1997

Date Prepared: 04/24/2023

Analytical Method: SM2540 D-1997

Project: Marsh Landing DDS; Quarterly

Unit: mg/L

Total Suspended Solids

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2304E96-001D	Water	04/20/2023 12:30	WetChem	268232

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Total Suspended Solids	1.40	1.00	1.00	1	04/24/2023 16:30

Analyst(s): JME



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2304E96
Date Prepared: 04/21/2023	BatchID: 268145
Date Analyzed: 04/26/2023	Extraction Method: SM5210B
Instrument: WetChem	Analytical Method: SM5210 B
Matrix: Water	Unit: mg/L
Project: Marsh Landing DDS; Quarterly	Sample ID: MB/LCS/LCSD-268145 2304E96-001B

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	200	210	198	102	108	80-120	6.02	16

Analyte	SAMP Result	DUP Result	RPD	RPD Limit
BOD	2.3	2.4	2.2	10



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2304E96
Date Prepared: 04/24/2023	BatchID: 268290
Date Analyzed: 04/24/2023	Extraction Method: SM5220 D
Instrument: SPECTROPHOTOMETER2	Analytical Method: SM5220 D-1997
Matrix: Water	Unit: mg/L
Project: Marsh Landing DDSD; Quarterly	Sample ID: MB/LCS/LCSD-268290

QC Summary Report for COD

Analyte	MB Result	MDL	RL	-	-	-
COD	ND	8.2	10	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
COD	94	96	100	94	96	90-110	2.11	20



Quality Control Report

Client: NRG Energy, LLC

WorkOrder: 2304E96

Date Prepared: 04/21/2023

BatchID: 268141

Date Analyzed: 04/21/2023

Extraction Method: E200.8

Instrument: ICP-MS4

Analytical Method: E200.8

Matrix: Water

Unit: µg/L

Project: Marsh Landing DDSD; Quarterly

Sample ID: MB/LCS/LCSD-268141

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Arsenic	ND	0.074	0.50	-	-	-
Cadmium	ND	0.043	0.50	-	-	-
Chromium	ND	0.28	0.50	-	-	-
Copper	ND	0.75	1.5	-	-	-
Iron	ND	26	50	-	-	-
Lead	ND	0.19	0.50	-	-	-
Mercury	ND	0.033	0.050	-	-	-
Molybdenum	ND	0.13	0.50	-	-	-
Nickel	ND	0.33	0.50	-	-	-
Selenium	ND	0.16	0.50	-	-	-
Silver	ND	0.092	0.50	-	-	-
Zinc	ND	14	20	-	-	-

Surrogate Recovery

Terbium	520			500	104	70-130
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Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Arsenic	52	52	50	105	103	85-115	1.33	20
Cadmium	52	52	50	103	105	85-115	1.52	20
Chromium	52	53	50	105	106	85-115	0.800	20
Copper	54	52	50	107	103	85-115	3.34	20
Iron	5200	5200	5000	104	104	85-115	0.263	20
Lead	51	51	50	103	102	85-115	0.977	20
Mercury	1.3	1.3	1.25	101	102	85-115	1.18	20
Molybdenum	50	51	50	101	102	85-115	1.08	20
Nickel	53	51	50	106	103	85-115	2.84	20
Selenium	53	53	50	106	105	85-115	1.12	20
Silver	52	53	50	105	105	85-115	0.360	20
Zinc	530	520	500	106	103	85-115	3.12	20

Surrogate Recovery

Terbium	530	530	500	105	105	70-130	0.0544	20
---------	-----	-----	-----	-----	-----	--------	--------	----



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2304E96
Date Prepared: 04/26/2023	BatchID: 268460
Date Analyzed: 04/27/2023	Extraction Method: SM2540 C-1997
Instrument: WetChem	Analytical Method: SM2540 C-1997
Matrix: Water	Unit: mg/L
Project: Marsh Landing DDS; Quarterly	Sample ID: MB/LCS/LCSD-268460

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	1000	936	1000	100	94	80-120	6.61	10



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2304E96
Date Prepared: 04/24/2023	BatchID: 268232
Date Analyzed: 04/24/2023	Extraction Method: SM2540 D-1997
Instrument: WetChem	Analytical Method: SM2540 D-1997
Matrix: Water	Unit: mg/L
Project: Marsh Landing DDS; Quarterly	Sample ID: MB/LCS/LCSD-268232

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	92.0	90.0	100	92	90	80-120	2.20	10



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2304E96

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: james.robinson@nrg.com; joe.moura@nrg
 PO: 4501914176
 Project: Marsh Landing DDSD; Quarterly

Bill to:

Accounts Payable
 NRG
 4900 N. Scottsdale Road, Ste. 5000
 Scottsdale, AZ 85251
 invoices@clearwayenergy.coupahost.co

**Requested TATs: 5 days;
 7 days;**

Date Received: **04/21/2023**
Date Logged: **04/21/2023**

Lab ID	ClientSampleID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
2304E96-001	FAC Combined Wastewater	Water	4/20/2023 12:30	<input type="checkbox"/>	B	A	E	A	C	D						

Test Legend:

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

Project Manager: Susan Thompson

Prepared by: Agustina Venegas

Comments: Use QUOTE 212372 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: 2304E96
QC Level: LEVEL 2
Date Logged: 4/21/2023

Comments: Use QUOTE 212372 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	Containers /Composites	Bottle & Preservative	U**	Head Space	Dry-Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	Sub Out
001A	FAC Combined Wastewater	Water	SM5220D (COD)	1	aVOA w/ H2SO4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4/20/2023 12:30	5 days	4/28/2023	Present	<input type="checkbox"/>	<input type="checkbox"/>
001B	FAC Combined Wastewater	Water	SM5210B (BOD)	1	500mL HDPE, unprsv.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4/20/2023 12:30	7 days	5/2/2023	Present	<input type="checkbox"/>	<input type="checkbox"/>
001C	FAC Combined Wastewater	Water	SM2540C (TDS)	1	500mL HDPE, unprsv.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4/20/2023 12:30	5 days	4/28/2023	Present	<input type="checkbox"/>	<input type="checkbox"/>
001D	FAC Combined Wastewater	Water	SM2540D (TSS)	1	1L HDPE, unprsv.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4/20/2023 12:30	5 days	4/28/2023	Present	<input type="checkbox"/>	<input type="checkbox"/>
001E	FAC Combined Wastewater	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"/>	4/20/2023 12:30	5 days	4/28/2023	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).

- 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.

2304E94

Chain of Custody

Page 1 of 2-Quarterly

Marsh Landing Generating Station
 3201 Wilbur Avenue, P.O. Box 1687, Antioch, CA 94509
 Phone: (925) 779-6500 Fax: (925) 779-6509

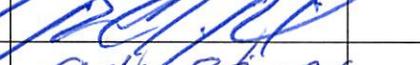
SAMPLES SUBMITTED TO				SEND INVOICE TO				PROJECT				ANALYSIS REQUEST			
Laboratory: McCampbell Analytical, Inc. ELAP Cert. No. 1644 Address: 1534 Willow Pass Road, Pittsburg, CA 94565-1701 Phone/Fax: 925 252 9262/ 925 252 9269				Company: Marsh Landing LLC Attention: Accounts Payable Address: invoices@clearwayenergy.com P.O. No.: 4501914176				Plant: Marsh Landing Title: DDSD Phase: Quarterly Manager: David Frandsen				COD (SM5220D) 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.	COD	BOD	TDS	TSS
ML-23-035	20-Apr-23	1230	DDSD	Quarterly	Wastewater	C-24	FAC Combined Wastewater	2	Amber VOAs	43	H ₂ SO ₄ (pH<2, 4°C)	X			
ML-23-036	20-Apr-23	1230	DDSD	Quarterly	Wastewater	C-24	FAC Combined Wastewater	1	HDPE Bottle	1,000	None (ZHS, 4°C)		X		
ML-23-037	20-Apr-23	1230	DDSD	Quarterly	Wastewater	C-24	FAC Combined Wastewater	1	HDPE Bottle	500	None (4°C)			X	
ML-23-038	20-Apr-23	1230	DDSD	Quarterly	Wastewater	C-24	FAC Combined Wastewater	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 Phone/Fax: 925.324-3533/6509 E-mail: david.frandsen@nrg.com E-mail CC: james.robinson@nrg.com, 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. Please report all results with the units of mg/L. RESULTS AND PRICING PER QUOTE ID: 212372. *Include sample description with client sample number ID.							
PRINTED NAME			SIGNATURE			COMPANY		DATE		TIME					
Sampled by: Ryan Robinson						NRG Energy Services		20-Apr-23		1230					
Relinquished by: Ryan Robinson						NRG Energy Services		21-Apr-23		0830					
Received by: AGUSTINA VENEGAS						McCampbell Analytical, Inc.		21-Apr-23		0830					
Relinquished by:															
Received by:															
Relinquished by:															
Received by:															

0.20 wet

Chain of Custody

Page 2 of 2-Quarterly

Marsh Landing Generating Station
 3201 Wilbur Avenue, P.O. Box 1687, Antioch, CA 94509
 Phone: (925) 779-6500 Fax: (925) 779-6509

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@cleanwayenergy.com P.O. No.: 4501914176			Plant: Marsh Landing Title: DDSD Phase: Quarterly Manager: David Frandsen			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-23-039	20-Apr-23	1230	DDSD	Quarterly	Wastewater	C-24	FAC Combined Wastewater	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 Phone/Fax: 925.324-3533/6509 E-mail: david.frandsen@nrg.com E-mail CC: james.robinson@nrg.com, joe.moura@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: 212372. *Include sample description with client sample number ID.										
PRINTED NAME	SIGNATURE		COMPANY		DATE	TIME												
Sampled by: Ryan Robinson			NRG Energy Services		20-Apr-23	1230												
Relinquished by: Ryan Robinson			NRG Energy Services		21-Apr-23	0830												
Received by: AGUSTINA VENEGAS			McC Campbell Analytical, Inc.		21-Apr-23	0830												
Relinquished by:																		
Received by:																		
Relinquished by:																		
Received by:																		



Sample Receipt Checklist

Client Name: NRG Energy, LLC
 Project: Marsh Landing DDSD; Quarterly
 WorkOrder №: 2304E96 Matrix: Water
 Carrier: Client Drop-In

Date and Time Received: 4/21/2023 08:30
 Date Logged: 4/21/2023
 Received by: Agustina Venegas
 Logged by: Agustina Venegas

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 checked="" type="checkbox"/>	NA <input 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: 0.2°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:



Industrial User Report Checklist And Certification Statement Form

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)

RECEIVED

OCT 12 2023

Revised July 2014

DELTA DIABLO



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

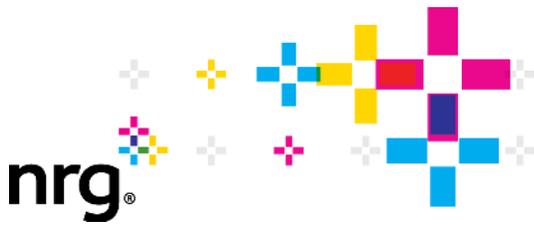
Certification Statement

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	July 1-September 30, 2023

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	



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

October 11, 2023

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

**Subject: 2023 Third Quarterly (July 1-September 30) Self-Monitoring Report
Marsh Landing LLC, Marsh Landing Generating Station,
Industrial Wastewater Discharge Permit 0311963-S**

This letter documents the transmittal of the 2023 Third 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 July 1 through September 30, 2023. This report includes monthly flow data and quarterly and semiannual analytical data required to be collected in 2023. 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 Results for Combined Wastewater (FAC Combined)
Table 2: Semiannual Results for Combined Wastewater (FAC Combined)
Table 3: July 2023 Monthly Flow Data
Table 4: August 2023 Monthly Flow Data
Table 5: September 2023 Monthly Flow Data

Attachment 1: pH COC
Attachment 2: Analytical Reports

Table 1
Quarterly Results for Combined Wastewater (IW-001)

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	July - September 2023
Report Type	Quarterly

Constituent	Sample Date	Permit Limit	Result	Units
Field pH	8/1/2023	6-10	7.3	S.U.
BOD	8/1/2023	-	ND	mg/L
COD	8/1/2023	-	26.0	mg/L
Arsenic	8/1/2023	0.15	0.00083	mg/L
Cadmium	8/1/2023	0.1	ND	mg/L
Chromium	8/1/2023	0.5	0.00061	mg/L
Copper	8/1/2023	0.5	0.0035	mg/L
Iron	8/1/2023	-	0.11	mg/L
Lead	8/1/2023	0.5	ND	mg/L
Mercury	8/1/2023	0.003	ND	mg/L
Molybdenum	8/1/2023	-	0.0021	mg/L
Nickel	8/1/2023	0.5	0.0033	mg/L
Selenium	8/1/2023	0.25	0.00018 J	mg/L
Silver	8/1/2023	0.2	ND	mg/L
Zinc	8/1/2023	1.0	0.025	mg/L
TDS	8/1/2023	-	286.0	mg/L
TSS	8/1/2023	-	1.8	mg/L

mg/L = Milligrams per liter

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

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

Table 2
 Semiannual Results for Combined Wastewater (IW-001)

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	July - September 2023
Report Type	Semiannual

Constituent	Sample Date	Permit Limit	Result	Units
Cyanide	8/1/2023	0.20	0.0016	mg/L
Total Phenolics (EPA 420.4)	8/1/2023	1.0	ND	mg/L
Ammonia as N	8/1/2023	200	0.27	mg/L
Oil and Grease Animal/Vegetable (HEM)	8/1/2023	300	ND	mg/L
Oil and Grease Petroleum/Mineral (SGT-HEM)	8/1/2023	100	2.2 J	mg/L
<u>TOXIC ORGANICS</u>				
Bromodichloromethane	8/1/2023	-	0.00052	mg/L
Bromoform	8/1/2023	-	0.00047 JB	mg/L
Chloroform	8/1/2023	-	0.00062	mg/L
Dibromochloromethane	8/1/2023	-	0.00038	mg/L
<u>TOTAL TOXIC ORGANICS</u>	8/1/2023	2.0	0.0015	mg/L

mg/L = Milligrams per liter

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

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

B=Analyte detected in the associated Method Blank at a concentration greater than 1/10 the reported sample result.

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	Jul-23
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuous, measured by flow meter
Sample Date	7/1/2023 - 7/31/2023
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	3,206	19.66	
2	13,278	20.70	
3	10,794	19.64	
4	16,757	19.62	
5	14,742	19.59	
6	0	0.00	
7	3,758	19.58	
8	7,332	19.58	
9	0	0.00	
10	4,741	20.23	
11	10,791	19.57	
12	4,556	19.68	
13	383	20.66	
14	452	19.63	
15	10,231	19.84	
16	18,317	20.01	
17	27,217	19.64	
18	22,840	19.59	
19	28,042	19.60	
20	28,080	19.92	
21	28,079	20.70	
22	28,012	20.52	
23	28,080	19.72	
24	28,079	19.57	
25	25,793	19.63	
26	12,904	19.61	
27	261	19.54	
28	1,939	19.57	
29	7,962	19.87	
30	11,075	19.74	
31	7,762	20.10	

Total Monthly Flow (gal)	405,467	Did flow exceed limits?	NO
Daily Max Flow (gpd)	28,080	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	13,080		

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	Aug-23		
Report Type	Quarterly		
Constituent	Flow		
Sample Type	Continuous, measured by flow meter		
Sample Date	8/1/2023 - 8/31/2023		
Permit Limits (s.u.)	NTE 30,240 gpd. NTE 21 gpm +10% for 15 consecutive minutes or 30 minutes in a 24-hour period		
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		
			Minutes per Day of Flow exceeding 23.1 gpm
Day	Total Flow (gpd)	Instantaneous Max (gpm)	
1	9,947	19.58	
2	11,593	20.06	
3	0	0.00	
4	3,482	19.58	
5	13,640	19.61	
6	9,319	19.66	
7	23,496	20.97	
8	28,080	19.62	
9	2,502	19.55	
10	0	0.00	
11	480	19.71	
12	5,314	19.73	
13	8,611	19.72	
14	19,893	19.73	
15	28,081	19.60	
16	28,036	19.61	
17	28,022	19.59	
18	0	0.00	
19	0	0.00	
20	0	0.00	
21	8,498	19.61	
22	0	0.00	
23	6,324	19.63	
24	4,436	19.67	
25	0	0.00	
26	0	0.00	
27	4,009	19.68	
28	0	0.00	
29	6,531	19.69	
30	14,490	19.59	
31	0	0.00	

Total Monthly Flow (gal)	264,783	Did flow exceed limits?	NO
Daily Max Flow (gpd)	28,081	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	8,541		

Table 5
 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	Sep-23
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuous, measured by flow meter
Sample Date	9/1/2023 - 9/31/2023
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	5,387	19.59	
2	6,887	19.73	
3	398	17.30	
4	0	0.00	
5	11,890	19.68	
6	0	0.00	
7	0	0.00	
8	4,125	19.69	
9	12,522	19.58	
10	0	0.00	
11	11,180	19.62	
12	12,382	21.26	
13	5,289	19.61	
14	6,910	19.72	
15	12,204	19.64	
16	0	0.00	
17	0	0.00	
18	0	0.00	
19	0	0.00	
20	6,650	20.40	
21	4,119	19.55	
22	0	0.00	
23	0	0.00	
24	864	20.43	
25	10,308	20.84	
26	5,286	19.57	
27	0	0.00	
28	0	0.00	
29	0	0.00	
30	8,818	19.68	

Total Monthly Flow (gal)	125,220	Did flow exceed limits?	NO
Daily Max Flow (gpd)	12,522	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	4,174		

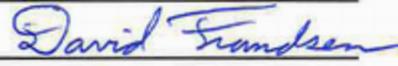
Marsh Landing Generating Station

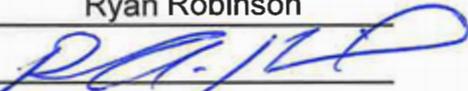
Reported to:
Environmental Engineer

NPDES Monthly Analytical Report

Sample Point	Sample Number	Sample Date (m/d/y)	Sample Collection Time	Date Analyzed (m/d/y)	pH Analysis Time	Sample Medium	Sample Type (Grab)	pH
Method:								SM
Unit:								4500-H+B
Reporting Limit:								standard
Method Detection Limit:								0.18
IW-001	ML-23-081	8/1/23	1030	8/1/23	1030	Wastewater	Grab	7.3

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

Environmental Engineer David Frandsen
Signature: 
Date: Aug 1, 2023

Sampling Technologist: Ryan Robinson
Signature: 
Date: 1-Aug-23



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2308016

Report Created for: NRG Energy, LLC

3201 Wilbur Avenue
Antioch, CA 94509

Project Contact: David Frandsen

Project P.O.: 4501914176

Project: Marsh Landing; DDSD Quarterly

Project Received: 08/01/2023

Analytical Report reviewed & approved for release on 08/09/2023 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

WorkOrder: 2308016

Project: Marsh Landing; DDS D Quarterly

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
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
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
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure

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: 2308016

Project: Marsh Landing; DDSQ Quarterly

TEQ Toxicity Equivalents

TZA TimeZone Net Adjustment for sample collected outside of MAI's UTC.

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.

i9 The BOD dilution scheme was setup per the method and met the criterion of a residual dissolved oxygen of at least 1 mg/L and final DO difference of 2mg/L, however the reported sample yielded a result of ND based on the method dilutions performed.



Analytical Report

Client: NRG Energy, LLC

WorkOrder: 2308016

Date Received: 08/01/2023 11:55

Extraction Method: SM5210B

Date Prepared: 08/03/2023

Analytical Method: SM5210 B

Project: Marsh Landing; DDSD Quarterly

Unit: mg/L

Biochemical Oxygen Demand (BOD)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2308016-001B	Water	08/01/2023 10:30	WetChem	275057

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
BOD	ND	2.0	2.0	1.02	08/08/2023 13:29

Analyst(s): JRA

Analytical Comments: i9



Analytical Report

Client: NRG Energy, LLC

WorkOrder: 2308016

Date Received: 08/01/2023 11:55

Extraction Method: SM5220 D

Date Prepared: 08/03/2023

Analytical Method: SM5220 D-1997

Project: Marsh Landing; DDSD Quarterly

Unit: mg/L

Chemical Oxygen Demand (COD) as mg O₂ /L

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2308016-001A	Water	08/01/2023 10:30	SPECTROPHOTOMETER2	275089

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
COD	26	8.2	10	1	08/03/2023 16:47

Analyst(s): IGC



Analytical Report

Client: NRG Energy, LLC

WorkOrder: 2308016

Date Received: 08/01/2023 11:55

Extraction Method: E200.8

Date Prepared: 08/01/2023

Analytical Method: E200.8

Project: Marsh Landing; DDSD Quarterly

Unit: mg/L

Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2308016-001E	Water	08/01/2023 10:30	ICP-MS5 194SMPL.d	274897

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Arsenic	0.00083		0.000071	0.00050	1	08/02/2023 17:13
Cadmium	ND		0.000050	0.00050	1	08/02/2023 17:13
Chromium	0.00061		0.00026	0.00050	1	08/02/2023 17:13
Copper	0.0035		0.00063	0.0015	1	08/02/2023 17:13
Iron	0.11		0.022	0.050	1	08/02/2023 17:13
Lead	ND		0.00019	0.00050	1	08/02/2023 17:13
Mercury	ND		0.000031	0.000050	1	08/02/2023 17:13
Molybdenum	0.0021		0.00014	0.00050	1	08/02/2023 17:13
Nickel	0.0033		0.00033	0.00050	1	08/02/2023 17:13
Selenium	0.00018	J	0.00018	0.00050	1	08/02/2023 17:13
Silver	ND		0.000051	0.00050	1	08/02/2023 17:13
Zinc	0.025		0.011	0.020	1	08/02/2023 17:13

Surrogates	REC (%)	Limits
Terbium	105	70-130

Analyst(s): AL



Analytical Report

Client: NRG Energy, LLC

WorkOrder: 2308016

Date Received: 08/01/2023 11:55

Extraction Method: SM2540 C-1997

Date Prepared: 08/07/2023

Analytical Method: SM2540 C

Project: Marsh Landing; DDSD Quarterly

Unit: mg/L

Total Dissolved Solids

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2308016-001C	Water	08/01/2023 10:30	WetChem	275281

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Total Dissolved Solids	286	10.0	10.0	1	08/08/2023 12:20

Analyst(s): JME



Analytical Report

Client: NRG Energy, LLC

WorkOrder: 2308016

Date Received: 08/01/2023 11:55

Extraction Method: SM2540 D-1997

Date Prepared: 08/07/2023

Analytical Method: SM2540 D

Project: Marsh Landing; DDSD Quarterly

Unit: mg/L

Total Suspended Solids

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2308016-001D	Water	08/01/2023 10:30	WetChem	275318

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Total Suspended Solids	1.80	1.00	1.00	1	08/07/2023 18:30

Analyst(s): JRA



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2308016
Date Prepared: 08/03/2023	BatchID: 275057
Date Analyzed: 08/08/2023	Extraction Method: SM5210B
Instrument: WetChem	Analytical Method: SM5210 B
Matrix: Water	Unit: mg/L
Project: Marsh Landing; DDSD Quarterly	Sample ID: MB/LCS/LCSD-275057

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	87	80-120	1.76	16



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2308016
Date Prepared: 08/03/2023	BatchID: 275089
Date Analyzed: 08/03/2023	Extraction Method: SM5220 D
Instrument: SPECTROPHOTOMETER2	Analytical Method: SM5220 D-1997
Matrix: Water	Unit: mg/L
Project: Marsh Landing; DDSD Quarterly	Sample ID: MB/LCS/LCSD-275089

QC Summary Report for COD

Analyte	MB Result	MDL	RL			
COD	ND	8.2	10	-	-	-

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



Quality Control Report

Client: NRG Energy, LLC

WorkOrder: 2308016

Date Prepared: 08/01/2023

BatchID: 274897

Date Analyzed: 08/01/2023 - 08/02/2023

Extraction Method: E200.8

Instrument: ICP-MS6

Analytical Method: E200.8

Matrix: Water

Unit: µg/L

Project: Marsh Landing; DDSD Quarterly

Sample ID: MB/LCS/LCSD-274897

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	0.26	0.50	-	-	-
Copper	ND	0.63	1.5	-	-	-
Iron	ND	22	50	-	-	-
Lead	ND	0.19	0.50	-	-	-
Mercury	ND	0.031	0.050	-	-	-
Molybdenum	ND	0.14	0.50	-	-	-
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	490			500	97	70-130
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Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Arsenic	44	48	50	88	95	85-115	7.84	20
Cadmium	45	48	50	90	96	85-115	6.82	20
Chromium	45	48	50	90	96	85-115	7.52	20
Copper	45	48	50	91	96	85-115	5.78	20
Iron	4700	4700	5000	94	95	85-115	0.874	20
Lead	45	48	50	90	97	85-115	6.99	20
Mercury	1.2	1.2	1.25	93	97	85-115	3.37	20
Molybdenum	47	47	50	94	95	85-115	0.876	20
Nickel	45	49	50	91	97	85-115	6.85	20
Selenium	46	50	50	92	99	85-115	7.69	20
Silver	45	49	50	91	98	85-115	7.62	20
Zinc	460	490	500	91	97	85-115	6.59	20

Surrogate Recovery

Terbium	480	490	500	96	97	70-130	1.66	20
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Quality Control Report

Client:	NRG Energy, LLC	WorkOrder:	2308016
Date Prepared:	08/07/2023	BatchID:	275281
Date Analyzed:	08/08/2023	Extraction Method:	SM2540 C-1997
Instrument:	WetChem	Analytical Method:	SM2540 C
Matrix:	Water	Unit:	mg/L
Project:	Marsh Landing; DDSD Quarterly	Sample ID:	MB/LCS/LCSD-275281

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	972	950	1000	97	95	80-120	2.29	10



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2308016
Date Prepared: 08/07/2023	BatchID: 275318
Date Analyzed: 08/07/2023	Extraction Method: SM2540 D-1997
Instrument: WetChem	Analytical Method: SM2540 D
Matrix: Water	Unit: mg/L
Project: Marsh Landing; DDSD Quarterly	Sample ID: MB/LCS/LCSD-275318

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	107	106	100	107	106	80-120	0.939	10



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2308016

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: 4501914176
Project: Marsh Landing; DDSD Quarterly

Bill to:

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

**Requested TATs: 5 days;
7 days;**

Date Received: 08/01/2023
Date Logged: 08/01/2023

Lab ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
2308016-001	IW-001	Water	8/1/2023 10:30	<input type="checkbox"/>	B	A	E	A	C	D							

Test Legend:

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

Project Manager: Susan Thompson

Prepared by: Lilly Ortiz

Comments: Use QUOTE 212372 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; DDS Quarterly

Work Order: 2308016
QC Level: LEVEL 2
Date Logged: 8/1/2023

Comments: Use QUOTE 212372 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

LabID	ClientSampID	Matrix	Test Name	Containers /Composites	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"/>	8/1/2023 10:30	5 days	8/8/2023	None	<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"/>	8/1/2023 10:30	7 days	8/10/2023	None	<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"/>	8/1/2023 10:30	5 days	8/8/2023	None	<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"/>	8/1/2023 10:30	5 days	8/8/2023	None	<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"/>	8/1/2023 10:30	5 days	8/8/2023	None	<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).

- 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.

2308016

Chain of Custody

Page 1 of 2-Quarterly

Marsh Landing Generating Station
 3201 Wilbur Avenue, P.O. Box 1687, Antioch, CA 94509
 Phone: (925) 779-6500 Fax: (925) 779-6509

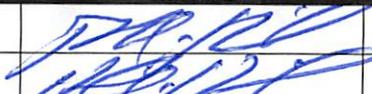
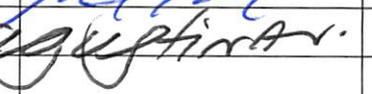
SAMPLES SUBMITTED TO				SEND INVOICE TO				PROJECT				ANALYSIS REQUEST			
Laboratory: McCampbell Analytical, Inc. ELAP Cert. No. 1644 Address: 1534 Willow Pass Road, Pittsburg, CA 94565-1701 Phone/Fax: 925.252.9262/ 925.252.9269				Company: Marsh Landing LLC Attention: Accounts Payable Address: invoices@clearwayenergy.com P.O. No.: 4501914176				Plant: Marsh Landing Title: DDSD Phase: Quarterly Manager: David Frandsen				COD (SM5220D) 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.	COD	BOD	TDS	TSS
ML-23-057	8/1/2023	1030	DDSD	Quarterly	Wastewater	C-24	IW-001	2	Amber VOAs	43	H ₂ SO ₄ (pH<2, 4°C)	X			
ML-23-058	8/1/2023	1030	DDSD	Quarterly	Wastewater	C-24	IW-001	1	HDPE Bottle	1,000	None (ZHS, 4°C)		X		
ML-23-059	8/1/2023	1030	DDSD	Quarterly	Wastewater	C-24	IW-001	1	HDPE Bottle	500	None (4°C)			X	
ML-23-060	8/1/2023	1030	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 Phone/Fax: 925.324-3533/6509 E-mail: david.frandsen@nrq.com E-mail CC: james.robinson@nrq.com E-mail CC: joe.moura@nrq.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. Please report all results with the units of mg/L. RESULTS AND PRICING PER QUOTE ID: 212372. *Include sample description with client sample number ID.								HOLDING TIME: 28 days, 48 hours, 7 days, 7 days			
PRINTED NAME		SIGNATURE		COMPANY		DATE		TIME							
Sampled by: Ryan Robinson				NRG Energy Services		8/1/2023		1030							
Relinquished by: Ryan Robinson				NRG Energy Services		8/1/2023		1130							
Received by: <i>Agustina</i>				McCampbell Analytical, Inc.		8/1/2023		1155A							
Relinquished by:															
Received by:															
Relinquished by:															
Received by:															

1.60
WET

Chain of Custody

Page 2 of 2-Quarterly

Marsh Landing Generating Station
 3201 Wilbur Avenue, P.O. Box 1687, Antioch, CA 94509
 Phone: (925) 779-6500 Fax: (925) 779-6509

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@clearwayenergy.com P.O. No.: 4501914176				Plant: Marsh Landing Title: DDSD Phase: Quarterly Manager: David Frandsen				Total Metals* (EPA Method 200.8)				
SAMPLE INFORMATION								CONTAINER INFORMATION				X				
Sample Number	Sample Date	Sample Collection Time	Regulatory Driver	Regulatory Frequency	Sample Medium	Sample Type	Sample Description	Number	Type	Volume (each, mL)	Preserv.					
ML-23-061	8/1/2023	1030	DDSD	Quarterly	Wastewater	C-24	IW-001	1	HDPE Bottle	250	HNO3 (pH<2)					
											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 Phone/Fax: 925 324-3533/6509 E-mail: david.frandsen@nrg.com E-mail CC: james.robinson@nrg.com , joe.moura@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: 212372. *Include sample description with client sample number ID.								
PRINTED NAME			SIGNATURE			COMPANY		DATE		TIME						
Sampled by: Ryan Robinson						NRG Energy Services		8/1/2023		1030						
Relinquished by: Ryan Robinson						NRG Energy Services		8/1/2023		1130 1155						
Received by: <i>Agustina</i>						McC Campbell Analytical, Inc.		8/1/2023		1155A						
Relinquished by:																
Received by:																
Relinquished by:																
Received by:																



Sample Receipt Checklist

Client Name: NRG Energy, LLC
 Project: Marsh Landing; DDSD Quarterly
 WorkOrder No: 2308016 Matrix: Water
 Carrier: Client Drop-In

Date and Time Received: 8/1/2023 11:55
 Date Logged: 8/1/2023
 Received by: Agustina Venegas
 Logged by: Lilly Ortiz

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: 1.6°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:



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2308017

Report Created for: NRG Energy, LLC

3201 Wilbur Avenue
Antioch, CA 94509

Project Contact: David Frandsen

Project P.O.: 4501914176

Project: Marsh Landing; DDSD Semi-Annual

Project Received: 08/01/2023

Analytical Report reviewed & approved for release on 08/09/2023 by:

Susan Thompson
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: 2308017

Project: Marsh Landing; DDS Semi-Annual

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
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
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
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure

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: 2308017

Project: Marsh Landing; DDS Semi-Annual

TEQ Toxicity Equivalents

TZA TimeZone Net Adjustment for sample collected outside of MAI's UTC.

WET (STLC) Waste Extraction Test (Soluble Threshold Limit Concentration)

Analytical Qualifiers

B Analyte detected in the associated Method Blank at a concentration greater than 1/10 the reported sample result.

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

a3 Sample diluted due to high organic content interfering with quantitative/or qualitative analysis.

Quality Control Qualifiers

F2 LCS/LCSD recovery and/or RPD/RSD is out of acceptance criteria.

F5 LCS/LCSD recovery is outside of acceptance limits; however, the data is acceptable based upon the TNI allowable marginal exceedances.



Analytical Report

Client: NRG Energy, LLC
Date Received: 08/01/2023 11:55
Date Prepared: 08/08/2023
Project: Marsh Landing; DDS D Semi-Annual

WorkOrder: 2308017
Extraction Method: E1664A_SG
Analytical Method: E1664A
Unit: mg/L

Hexane Extractable Material (HEM; Oil & Grease) with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2308017-001B	Water	08/01/2023 10:30	O&G	275374

<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
SGT-HEM	2.2	J	1.2	5.3	1	08/08/2023 14:50

Analyst(s): LAM



Analytical Report

Client: NRG Energy, LLC
Date Received: 08/01/2023 11:55
Date Prepared: 08/08/2023
Project: Marsh Landing; DDS D Semi-Annual

WorkOrder: 2308017
Extraction Method: E1664A
Analytical Method: E1664A
Unit: mg/L

Hexane Extractable Material (HEM; Oil & Grease) without Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2308017-001A	Water	08/01/2023 10:30	O&G	275374

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
HEM	ND	2.6	5.1	1	08/08/2023 14:45

Analyst(s): LAM



Analytical Report

Client: NRG Energy, LLC
Date Received: 08/01/2023 11:55
Date Prepared: 08/02/2023
Project: Marsh Landing; DDS Semi-Annual

WorkOrder: 2308017
Extraction Method: E608.3/SW3620B
Analytical Method: E608.3
Unit: mg/L

Organochlorine Pesticides + PCBs w/ Florisil Clean-up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2308017-001F	Water	08/01/2023 10:30	GC40 08032315.d	274945

Analytes	Result	MDL	RL	DF	Date Analyzed
Aldrin	ND	0.000005	0.000020	20	08/03/2023 14:18
a-BHC	ND	0.000006	0.000020	20	08/03/2023 14:18
b-BHC	ND	0.000014	0.000020	20	08/03/2023 14:18
d-BHC	ND	0.000002	0.000020	20	08/03/2023 14:18
g-BHC	ND	0.000009	0.000020	20	08/03/2023 14:18
Chlordane (Technical)	ND	0.000046	0.000040	20	08/03/2023 14:18
p,p-DDD	ND	0.000002	0.000020	20	08/03/2023 14:18
p,p-DDE	ND	0.000003	0.000020	20	08/03/2023 14:18
p,p-DDT	ND	0.000003	0.000020	20	08/03/2023 14:18
Dieldrin	ND	0.000002	0.000020	20	08/03/2023 14:18
Endosulfan I	ND	0.000002	0.000020	20	08/03/2023 14:18
Endosulfan II	ND	0.000009	0.000020	20	08/03/2023 14:18
Endosulfan sulfate	ND	0.000006	0.000040	20	08/03/2023 14:18
Endrin	ND	0.000003	0.000020	20	08/03/2023 14:18
Endrin aldehyde	ND	0.000011	0.000020	20	08/03/2023 14:18
Heptachlor	ND	0.000008	0.000020	20	08/03/2023 14:18
Heptachlor epoxide	ND	0.000005	0.000020	20	08/03/2023 14:18
Toxaphene	ND	0.000040	0.000040	20	08/03/2023 14:18
Aroclor1016	ND	0.000038	0.000040	20	08/03/2023 14:18
Aroclor1221	ND	0.000048	0.000040	20	08/03/2023 14:18
Aroclor1232	ND	0.000076	0.000040	20	08/03/2023 14:18
Aroclor1242	ND	0.000056	0.000040	20	08/03/2023 14:18
Aroclor1248	ND	0.000036	0.000040	20	08/03/2023 14:18
Aroclor1254	ND	0.000030	0.000040	20	08/03/2023 14:18
Aroclor1260	ND	0.000056	0.000040	20	08/03/2023 14:18

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	125	60-130	08/03/2023 14:18

Analyst(s): SVE **Analytical Comments:** a3



Analytical Report

Client: NRG Energy, LLC
Date Received: 08/01/2023 11:55
Date Prepared: 08/02/2023
Project: Marsh Landing; DDS D Semi-Annual

WorkOrder: 2308017
Extraction Method: E624.1
Analytical Method: E624.1
Unit: mg/L

Acrolein, Acrylonitrile, & 2-Chloroethyl Vinyl Ether

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2308017-001H	Water	08/01/2023 10:30	GC10 08022314.D	275071

Analytes	Result	MDL	RL	DF	Date Analyzed
Acrolein (Propenal)	ND	0.0037	0.0050	1	08/02/2023 23:01
Acrylonitrile	ND	0.00027	0.0020	1	08/02/2023 23:01
2-Chloroethyl Vinyl Ether	ND	0.00052	0.0010	1	08/02/2023 23:01

Surrogates	REC (%)	Limits
Dibromofluoromethane	103	70-130

Analyst(s): ALU



Analytical Report

Client: NRG Energy, LLC
Date Received: 08/01/2023 11:55
Date Prepared: 08/03/2023
Project: Marsh Landing; DDS Semi-Annual

WorkOrder: 2308017
Extraction Method: E624.1
Analytical Method: E624.1
Unit: mg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2308017-001G	Water	08/01/2023 10:30	GC16 08022326.D	275004

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Benzene	ND		0.000034	0.00020	1	08/03/2023 01:53
Bromodichloromethane	0.00052		0.000022	0.000050	1	08/03/2023 01:53
Bromoform	0.00047	JB	0.00010	0.00050	1	08/03/2023 01:53
Bromomethane	ND		0.00026	0.00050	1	08/03/2023 01:53
Carbon tetrachloride	ND		0.000033	0.000050	1	08/03/2023 01:53
Chlorobenzene	ND		0.000092	0.00050	1	08/03/2023 01:53
Chloroethane	ND		0.00023	0.00050	1	08/03/2023 01:53
Chloroform	0.00062		0.000015	0.00010	1	08/03/2023 01:53
Chloromethane	ND		0.00018	0.00050	1	08/03/2023 01:53
Dibromochloromethane	0.00038		0.000069	0.00015	1	08/03/2023 01:53
1,2-Dichlorobenzene	ND		0.00011	0.00050	1	08/03/2023 01:53
1,3-Dichlorobenzene	ND		0.00012	0.00050	1	08/03/2023 01:53
1,4-Dichlorobenzene	ND		0.00011	0.00050	1	08/03/2023 01:53
1,1-Dichloroethane	ND		0.00014	0.00050	1	08/03/2023 01:53
1,2-Dichloroethane (1,2-DCA)	ND		0.000011	0.000020	1	08/03/2023 01:53
1,1-Dichloroethene	ND		0.000003	0.000010	1	08/03/2023 01:53
trans-1,2-Dichloroethene	ND		0.00012	0.00050	1	08/03/2023 01:53
1,2-Dichloropropane	ND		0.000029	0.00020	1	08/03/2023 01:53
cis-1,3-Dichloropropene	ND		0.00013	0.00050	1	08/03/2023 01:53
trans-1,3-Dichloropropene	ND		0.00020	0.00050	1	08/03/2023 01:53
Ethylbenzene	ND		0.00014	0.00050	1	08/03/2023 01:53
Methylene chloride	ND		0.00075	0.0020	1	08/03/2023 01:53
1,1,2,2-Tetrachloroethane	ND		0.000018	0.000020	1	08/03/2023 01:53
Tetrachloroethene	ND		0.000028	0.00020	1	08/03/2023 01:53
Toluene	ND		0.000096	0.00050	1	08/03/2023 01:53
1,1,1-Trichloroethane	ND		0.00014	0.00050	1	08/03/2023 01:53
1,1,2-Trichloroethane	ND		0.000026	0.00020	1	08/03/2023 01:53
Trichloroethene	ND		0.000030	0.00050	1	08/03/2023 01:53
Trichlorofluoromethane	ND		0.00013	0.00050	1	08/03/2023 01:53
Vinyl chloride	ND		0.000002	0.0000050	1	08/03/2023 01:53

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	108	70-130	08/03/2023 01:53
Toluene-d8	105	70-130	08/03/2023 01:53
4-BFB	92	70-130	08/03/2023 01:53

Analyst(s): TW



Analytical Report

Client: NRG Energy, LLC
Date Received: 08/01/2023 11:55
Date Prepared: 08/02/2023
Project: Marsh Landing; DDS Semi-Annual

WorkOrder: 2308017
Extraction Method: E625.1
Analytical Method: E625.1
Unit: mg/L

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected			Instrument	Batch ID
IW-001	2308017-0011	Water	08/01/2023 10:30			GC48 08032316.D	274948
Analytes	Result	MDL	RL	DF	Date Analyzed		
Acenaphthene	ND	0.000015	0.000025	5	08/03/2023 15:02		
Acenaphthylene	ND	0.000009	0.000025	5	08/03/2023 15:02		
Anthracene	ND	0.000010	0.000025	5	08/03/2023 15:02		
Benzidine	ND	0.014	0.025	5	08/03/2023 15:02		
Benzo (a) anthracene	ND	0.00010	0.00025	5	08/03/2023 15:02		
Benzo (a) pyrene	ND	0.000025	0.000025	5	08/03/2023 15:02		
Benzo (b) fluoranthene	ND	0.000027	0.000050	5	08/03/2023 15:02		
Benzo (g,h,i) perylene	ND	0.000020	0.000050	5	08/03/2023 15:02		
Benzo (k) fluoranthene	ND	0.000025	0.000050	5	08/03/2023 15:02		
Bis (2-chloroethoxy) Methane	ND	0.0026	0.0050	5	08/03/2023 15:02		
Bis (2-chloroethyl) Ether	ND	0.000025	0.000025	5	08/03/2023 15:02		
Bis (2-chloroisopropyl) Ether	ND	0.000025	0.000050	5	08/03/2023 15:02		
Bis (2-ethylhexyl) Phthalate	ND	0.00066	0.0013	5	08/03/2023 15:02		
4-Bromophenyl Phenyl Ether	ND	0.0015	0.0050	5	08/03/2023 15:02		
Butylbenzyl Phthalate	ND	0.00041	0.0013	5	08/03/2023 15:02		
4-Chloro-3-methylphenol	ND	0.0030	0.0050	5	08/03/2023 15:02		
2-Chloronaphthalene	ND	0.0028	0.0050	5	08/03/2023 15:02		
2-Chlorophenol	ND	0.00018	0.00025	5	08/03/2023 15:02		
4-Chlorophenyl Phenyl Ether	ND	0.0025	0.0050	5	08/03/2023 15:02		
Chrysene	ND	0.000014	0.000025	5	08/03/2023 15:02		
Dibenzo (a,h) anthracene	ND	0.000026	0.000050	5	08/03/2023 15:02		
Di-n-butyl Phthalate	ND	0.00039	0.0013	5	08/03/2023 15:02		
1,2-Dichlorobenzene	ND	0.0027	0.0050	5	08/03/2023 15:02		
1,3-Dichlorobenzene	ND	0.0030	0.0050	5	08/03/2023 15:02		
1,4-Dichlorobenzene	ND	0.0022	0.0050	5	08/03/2023 15:02		
3,3-Dichlorobenzidine	ND	0.000031	0.000050	5	08/03/2023 15:02		
2,4-Dichlorophenol	ND	0.000028	0.000050	5	08/03/2023 15:02		
Diethyl Phthalate	ND	0.00011	0.00025	5	08/03/2023 15:02		
2,4-Dimethylphenol	ND	0.0027	0.0050	5	08/03/2023 15:02		
Dimethyl Phthalate	ND	0.000030	0.000050	5	08/03/2023 15:02		
4,6-Dinitro-2-methylphenol	ND	0.019	0.025	5	08/03/2023 15:02		
2,4-Dinitrophenol	ND	0.0034	0.0050	5	08/03/2023 15:02		
2,4-Dinitrotoluene	ND	0.00014	0.00025	5	08/03/2023 15:02		
2,6-Dinitrotoluene	ND	0.00015	0.00025	5	08/03/2023 15:02		
Di-n-octyl Phthalate	ND	0.0061	0.013	5	08/03/2023 15:02		
1,2-Diphenylhydrazine	ND	0.0021	0.0050	5	08/03/2023 15:02		
Fluoranthene	ND	0.000019	0.000050	5	08/03/2023 15:02		

(Cont.)



Analytical Report

Client: NRG Energy, LLC
Date Received: 08/01/2023 11:55
Date Prepared: 08/02/2023
Project: Marsh Landing; DDSD Semi-Annual

WorkOrder: 2308017
Extraction Method: E625.1
Analytical Method: E625.1
Unit: mg/L

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2308017-0011	Water	08/01/2023 10:30	GC48 08032316.D	274948

Analytes	Result	MDL	RL	DF	Date Analyzed
Fluorene	ND	0.000009	0.000050	5	08/03/2023 15:02
Hexachlorobenzene	ND	0.000008	0.000025	5	08/03/2023 15:02
Hexachlorobutadiene	ND	0.000005	0.000025	5	08/03/2023 15:02
Hexachlorocyclopentadiene	ND	0.012	0.025	5	08/03/2023 15:02
Hexachloroethane	ND	0.000017	0.000050	5	08/03/2023 15:02
Indeno (1,2,3-cd) pyrene	ND	0.000035	0.000050	5	08/03/2023 15:02
Isophorone	ND	0.0023	0.0050	5	08/03/2023 15:02
Naphthalene	ND	0.000032	0.000050	5	08/03/2023 15:02
Nitrobenzene	ND	0.0031	0.0050	5	08/03/2023 15:02
2-Nitrophenol	ND	0.015	0.025	5	08/03/2023 15:02
4-Nitrophenol	ND	0.018	0.025	5	08/03/2023 15:02
N-Nitrosodimethylamine	ND	0.018	0.025	5	08/03/2023 15:02
N-Nitrosodiphenylamine	ND	0.0018	0.0050	5	08/03/2023 15:02
N-Nitrosodi-n-propylamine	ND	0.0030	0.0050	5	08/03/2023 15:02
Pentachlorophenol	ND	0.00081	0.0013	5	08/03/2023 15:02
Phenanthrene	ND	0.000018	0.000025	5	08/03/2023 15:02
Phenol	ND	0.000096	0.00020	5	08/03/2023 15:02
Pyrene	ND	0.000014	0.000025	5	08/03/2023 15:02
1,2,4-Trichlorobenzene	ND	0.0026	0.0050	5	08/03/2023 15:02
2,4,6-Trichlorophenol	ND	0.000027	0.000050	5	08/03/2023 15:02

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorophenol	45	20-103	08/03/2023 15:02
Phenol-d5	33	20-120	08/03/2023 15:02
Nitrobenzene-d5	68	61-130	08/03/2023 15:02
2-Fluorobiphenyl	96	63-115	08/03/2023 15:02
2,4,6-Tribromophenol	90	48-149	08/03/2023 15:02
4-Terphenyl-d14	63	32-113	08/03/2023 15:02

Analyst(s): AK

Analytical Comments: a3



Analytical Report

Client: NRG Energy, LLC
Date Received: 08/01/2023 11:55
Date Prepared: 08/02/2023
Project: Marsh Landing; DDS D Semi-Annual

WorkOrder: 2308017
Extraction Method: E350.1
Analytical Method: E350.1
Unit: mg/L

Ammonia As Nitrogen

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2308017-001E	Water	08/01/2023 10:30	WC_SKALAR 230802D1_40	274981

Analytes	Result	MDL	RL	DF	Date Analyzed
Ammonia, total as N	0.27	0.095	0.10	1	08/02/2023 16:32

Analyst(s): IGC



Analytical Report

Client: NRG Energy, LLC
Date Received: 08/01/2023 11:55
Date Prepared: 08/02/2023
Project: Marsh Landing; DDS D Semi-Annual

WorkOrder: 2308017
Extraction Method: Kelada-01
Analytical Method: Kelada-01
Unit: mg/L

Cyanide, Total

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2308017-001C	Water	08/01/2023 10:30	WC_Skalar3 230802a0_26	274950

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Total Cyanide	0.0016	0.00062	0.0010	1	08/02/2023 11:20

Analyst(s): CC



Analytical Report

Client: NRG Energy, LLC
Date Received: 08/01/2023 11:55
Date Prepared: 08/04/2023
Project: Marsh Landing; DDS Semi-Annual

WorkOrder: 2308017
Extraction Method: E420.4
Analytical Method: E420.4
Unit: mg/L

Phenolics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2308017-001D	Water	08/01/2023 10:30	WC_SKALAR 230804A1_28	275175

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Phenolics	ND	0.0014	0.0020	1	08/04/2023 12:41

Analyst(s): CC



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2308017
Date Prepared: 08/08/2023	BatchID: 275374
Date Analyzed: 08/08/2023	Extraction Method: E1664A_SG
Instrument: O&G	Analytical Method: E1664A
Matrix: Water	Unit: mg/L
Project: Marsh Landing; DDSD Semi-Annual	Sample ID: MB/LCS/LCSD-275374

QC Summary Report for E1664A

Analyte	MB Result	MDL	RL			
HEM	ND	2.5	5.0	-	-	-
SGT-HEM	ND	1.1	5.0	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
HEM	19	20	20.83	91	98	78-114	7.37	30
SGT-HEM	7.9	7.0	10.42	76	68	64-132	11.5	30



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2308017
Date Prepared: 08/02/2023	BatchID: 274945
Date Analyzed: 08/02/2023	Extraction Method: E608.3/SW3620B
Instrument: GC40	Analytical Method: E608.3
Matrix: Water	Unit: µg/L
Project: Marsh Landing; DDS Semi-Annual	Sample ID: MB/LCS/LCSD-274945

QC Summary Report for E608.3 w/ Florisil Clean-up

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Aldrin	ND	0.00028	0.0010	-	-	-
a-BHC	ND	0.00031	0.0010	-	-	-
b-BHC	ND	0.00069	0.0010	-	-	-
d-BHC	ND	0.00014	0.0010	-	-	-
g-BHC	ND	0.00045	0.0010	-	-	-
Chlordane (Technical)	ND	0.0023	0.020	-	-	-
a-Chlordane	ND	0.00085	0.0010	-	-	-
g-Chlordane	ND	0.00015	0.0010	-	-	-
p,p-DDD	ND	0.00011	0.0010	-	-	-
p,p-DDE	ND	0.00018	0.0010	-	-	-
p,p-DDT	ND	0.00017	0.0010	-	-	-
Dieldrin	ND	0.00014	0.0010	-	-	-
Endosulfan I	ND	0.00011	0.0010	-	-	-
Endosulfan II	ND	0.00046	0.0010	-	-	-
Endosulfan sulfate	ND	0.00033	0.0020	-	-	-
Endrin	ND	0.00018	0.0010	-	-	-
Endrin aldehyde	ND	0.00053	0.0010	-	-	-
Endrin ketone	ND	0.00026	0.0010	-	-	-
Heptachlor	ND	0.00041	0.0010	-	-	-
Heptachlor epoxide	ND	0.00025	0.0010	-	-	-
Methoxychlor	ND	0.00012	0.0010	-	-	-
Toxaphene	ND	0.0020	0.020	-	-	-
Aroclor1016	ND	0.0019	0.020	-	-	-
Aroclor1221	ND	0.0024	0.020	-	-	-
Aroclor1232	ND	0.0038	0.020	-	-	-
Aroclor1242	ND	0.0028	0.020	-	-	-
Aroclor1248	ND	0.0018	0.020	-	-	-
Aroclor1254	ND	0.0015	0.020	-	-	-
Aroclor1260	ND	0.0028	0.020	-	-	-
Surrogate Recovery						
Decachlorobiphenyl	0.039			0.05	78	60-130

(Cont.)



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2308017
Date Prepared: 08/02/2023	BatchID: 274945
Date Analyzed: 08/02/2023	Extraction Method: E608.3/SW3620B
Instrument: GC40	Analytical Method: E608.3
Matrix: Water	Unit: µg/L
Project: Marsh Landing; DDS Semi-Annual	Sample ID: MB/LCS/LCSD-274945

QC Summary Report for E608.3 w/ Florisil Clean-up

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Aldrin	0.036	0.037	0.050	71	74	54-130	3.84	20
a-BHC	0.034	0.036	0.050	68,F2	71	70-130	3.74	20
b-BHC	0.037	0.038	0.050	73	77	70-130	4.45	20
d-BHC	0.036	0.038	0.050	73	76	70-130	4.33	20
g-BHC	0.032	0.033	0.050	64	66	60-130	3.13	20
a-Chlordane	0.036	0.037	0.050	72	75	55-130	3.67	20
g-Chlordane	0.037	0.038	0.050	73	76	55-130	3.68	20
p,p-DDD	0.041	0.043	0.050	83	86	70-130	3.52	20
p,p-DDE	0.040	0.041	0.050	80	83	70-130	3.44	20
p,p-DDT	0.040	0.041	0.050	79	83	70-130	4.36	20
Dieldrin	0.038	0.039	0.050	76	79	70-130	3.63	20
Endosulfan I	0.038	0.039	0.050	76	79	70-130	3.24	20
Endosulfan II	0.042	0.044	0.050	84	87	70-130	3.52	20
Endosulfan sulfate	0.042	0.043	0.050	84	87	70-130	3.57	20
Endrin	0.050	0.051	0.050	99	103	70-130	3.33	20
Endrin aldehyde	0.034	0.035	0.050	67	69	60-130	3.23	20
Endrin ketone	0.038	0.040	0.050	77	80	60-130	4.22	20
Heptachlor	0.038	0.039	0.050	76	79	43-130	4.18	20
Heptachlor epoxide	0.038	0.039	0.050	75	77	70-130	2.60	20
Methoxychlor	0.040	0.042	0.050	81	84	70-130	4.39	20
Aroclor1016	0.14	0.15	0.15	93	98	70-130	200,F2	20
Aroclor1260	0.14	0.15	0.15	90	97	70-130	200,F2	20
Surrogate Recovery								
Decachlorobiphenyl	0.035	0.037	0.050	70	75	60-130	5.91	20



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2308017
Date Prepared: 08/02/2023	BatchID: 275071
Date Analyzed: 08/02/2023	Extraction Method: E624.1
Instrument: GC10	Analytical Method: E624.1
Matrix: Water	Unit: µg/L
Project: Marsh Landing; DDS Semi-Annual	Sample ID: MB/LCS/LCSD-275071

QC Summary Report for E624.1

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acrolein (Propenal)	ND	3.7	5.0	-	-	-
Acrylonitrile	ND	0.27	2.0	-	-	-
2-Chloroethyl Vinyl Ether	ND	0.52	1.0	-	-	-
Surrogate Recovery						
Dibromofluoromethane	26			25	104	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acrolein (Propenal)	22	25	20	108	125	71-140	14.5	20
Acrylonitrile	24	23	20	120	113	67-145	5.45	20
2-Chloroethyl Vinyl Ether	23	22	20	117	111	70-124	5.22	20
Surrogate Recovery								
Dibromofluoromethane	28	26	25	112	106	70-130	6.06	20



Quality Control Report

Client:	NRG Energy, LLC	WorkOrder:	2308017
Date Prepared:	08/02/2023	BatchID:	275004
Date Analyzed:	08/02/2023	Extraction Method:	E624.1
Instrument:	GC16	Analytical Method:	E624.1
Matrix:	Water	Unit:	µg/L
Project:	Marsh Landing; DDS Semi-Annual	Sample ID:	MB/LCS/LCSD-275004

QC Summary Report for E624.1

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Benzene	ND	0.034	0.20	-	-	-
Bromodichloromethane	ND	0.022	0.050	-	-	-
Bromoform	0.41,J	0.10	0.50	-	-	-
Bromomethane	ND	0.26	0.50	-	-	-
Carbon tetrachloride	ND	0.033	0.050	-	-	-
Chlorobenzene	ND	0.092	0.50	-	-	-
Chloroethane	ND	0.23	0.50	-	-	-
Chloroform	ND	0.015	0.10	-	-	-
Chloromethane	ND	0.18	0.50	-	-	-
Dibromochloromethane	ND	0.069	0.15	-	-	-
1,2-Dichlorobenzene	ND	0.11	0.50	-	-	-
1,3-Dichlorobenzene	ND	0.12	0.50	-	-	-
1,4-Dichlorobenzene	ND	0.11	0.50	-	-	-
1,1-Dichloroethane	ND	0.14	0.50	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.011	0.020	-	-	-
1,1-Dichloroethene	ND	0.0036	0.010	-	-	-
trans-1,2-Dichloroethene	ND	0.12	0.50	-	-	-
1,2-Dichloropropane	ND	0.029	0.20	-	-	-
cis-1,3-Dichloropropene	ND	0.13	0.50	-	-	-
trans-1,3-Dichloropropene	ND	0.20	0.50	-	-	-
Ethylbenzene	ND	0.14	0.50	-	-	-
Methylene chloride	ND	0.75	2.0	-	-	-
1,1,2,2-Tetrachloroethane	ND	0.018	0.020	-	-	-
Tetrachloroethene	ND	0.028	0.20	-	-	-
Toluene	ND	0.096	0.50	-	-	-
1,1,1-Trichloroethane	ND	0.14	0.50	-	-	-
1,1,2-Trichloroethane	ND	0.026	0.20	-	-	-
Trichloroethene	ND	0.030	0.50	-	-	-
Trichlorofluoromethane	ND	0.13	0.50	-	-	-
Vinyl chloride	ND	0.0027	0.0050	-	-	-
Surrogate Recovery						
Dibromofluoromethane	28			25	113	70-130
Toluene-d8	25			25	99	70-130
4-BFB	2.5			2.5	98	70-130

(Cont.)



Quality Control Report

Client:	NRG Energy, LLC	WorkOrder:	2308017
Date Prepared:	08/02/2023	BatchID:	275004
Date Analyzed:	08/02/2023	Extraction Method:	E624.1
Instrument:	GC16	Analytical Method:	E624.1
Matrix:	Water	Unit:	µg/L
Project:	Marsh Landing; DDSD Semi-Annual	Sample ID:	MB/LCS/LCSD-275004

QC Summary Report for E624.1

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Benzene	4.0	3.8	4	99	94	65-130	5.08	20
Bromodichloromethane	4.0	3.8	4	99	95	60-130	3.69	20
Bromoform	3.9	3.7	4	97	92	70-130	4.49	20
Bromomethane	5.2	4.7	4	131,F2	118	50-130	10.9	20
Carbon tetrachloride	4.1	3.9	4	103	98	70-130	4.41	20
Chlorobenzene	4.4	4.2	4	109	106	65-130	2.82	20
Chloroethane	4.4	4.2	4	111	106	60-140	4.13	20
Chloroform	3.8	3.7	4	95	92	70-130	3.59	20
Chloromethane	4.7	4.4	4	117	109	50-130	7.03	20
Dibromochloromethane	4.0	3.9	4	101	97	70-130	3.65	20
1,2-Dichlorobenzene	4.1	4.0	4	103	100	65-130	2.71	20
1,3-Dichlorobenzene	4.3	4.2	4	107	105	70-130	1.55	20
1,4-Dichlorobenzene	4.1	4.2	4	103	105	65-130	1.61	20
1,1-Dichloroethane	4.4	4.2	4	109	106	70-130	3.31	20
1,2-Dichloroethane (1,2-DCA)	3.7	3.5	4	92	87	70-130	5.39	20
1,1-Dichloroethene	3.9	3.8	4	98	94	60-130	4.09	20
trans-1,2-Dichloroethene	4.3	4.2	4	108	104	70-130	3.79	20
1,2-Dichloropropane	4.0	3.9	4	100	97	60-130	3.78	20
cis-1,3-Dichloropropene	4.0	3.9	4	99	98	60-130	1.73	20
trans-1,3-Dichloropropene	4.0	3.8	4	99	96	60-130	3.35	20
Ethylbenzene	4.5	4.4	4	112	109	60-130	2.65	20
Methylene chloride	4.1	3.9	4	103	97	60-130	6.26	20
1,1,2,2-Tetrachloroethane	4.0	4.0	4	100	99	60-130	0.729	20
Tetrachloroethene	4.0	4.0	4	100	99	70-130	1.59	20
Toluene	4.2	4.1	4	104	103	70-130	1.21	20
1,1,1-Trichloroethane	4.1	3.9	4	103	98	70-130	5.05	20
1,1,2-Trichloroethane	4.3	4.1	4	107	102	70-130	5.17	20
Trichloroethene	4.3	4.3	4	108	107	65-130	1.37	20
Trichlorofluoromethane	4.4	4.2	4	109	104	60-130	4.41	20
Vinyl chloride	2.1	2.0	2	105	98	60-130	7.43	20
Surrogate Recovery								
Dibromofluoromethane	29	27	25	115	107	70-130	6.49	20
Toluene-d8	28	26	25	111	106	70-130	4.81	20
4-BFB	2.6	2.4	2.5	105	96	70-130	8.74	20



Quality Control Report

Client:	NRG Energy, LLC	WorkOrder:	2308017
Date Prepared:	08/02/2023	BatchID:	274948
Date Analyzed:	08/02/2023	Extraction Method:	E625.1
Instrument:	GC21	Analytical Method:	E625.1
Matrix:	Water	Unit:	µg/L
Project:	Marsh Landing; DDS Semi-Annual	Sample ID:	MB/LCS/LCSD-274948

QC Summary Report for E625.1

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acenaphthene	ND	0.0029	0.0050	-	-	-
Acenaphthylene	ND	0.0018	0.0050	-	-	-
Anthracene	ND	0.0020	0.0050	-	-	-
Benzidine	ND	2.7	5.0	-	-	-
Benzo (a) anthracene	ND	0.020	0.050	-	-	-
Benzo (a) pyrene	ND	0.0050	0.0050	-	-	-
Benzo (b) fluoranthene	ND	0.0053	0.010	-	-	-
Benzo (g,h,i) perylene	ND	0.0039	0.010	-	-	-
Benzo (k) fluoranthene	ND	0.0050	0.010	-	-	-
Bis (2-chloroethoxy) Methane	ND	0.51	1.0	-	-	-
Bis (2-chloroethyl) Ether	ND	0.0050	0.0050	-	-	-
Bis (2-chloroisopropyl) Ether	ND	0.0049	0.010	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	0.13	0.25	-	-	-
4-Bromophenyl Phenyl Ether	ND	0.29	1.0	-	-	-
Butylbenzyl Phthalate	ND	0.081	0.25	-	-	-
4-Chloro-3-methylphenol	ND	0.59	1.0	-	-	-
2-Chloronaphthalene	ND	0.56	1.0	-	-	-
2-Chlorophenol	ND	0.036	0.050	-	-	-
4-Chlorophenyl Phenyl Ether	ND	0.49	1.0	-	-	-
Chrysene	ND	0.0027	0.0050	-	-	-
Dibenzo (a,h) anthracene	ND	0.0052	0.010	-	-	-
Di-n-butyl Phthalate	ND	0.078	0.25	-	-	-
1,2-Dichlorobenzene	ND	0.53	1.0	-	-	-
1,3-Dichlorobenzene	ND	0.59	1.0	-	-	-
1,4-Dichlorobenzene	ND	0.44	1.0	-	-	-
3,3-Dichlorobenzidine	ND	0.0062	0.010	-	-	-
2,4-Dichlorophenol	ND	0.0056	0.010	-	-	-
Diethyl Phthalate	ND	0.021	0.050	-	-	-
2,4-Dimethylphenol	ND	0.53	1.0	-	-	-
Dimethyl Phthalate	ND	0.0059	0.010	-	-	-
4,6-Dinitro-2-methylphenol	ND	3.7	5.0	-	-	-
2,4-Dinitrophenol	ND	0.68	1.0	-	-	-
2,4-Dinitrotoluene	ND	0.027	0.050	-	-	-
2,6-Dinitrotoluene	ND	0.030	0.050	-	-	-
Di-n-octyl Phthalate	ND	1.2	2.5	-	-	-
1,2-Diphenylhydrazine	ND	0.42	1.0	-	-	-
Fluoranthene	ND	0.0038	0.010	-	-	-
Fluorene	ND	0.0018	0.010	-	-	-

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Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2308017
Date Prepared: 08/02/2023	BatchID: 274948
Date Analyzed: 08/02/2023	Extraction Method: E625.1
Instrument: GC21	Analytical Method: E625.1
Matrix: Water	Unit: µg/L
Project: Marsh Landing; DDSD Semi-Annual	Sample ID: MB/LCS/LCSD-274948

QC Summary Report for E625.1

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Hexachlorobenzene	ND	0.0017	0.0050	-	-	-
Hexachlorobutadiene	ND	0.0011	0.0050	-	-	-
Hexachlorocyclopentadiene	ND	2.3	5.0	-	-	-
Hexachloroethane	ND	0.0034	0.010	-	-	-
Indeno (1,2,3-cd) pyrene	ND	0.0070	0.010	-	-	-
Isophorone	ND	0.45	1.0	-	-	-
Naphthalene	ND	0.0063	0.010	-	-	-
Nitrobenzene	ND	0.61	1.0	-	-	-
2-Nitrophenol	ND	3.0	5.0	-	-	-
4-Nitrophenol	ND	3.6	5.0	-	-	-
N-Nitrosodimethylamine	ND	3.6	5.0	-	-	-
N-Nitrosodiphenylamine	ND	0.36	1.0	-	-	-
N-Nitrosodi-n-propylamine	ND	0.60	1.0	-	-	-
Pentachlorophenol	ND	0.16	0.25	-	-	-
Phenanthrene	0.0038,J	0.0036	0.0050	-	-	-
Phenol	ND	0.019	0.040	-	-	-
Pyrene	ND	0.0028	0.0050	-	-	-
1,2,4-Trichlorobenzene	ND	0.52	1.0	-	-	-
2,4,6-Trichlorophenol	ND	0.0053	0.010	-	-	-

Surrogate Recovery

2-Fluorophenol	2.3	5	46	20-103
Phenol-d5	1.7	5	34	20-120
Nitrobenzene-d5	3.8	5	76	61-130
2-Fluorobiphenyl	3.5	5	69	63-115
2,4,6-Tribromophenol	4.3	5	87	48-149
4-Terphenyl-d14	3.4	5	67	32-113

(Cont.)



Quality Control Report

Client:	NRG Energy, LLC	WorkOrder:	2308017
Date Prepared:	08/02/2023	BatchID:	274948
Date Analyzed:	08/02/2023	Extraction Method:	E625.1
Instrument:	GC21	Analytical Method:	E625.1
Matrix:	Water	Unit:	µg/L
Project:	Marsh Landing; DDS Semi-Annual	Sample ID:	MB/LCS/LCSD-274948

QC Summary Report for E625.1

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acenaphthene	0.22	0.23	0.25	88	94	60-132	6.21	25
Acenaphthylene	0.21	0.22	0.25	84	89	54-126	6.79	25
Anthracene	0.25	0.27	0.25	99	108	60-130	9.46	25
Benzidine	14	14	25	54	57	20-130	5.57	25
Benzo (a) anthracene	0.26	0.27	0.25	104	109	60-130	4.06	25
Benzo (a) pyrene	0.28	0.29	0.25	110	116	60-130	5.14	25
Benzo (b) fluoranthene	0.26	0.28	0.25	106	111	60-130	4.63	25
Benzo (g,h,i) perylene	0.28	0.29	0.25	110	116	50-130	5.21	25
Benzo (k) fluoranthene	0.31	0.32	0.25	122	127	60-130	3.90	25
Bis (2-chloroethoxy) Methane	4.0	4.4	5	79	87	65-130	9.69	25
Bis (2-chloroethyl) Ether	0.19	0.19	0.25	74	74	60-130	0.0637	25
Bis (2-chloroisopropyl) Ether	0.17	0.19	0.25	69	78	63-139	11.8	25
Bis (2-ethylhexyl) Phthalate	0.30	0.31	0.25	120	125	60-130	4.06	25
4-Bromophenyl Phenyl Ether	4.5	4.7	5	91	95	65-120	4.29	25
Butylbenzyl Phthalate	0.29	0.30	0.25	116	119	60-140	2.47	25
4-Chloro-3-methylphenol	4.4	5.1	5	88	103	65-130	14.9	25
2-Chloronaphthalene	4.2	4.5	5	83	90	65-120	8.34	25
2-Chlorophenol	0.17	0.20	0.25	70	79	60-130	13.0	25
4-Chlorophenyl Phenyl Ether	4.4	4.8	5	88	95	65-130	8.20	25
Chrysene	0.27	0.28	0.25	107	110	70-130	2.92	25
Dibenzo (a,h) anthracene	0.27	0.29	0.25	106	115	50-130	7.98	25
Di-n-butyl Phthalate	0.29	0.31	0.25	116	125	60-130	7.84	25
1,2-Dichlorobenzene	3.2	3.6	5	63	71	60-130	11.5	25
1,3-Dichlorobenzene	3.1	3.4	5	62	68	60-130	10.3	25
1,4-Dichlorobenzene	3.0	3.4	5	60	68	60-130	12.1	25
3,3-Dichlorobenzidine	0.25	0.26	0.25	99	105	60-130	5.71	25
2,4-Dichlorophenol	0.19	0.21	0.25	77	85	53-122	10.3	25
Diethyl Phthalate	0.21	0.23	0.25	85	91	65-130	6.56	25
2,4-Dimethylphenol	3.4	4.1	5	69	82	60-130	17.8	25
Dimethyl Phthalate	0.11	0.12	0.25	46,F5	48,F5	60-130	4.42	25
4,6-Dinitro-2-methylphenol	24	26	25	96	105	60-130	9.41	25
2,4-Dinitrophenol	4.4	4.8	5	87	97	50-130	10.2	25
2,4-Dinitrotoluene	0.29	0.32	0.25	114	129	70-130	11.9	25
2,6-Dinitrotoluene	0.28	0.31	0.25	113	126	68-137	10.6	25
Di-n-octyl Phthalate	5.9	6.2	5	118	125	70-130	5.94	25
1,2-Diphenylhydrazine	4.5	4.9	5	89	98	65-130	9.25	25
Fluoranthene	0.27	0.29	0.25	108	117	65-130	8.00	25
Fluorene	0.24	0.26	0.25	95	103	70-120	8.63	25

(Cont.)



Quality Control Report

Client:	NRG Energy, LLC	WorkOrder:	2308017
Date Prepared:	08/02/2023	BatchID:	274948
Date Analyzed:	08/02/2023	Extraction Method:	E625.1
Instrument:	GC21	Analytical Method:	E625.1
Matrix:	Water	Unit:	µg/L
Project:	Marsh Landing; DDSD Semi-Annual	Sample ID:	MB/LCS/LCSD-274948

QC Summary Report for E625.1

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Hexachlorobenzene	0.22	0.24	0.25	89	95	60-130	6.98	25
Hexachlorobutadiene	0.16	0.18	0.25	63,F5	72	68-130	12.3	25
Hexachlorocyclopentadiene	14	15	25	56	61	50-130	9.23	25
Hexachloroethane	0.15	0.17	0.25	61	68	55-120	11.1	25
Indeno (1,2,3-cd) pyrene	0.27	0.28	0.25	109	114	50-130	4.32	25
Isophorone	3.6	4.0	5	72	81	52-130	11.6	25
Naphthalene	0.16	0.18	0.25	65,F5	72	70-130	11.2	25
Nitrobenzene	3.8	4.4	5	76	89	60-130	15.8	25
2-Nitrophenol	22	26	25	88	104	70-130	16.3	25
4-Nitrophenol	11	12	25	44	49	30-130	10.8	25
N-Nitrosodimethylamine	12	13	25	47	54	30-130	13.8	25
N-Nitrosodiphenylamine	4.9	5.1	5	98	103	65-130	5.26	25
N-Nitrosodi-n-propylamine	4.1	4.2	5	83	84	59-130	2.18	25
Pentachlorophenol	1.3	1.4	1.25	100	111	60-130	10.1	25
Phenanthrene	0.24	0.26	0.25	96	102	65-120	6.49	25
Phenol	0.35	0.40	1	35,F5	40,F5	48-120	12.8	25
Pyrene	0.28	0.28	0.25	112	113	70-120	0.987	25
1,2,4-Trichlorobenzene	3.2	3.8	5	64	76	57-130	16.5	25
2,4,6-Trichlorophenol	0.24	0.26	0.25	96	104	69-130	7.90	25

Surrogate Recovery

2-Fluorophenol	2.0	2.2	5	39	43	20-103	9.02	25
Phenol-d5	1.5	1.7	5	30	33	20-120	10.2	25
Nitrobenzene-d5	3.6	4.2	5	72	84	61-130	14.6	25
2-Fluorobiphenyl	3.6	3.8	5	72	76	63-115	5.35	25
2,4,6-Tribromophenol	4.6	5.0	5	93	100	48-149	7.04	25
4-Terphenyl-d14	3.4	3.4	5	69	69	32-113	0.0496	25



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2308017
Date Prepared: 08/02/2023	BatchID: 274981
Date Analyzed: 08/02/2023	Extraction Method: E350.1
Instrument: WC_SKALAR	Analytical Method: E350.1
Matrix: Water	Unit: mg/L
Project: Marsh Landing; DDSD Semi-Annual	Sample ID: MB/LCS/LCSD-274981

QC Summary Report for E350.1

Analyte	MB Result	MDL	RL			
Ammonia, total as N	ND	0.095	0.10	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Ammonia, total as N	4.0	4.0	4	100	101	88-113	1.07	20



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2308017
Date Prepared: 08/02/2023	BatchID: 274950
Date Analyzed: 08/02/2023	Extraction Method: Kelada-01
Instrument: WC_Skalar3	Analytical Method: Kelada-01
Matrix: Water	Unit: µg/L
Project: Marsh Landing; DDSD Semi-Annual	Sample ID: MB/LCS/LCSD-274950

QC Summary Report for Kelada-01

Analyte	MB Result	MDL	RL			
Total Cyanide	ND	0.62	1.0	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Total Cyanide	49	52	50	99	105	90-110	5.82	20



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2308017
Date Prepared: 08/04/2023	BatchID: 275175
Date Analyzed: 08/04/2023	Extraction Method: E420.4
Instrument: WC_SKALAR	Analytical Method: E420.4
Matrix: Water	Unit: µg/L
Project: Marsh Landing; DDSD Semi-Annual	Sample ID: MB/LCS/LCSD-275175

QC Summary Report for E420.4

Analyte	MB Result	MDL	RL			
Phenolics	ND	1.4	2.0	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Phenolics	40	40	40	100	99	80-120	1.50	20



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2308017

ClientCode: GOA

QuoteID: 212372

- 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: 4501914176
Project: Marsh Landing; DDSD Semi-Annual

Bill to:

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

Requested TAT: 5 days;

Date Received: 08/01/2023

Date Logged: 08/01/2023

Lab ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
2308017-001	IW-001	Water	8/1/2023 10:30	<input type="checkbox"/>	B	A	F	G	H	I	E	C	D	A		

Test Legend:

1	1664A_SG_W	2	1664A_W	3	608_W	4	624_W
5	624ACR+2CEVE_W	6	625_SCSM_W	7	AMMONIA_W	8	CN_PPM_W
9	PHENOLICS_W(ppm)	10	PRDisposal Fee	11		12	

Project Manager: Susan Thompson

Prepared by: Lilly Ortiz

Comments: Use QUOTE 212372 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; DDS Semi-Annual

Work Order: 2308017
QC Level: LEVEL 2
Date Logged: 8/1/2023

Comments Use QUOTE 212372 for any Marsh Landing projects to get correct analyte list. Always report in mg/L.

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LabID	ClientSampID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	U**	Head Space	Dry-Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	Sub Out
001A	IW-001	Water	E1664A (HEM; Oil & Grease w/o S.G. Clean-Up)	1	1LA w/ HCl	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8/1/2023 10:30	5 days	8/8/2023	Present	<input type="checkbox"/>	<input type="checkbox"/>
001B	IW-001	Water	E1664A (SGT- HEM; Non-polar Material)	1	1LA w/ HCl	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8/1/2023 10:30	5 days	8/8/2023	Present	<input type="checkbox"/>	<input type="checkbox"/>
001C	IW-001	Water	Kelada-01 (Cyanide, Total)	1	250mL aHDPE w/ NaOH	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8/1/2023 10:30	5 days	8/8/2023	Present	<input type="checkbox"/>	<input type="checkbox"/>
001D	IW-001	Water	E420.4 (Phenolics)	1	250mL aG w/ H2SO4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8/1/2023 10:30	5 days	8/8/2023	Present	<input type="checkbox"/>	<input type="checkbox"/>
001E	IW-001	Water	E350.1 (Ammonia)	1	250mL aG w/ H2SO4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8/1/2023 10:30	5 days	8/8/2023	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).

- 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.



WORK ORDER SUMMARY

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

Project: Marsh Landing; DDS Semi-Annual

Work Order: 2308017
QC Level: LEVEL 2
Date Logged: 8/1/2023

Comments: Use QUOTE 212372 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

LabID	ClientSampID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	U**	Head Space	Dry-Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	Sub Out
001F	IW-001	Water	E608.3 (OC Pesticides+PCBs w/ Florisil Clean-up) <a-BHC_1, Aldrin_1, Aroclor1016_1, Aroclor1221_1, Aroclor1232_1, Aroclor1242_1, Aroclor1248_1, Aroclor1254_1, Aroclor1260_1, Aroclor1262_1, Aroclor1262_2, Aroclor1268_1, Aroclor1268_2, b-BHC_1, Chlordane (Technical)_1, d-BHC_1, Dieldrin_1, Endosulfan I_1, Endosulfan II_1, Endosulfan sulfate_1, Endrin aldehyde_1, Endrin_1, g-BHC_1, Heptachlor epoxide_1, Heptachlor_1, p,p-DDD_1, p,p-DDE_1, p,p-DDT_1, Toxaphene_1>	1	1LA Narrow Mouth, Unpres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8/1/2023 10:30	5 days	8/8/2023	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).

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WORK ORDER SUMMARY

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

Project: Marsh Landing; DDS Semi-Annual

Work Order: 2308017
QC Level: LEVEL 2
Date Logged: 8/1/2023

Comments Use QUOTE 212372 for any Marsh Landing projects to get correct analyte list. Always report in mg/L.

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LabID	ClientSampID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	U**	Head Space	Dry-Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	Sub Out
001G	IW-001	Water	E624.1 (VOCs) <1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,2-Dichlorobenzene, 1,2-Dichloroethane (1,2-DCA), 1,2-Dichloropropane, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, Bromodichloromethane, Bromoform, Bromomethane, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloroform, Chloromethane, cis-1,3-Dichloropropene, Dibromochloromethane, Ethylbenzene, Methylene chloride, Tetrachloroethene, Toluene, trans-1,2-Dichloroethene, trans-1,3-Dichloropropene, Trichloroethene, Trichlorofluoromethane, Vinyl chloride>	2	VOA w/ HCl	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8/1/2023 10:30	5 days	8/8/2023	Present	<input type="checkbox"/>	<input type="checkbox"/>
001H	IW-001	Water	E624.1 (ACRO, ACRY, & 2-CEVE)	2	VOA, Unpres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8/1/2023 10:30	5 days	8/8/2023	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).

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WORK ORDER SUMMARY

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

Project: Marsh Landing; DDS Semi-Annual

Work Order: 2308017
QC Level: LEVEL 2
Date Logged: 8/1/2023

Comments: Use QUOTE 212372 for any Marsh Landing projects to get correct analyte list. Always report in mg/L.

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LabID	ClientSampID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	U**	Head Space	Dry-Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	Sub Out
00II	IW-001	Water	E625.1 (SVOCs) <1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Chloronaphthalene, 2-Chlorophenol, 2-Nitrophenol, 3,3-Dichlorobenzidine, 4,6-Dinitro-2-methylphenol, 4-Bromophenyl Phenyl Ether, 4-Chloro-3-methylphenol, 4-Chlorophenyl Phenyl Ether, 4-Nitrophenol, Acenaphthene, Acenaphthylene, Anthracene, Benzidine, Benzo (a) anthracene, Benzo (a) pyrene, Benzo (b) fluoranthene, Benzo (g,h,i) perylene, Benzo (k) fluoranthene, Bis (2-chloroethoxy) Methane, Bis (2-chloroethyl) Ether, Bis (2-chloroisopropyl) Ether, Bis (2-ethylhexyl) Phthalate, Butylbenzyl Phthalate, Chrysene, Dibenzo (a,h)	1	1LA Narrow Mouth, Unpres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8/1/2023 10:30	5 days	8/8/2023	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).

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WORK ORDER SUMMARY

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

Project: Marsh Landing; DDS Semi-Annual

Work Order: 2308017
QC Level: LEVEL 2
Date Logged: 8/1/2023

Comments Use QUOTE 212372 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

LabID	ClientSampID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	U**	Head Space	Dry- Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	Sub Out
			anthracene, Diethyl Phthalate, Dimethyl Phthalate, Di-n-butyl Phthalate, Di-n-octyl Phthalate, Fluoranthene, Fluorene, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Indeno (1,2,3-cd) pyrene, Isophorone, Naphthalene, Nitrobenzene, N-Nitrosodimethylamine, N-Nitrosodi-n-propylamine, N-Nitrosodiphenylamine, Pentachlorophenol, Phenanthrene, Phenol, Pyrene>											

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).

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2308017

Chain of Custody

Page 1 of 3-Semi-Annual

Marsh Landing Generating Station
 3201 Wilbur Avenue, P.O. Box 1687, Antioch, CA 94509
 Phone: (925) 779-6500 Fax: (925) 779-6509

SAMPLES SUBMITTED TO				SEND INVOICE TO				PROJECT				ANALYSIS REQUEST			
Laboratory: McCampbell Analytical, Inc. Attention: 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@clearwayenergy.com P.O. No.: 4501914176				Plant: Marsh Landing Title: DDSD Phase: Semi-Annual Manager: David Frandsen				Oil and Grease (animal/vegetable) ¹ (EPA Method 1664A) Oil and Grease (Petroleum/Mineral) ² (EPA Method 1664A)			
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, L)	Preserv.	Oil and Grease (animal/vegetable) ¹ (EPA Method 1664A)	Oil and Grease (Petroleum/Mineral) ² (EPA Method 1664A)		
ML-23-071	8/1/2023	1030	DDSD	Semi-Annual	Wastewater	Grab	IW-001	1	Amber Glass Jar	1	Hydrochloric Acid (pH<2, 4°C)	X			
ML-23-072	8/1/2023	1030	DDSD	Semi-Annual	Wastewater	Grab	IW-001	1	Amber Glass Jar	1	Hydrochloric Acid (pH<2, 4°C)		X		
HOLDING TIME:												28 days	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 Phone/Fax: 925.324-3533/6509 E-mail: david.frandsen@nrg.com E-mail CC: james.robinson@nrg.com , joe.moura@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. Animal/Vegetable O/G 2. Petroleum/Mineral O/G Please report all results with the units of mg/L. RESULTS AND PRICING PER QUOTE ID: 212372. *Include sample description with client sample number ID.							
PRINTED NAME	SIGNATURE		COMPANY			DATE		TIME							
Sampled by:	Ryan Robinson		NRG Energy Services			8/1/2023		1030							
Relinquished by:	Ryan Robinson		NRG Energy Services			8/1/2023		1150							
Received by:	Agustina V.		McCampbell Analytical, Inc.			8/1/2023		1155A							
Relinquished by:															
Received by:															
Relinquished by:															
Received by:															

1.00 WEA

Chain of Custody

Page 2 of 3-Semi-Annual

Marsh Landing Generating Station
 3201 Wilbur Avenue, P.O. Box 1687, Antioch, CA 94509
 Phone: (925) 779-6500 Fax: (925) 779-6509

SAMPLES SUBMITTED TO							SEND INVOICE TO			PROJECT			ANALYSIS REQUEST					
Laboratory: McCampbell Analytical, Inc. Attention: 1534 Willow Pass Road, Pittsburg, CA 94565-1701 Address: 925.252.9262/ 925.252.9269 Phone/Fax:							Company: Marsh Landing LLC Attention: Accounts Payable Address: invoices@cleanenergy.com P.O. No.: 4501914176			Plant: Marsh Landing Title: DDSD Phase: Semi-Annual Manager: David Frandsen			Cyanide* (Kelada-01)	Phenols (EPA Method 420.4)	Ammonia as N (EPA Method 350.1)			
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-23-073	8/1/2023	1030	DDSD	Semi-Annual	Wastewater	Grab	IW-001	1	HDPE Bottle	250	HNO3 (pH<2)	X						
ML-23-074	8/1/2023	1030	DDSD	Semi-Annual	Wastewater	Grab	IW-001	1	Amber Glass Jar	500	H2SO4 (pH<2, 4°C)		X					
ML-23-075	8/1/2023	1030	DDSD	Semi-Annual	Wastewater	C-24	IW-001	1	Amber Glass Jar	500	H2SO4 (pH<2, 4°C)			X				
												HOLDING TIME: 14 days	28 days	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 Phone/Fax: 925.324-3533/6509 E-mail: david.frandsen@nrg.com E-mail CC: james.robinson@nrg.com , joe.moura@nrg.com			Cyanide sample pretreated with sodium thiosulfate prior to preservation with sodium hydroxide.					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. Cyanide sample was pretreated with sodium thiosulfate prior to preservation with sodium hydroxide. Please report all results with the units of mg/L. RESULTS AND PRICING PER QUOTE ID: 212372. *Include sample description with client sample number ID.										
PRINTED NAME	SIGNATURE		COMPANY			DATE	TIME											
Sampled by: Ryan Robinson			NRG Energy Services			8/1/2023	1030											
Relinquished by: Ryan Robinson			NRG Energy Services			8/1/2023	1130											
Received by: <i>Agustina V.</i>	<i>Agustina V.</i>		McCampbell Analytical, Inc.			8/1/2023	1155A											
Relinquished by:																		
Received by:																		
Relinquished by:																		
Received by:																		

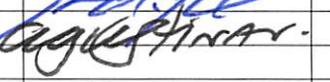
1155A

Chain of Custody

Page 3 of 3-Semi-Annual

Marsh Landing Generating Station

3201 Wilbur Avenue, P.O. Box 1687, Antioch, CA 94509
Phone: (925) 779-6500 Fax: (925) 779-6509

SAMPLES SUBMITTED TO				SEND INVOICE TO		PROJECT				ANALYSIS REQUEST						
Laboratory: McCampbell Analytical, Inc. Attention: 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: mccombs@clearwaterenergy.com P.O. No: 4501914176		Plant: Marsh Landing Title: DDSD Phase: Semi-Annual Manager: David Frandsen				Pesticides & PCBs (EPA Method 608) Volatile Organics (EPA Method 624) Volatile Organics (EPA Method 624) Semi-Volatile Organics (EPA Method 625)						
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.	Pesticides & PCBs (EPA Method 608)	Volatile Organics (EPA Method 624)	Volatile Organics (EPA Method 624)	Semi-Volatile Organics (EPA Method 625)	
ML-23-076	8/1/2023	1030	DDSD	Semi-Annual	Water	Grab	IW-001	1	Amber Glass	1,000	None (4°C)	X				
ML-23-077	8/1/2023	1030	DDSD	Semi-Annual	Water	Grab	IW-001	2	Clear VOA	43	HCL (ZHS, pH<2, 4°C)		X			
ML-23-078	8/1/2023	1030	DDSD	Semi-Annual	Water	Grab	IW-001	2	Clear VOA	43	None (4°C)			X		
ML-23-079	8/1/2023	1030	DDSD	Semi-Annual	Water	Grab	IW-001	1	Amber Glass	1,000	None (4°C)				X	
* For composite samples, the completion time of the 24-hr composite or the time of the final sample aliquot is considered the "sample collection time" for the purpose of determining sample holding time.												HOLDING TIME: 40 days		14 days	3 days	40 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 Phone/Fax: 925.324.3533/6509 E-mail: david.frandsen@nrg.com E-mail CC: james.robinson@nrg.com , joe.moura@nrg.com							Standard TAT (5-DAYS). 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. VOCs- Acrolein, acrylonitrile, and 2cleave Please report all results with the units of mg/L. RESULTS AND PRICING PER QUOTE ID: 212372 *Include sample description with client sample number ID.									
PRINTED NAME			SIGNATURE			COMPANY		DATE		TIME						
Sampled by: Ryan Robinson						NRG Energy Services		8/1/2023		1030						
Relinquished by: Ryan Robinson						NRG Energy Services		8/1/2023		1130						
Received by: <i>Agustina</i>			<i>Agustina</i>			McCampbell Analytical, Inc.		8/1/2023		1155A						
Relinquished by:																
Received by:																
Relinquished by:																
Received by:																



Sample Receipt Checklist

Client Name: NRG Energy, LLC
 Project: Marsh Landing; DDSD Semi-Annual
 WorkOrder No: 2308017 Matrix: Water
 Carrier: Client Drop-In

Date and Time Received: 8/1/2023 11:55
 Date Logged: 8/1/2023
 Received by: Agustina Venegas
 Logged by: Lilly Ortiz

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 checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input 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: 1.6°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; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" 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:



Industrial User Report Checklist And Certification Statement Form

Attn:	Jason Yun		
Environmental Compliance Specialist			
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.

RECEIVED

Self-Monitoring Reports (SMRs) (Required)

JAN 09 2024

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

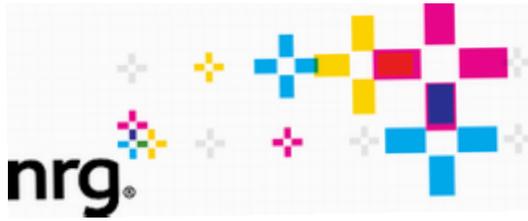
Certification Statement

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, 2023

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	1/8/2024



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

January 8, 2024

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

**Subject: 2023 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 2023 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, 2023. This report includes monthly flow data and quarterly analytical data required to be collected in 2023. 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 2023 Monthly Flow Data
Table 3:	November 2023 Monthly Flow Data
Table 4:	December 2023 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 2023
Report Type	Quarterly

Constituent	Sample Date	Permit Limit	Result	Units
Field pH	11/8/2023	6-10	7.46	S.U.
BOD	11/8/2023	-	8.2	mg/L
COD	11/8/2023	-	26	mg/L
Arsenic	11/8/2023	0.15	0.00053	mg/L
Cadmium	11/8/2023	0.1	ND	mg/L
Chromium	11/8/2023	0.5	0.00070	mg/L
Copper	11/8/2023	0.5	0.010	mg/L
Iron	11/8/2023	-	0.17	mg/L
Lead	11/8/2023	0.5	ND	mg/L
Mercury	11/8/2023	0.003	ND	mg/L
Molybdenum	11/8/2023	-	0.0018	mg/L
Nickel	11/8/2023	0.5	0.0036	mg/L
Selenium	11/8/2023	0.25	ND	mg/L
Silver	11/8/2023	0.2	ND	mg/L
Zinc	11/8/2023	1.0	0.026	mg/L
TDS	11/8/2023	-	406	mg/L
TSS	11/8/2023	-	8.34	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, 2023
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuously Measured (Rosemount 8705 Flanged Magnetic Flow Meter)
Sample Date	10/1/2023 - 10/31/2023
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	5,696	19.81	
3	5,623	19.56	
4	-	0.00	
5	4,165	20.34	
6	13,532	19.65	
7	3,471	19.56	
8	-	0.00	
9	-	0.00	
10	6,076	19.74	
11	-	0.00	
12	4,935	19.58	
13	3,842	19.64	
14	3,158	19.56	
15	416	16.51	
16	6,055	19.77	
17	-	0.00	
18	6,146	19.62	
19	13,068	19.68	
20	12,875	19.68	
21	15,649	21.12	
22	-	0.00	
23	2,956	19.61	
24	3,023	19.57	
25	6,425	19.58	
26	5,227	19.59	
27	8,085	19.75	
28	2,613	19.57	
29	4,342	19.58	
30	4,537	19.71	
31	-	0.00	

Total Monthly Flow (gal)	141,915	Did flow exceed limits?	NO
Daily Max Flow (gpd)	15,649	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	4,578		

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, 2023
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuously Measured (Rosemount 8705 Flanged Magnetic Flow Meter)
Sample Date	11/1/2023 - 11/30/2023
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	438	17.15	
3*	-	0.00	
4	-	0.00	
5	-	0.00	
6	-	0.00	
7	9,033	15.39	
8	19,829	19.69	
9	4,964	19.82	
10	4,196	19.68	
11	6,750	19.68	
12	5,364	19.59	
13	25,367	19.62	
14	4,915	19.58	
15	3,045	19.58	
16	11,291	19.62	
17	388	15.77	
18	-	0.00	
19	-	0.00	
20	4,065	19.61	
21	384	14.96	
22	6,250	19.67	
23	4,351	19.59	
24	4,263	19.62	
25	6,930	19.62	
26	-	0.00	
27	6,690	19.65	
28	6,982	19.61	
29	-	0.00	
30	14,675	19.65	

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

Total Monthly Flow (gal)	150,169	Did flow exceed limits?	NO
Daily Max Flow (gpd)	25,367	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	5,006		

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, 2023
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuously Measured (Rosemount 8705 Flanged Magnetic Flow Meter)
Sample Date	12/1/2023 - 12/31/2023
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	372	15.68	
2	-	0.00	
3	-	0.00	
4	2,686	20.13	
5	2,089	19.67	
6	382	15.81	
7	12,345	19.65	
8	-	0.00	
9	-	0.00	
10	-	0.00	
11	388	15.84	
12	-	0.00	
13	-	0.00	
14	-	0.00	
15	3,774	19.83	
16	507	15.56	
17	-	0.00	
18	4,354	19.69	
19	-	0.00	
20	11,203	20.48	
21	11,684	19.63	
22	5,061	19.63	
23	5,010	19.66	
24	-	0.00	
25	-	0.00	
26	389	15.14	
27	-	0.00	
28	3,649	19.89	
29	3,765	19.69	
30	10,055	19.61	
31	-	0.00	

Total Monthly Flow (gal)	77,714	Did flow exceed limits?	NO
Daily Max Flow (gpd)	12,345	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	2,507		

Marsh Landing Generating Station

Reported to:
Environmental Engineer

NPDES Monthly Analytical Report

Sample Point	Sample Number	Sample Date (m/d/y)	Sample Collection Time	Date Analyzed (m/d/y)	pH Analysis Time	Sample Medium	Sample Type (Grab)	pH
Method:								SM
Unit:								4500-H+B standard
Reporting Limit:								0.18
Method Detection Limit:								0.06
IW-001	ML-23-11	11/8/23	1100	11/8/23	1100	Wastewater	Grab	7.46

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

Environmental Engineer David Frandsen

Signature: 

Date: Nov. 8, 23

Sampling Technologist: Ryan Robinson

Signature: 

Date: 11/8/2023



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2311501

Report Created for: NRG Energy, LLC

3201 Wilbur Avenue
Antioch, CA 94509

Project Contact: David Frandsen

Project P.O.: 4501914176

Project: Marsh Landing DDSD Quarterly

Project Received: 11/08/2023

Analytical Report reviewed & approved for release on 11/17/2023 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

WorkOrder: 2311501

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 % 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: 2311501

Project: Marsh Landing DDSD Quarterly

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 UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Analytical Report

Client: NRG Energy, LLC
Date Received: 11/08/2023 12:28
Date Prepared: 11/10/2023
Project: Marsh Landing DDSD Quarterly

WorkOrder: 2311501
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	2311501-001B	Water	11/08/2023 11:00	WetChem	282064

Analytes	Result	MDL	RL	DF	Date Analyzed
BOD	8.2	8.0	8.0	4	11/15/2023 13:40

Analyst(s): JRA



Analytical Report

Client: NRG Energy, LLC
Date Received: 11/08/2023 12:28
Date Prepared: 11/14/2023
Project: Marsh Landing DDSQ Quarterly

WorkOrder: 2311501
Extraction Method: SM5220 D
Analytical Method: SM5220 D-1997
Unit: mg/L

Chemical Oxygen Demand (COD) as mg O₂ /L

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2311501-001A	Water	11/08/2023 11:00	SPECTROPHOTOMETER2	282261

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
COD	26	8.2	10	1	11/14/2023 19:44

Analyst(s): IGC



Analytical Report

Client: NRG Energy, LLC
Date Received: 11/08/2023 12:28
Date Prepared: 11/08/2023
Project: Marsh Landing DDSQ Quarterly

WorkOrder: 2311501
Extraction Method: E200.8
Analytical Method: E200.8
Unit: mg/L

Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2311501-001E	Water	11/08/2023 11:00	ICP-MS4 175SMPL.d	281902

Analytes	Result	MDL	RL	DF	Date Analyzed
Arsenic	0.00053	0.000071	0.00050	1	11/09/2023 15:21
Cadmium	ND	0.000050	0.00050	1	11/09/2023 15:21
Chromium	0.00070	0.00026	0.00050	1	11/09/2023 15:21
Copper	0.010	0.00063	0.0015	1	11/09/2023 15:21
Iron	0.17	0.022	0.050	1	11/09/2023 15:21
Lead	ND	0.00019	0.00050	1	11/09/2023 15:21
Mercury	ND	0.000031	0.000050	1	11/09/2023 15:21
Molybdenum	0.0018	0.00014	0.00050	1	11/09/2023 15:21
Nickel	0.0036	0.00033	0.00050	1	11/09/2023 15:21
Selenium	ND	0.00018	0.00050	1	11/09/2023 15:21
Silver	ND	0.000051	0.00050	1	11/09/2023 15:21
Zinc	0.026	0.011	0.020	1	11/09/2023 15:21

Surrogates	REC (%)	Limits	Date Analyzed
Terbium	110	70-130	11/09/2023 15:21

Analyst(s): WV



Analytical Report

Client: NRG Energy, LLC
Date Received: 11/08/2023 12:28
Date Prepared: 11/13/2023
Project: Marsh Landing DDSD Quarterly

WorkOrder: 2311501
Extraction Method: SM2540 C-1997
Analytical Method: SM2540 C
Unit: mg/L

Total Dissolved Solids

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2311501-001C	Water	11/08/2023 11:00	WetChem	282219

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Total Dissolved Solids	406	10.0	10.0	1	11/16/2023 13:53

Analyst(s): JME



Analytical Report

Client: NRG Energy, LLC
Date Received: 11/08/2023 12:28
Date Prepared: 11/10/2023
Project: Marsh Landing DDSQ Quarterly

WorkOrder: 2311501
Extraction Method: SM2540 D-1997
Analytical Method: SM2540 D
Unit: mg/L

Total Suspended Solids

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW-001	2311501-001D	Water	11/08/2023 11:00	WetChem	282104

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Total Suspended Solids	8.34	1.67	1.67	1.667	11/10/2023 16:00

Analyst(s): JME



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 11/10/2023
Date Analyzed: 11/15/2023
Instrument: WetChem
Matrix: Water
Project: Marsh Landing DDSQ Quarterly

WorkOrder: 2311501
BatchID: 282064
Extraction Method: SM5210B
Analytical Method: SM5210 B
Unit: mg/L
Sample ID: MB/LCS/LCSD-282064

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	180	180	198	93	93	80-120	0.271	16



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2311501
Date Prepared: 11/14/2023	BatchID: 282261
Date Analyzed: 11/14/2023	Extraction Method: SM5220 D
Instrument: SPECTROPHOTOMETER2	Analytical Method: SM5220 D-1997
Matrix: Water	Unit: mg/L
Project: Marsh Landing DDSD Quarterly	Sample ID: MB/LCS/LCSD-282261

QC Summary Report for COD

Analyte	MB Result	MDL	RL			
COD	ND	8.2	10	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
COD	92	96	100	92	96	90-110	4.26	20



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 11/08/2023
Date Analyzed: 11/09/2023
Instrument: ICP-MS4
Matrix: Water
Project: Marsh Landing DDSD Quarterly

WorkOrder: 2311501
BatchID: 281902
Extraction Method: E200.8
Analytical Method: E200.8
Unit: µg/L
Sample ID: MB/LCS/LCSD-281902

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	0.26	0.50	-	-	-
Copper	ND	0.63	1.5	-	-	-
Iron	ND	22	50	-	-	-
Lead	ND	0.19	0.50	-	-	-
Mercury	ND	0.031	0.050	-	-	-
Molybdenum	ND	0.14	0.50	-	-	-
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	540			500	107	70-130
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Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Arsenic	50	53	50	101	106	85-115	4.97	20
Cadmium	52	54	50	104	108	85-115	3.79	20
Chromium	51	53	50	102	106	85-115	3.36	20
Copper	53	55	50	105	109	85-115	3.78	20
Iron	5200	5200	5000	104	104	85-115	0.0756	20
Lead	51	53	50	103	106	85-115	3.41	20
Mercury	1.3	1.3	1.25	103	106	85-115	2.07	20
Molybdenum	51	52	50	103	104	85-115	1.04	20
Nickel	52	54	50	105	109	85-115	3.71	20
Selenium	52	56	50	104	111	85-115	6.92	20
Silver	53	55	50	106	109	85-115	3.08	20
Zinc	520	550	500	105	109	85-115	4.02	20

Surrogate Recovery

Terbium	540	540	500	107	108	70-130	0.464	20
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Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2311501
Date Prepared: 11/13/2023	BatchID: 282219
Date Analyzed: 11/16/2023	Extraction Method: SM2540 C-1997
Instrument: WetChem	Analytical Method: SM2540 C
Matrix: Water	Unit: mg/L
Project: Marsh Landing DDSQ Quarterly	Sample ID: MB/LCS/LCSD-282219

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	970	968	1000	97	97	80-120	0.206	10



Quality Control Report

Client: NRG Energy, LLC

WorkOrder: 2311501

Date Prepared: 11/10/2023

BatchID: 282104

Date Analyzed: 11/10/2023

Extraction Method: SM2540 D-1997

Instrument: WetChem

Analytical Method: SM2540 D

Matrix: Water

Unit: mg/L

Project: Marsh Landing DDSQ Quarterly

Sample ID: MB/LCS/LCSD-282104

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	97.0	94.0	100	97	94	80-120	3.14	10



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2311501

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 Quarterly

Bill to:

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

Requested TATs:

**5 days;
7 days;**

Date Received: **11/08/2023**

Date Logged: **11/08/2023**

Lab ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
2311501-001	IW-001	Water	11/8/2023 11:00	<input type="checkbox"/>	B	A	E	A	C	D							

Test Legend:

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

Prepared by: Valerie Alfaro

Comments: Use QUOTE 212372 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: 2311501
QC Level: LEVEL 2
Date Logged: 11/8/2023

Comments Use QUOTE 212372 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

LabID	ClientSampID	Matrix	Test Name	Containers /Composites	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"/>	11/8/2023 11:00	5 days	11/15/2023	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"/>	11/8/2023 11:00	7 days	11/17/2023	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"/>	11/8/2023 11:00	5 days	11/15/2023	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"/>	11/8/2023 11:00	5 days	11/15/2023	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"/>	11/8/2023 11:00	5 days	11/15/2023	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.

2311501

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: invoices@clearwayenergy.com P.O. No.: 4501914176				Plant: Marsh Landing Title: DDSD Phase: Quarterly 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.	COD (SM 5220D)	BOD (SM 5210B)	TDS (SM 2540B)	TSS (SM 2540D)
ML-23-106	11/8/23	1100	DDSD	Quarterly	Wastewater	C-24	IW-001	2	Amber VOAs	43	H ₂ SO ₄ (pH<2, 4°C)	X			
ML-23-107	11/8/23	1100	DDSD	Quarterly	Wastewater	C-24	IW-001	1	HDPE Bottle	1,000	None (ZHS, 4°C)		X		
ML-23-108	11/8/23	1100	DDSD	Quarterly	Wastewater	C-24	IW-001	1	HDPE Bottle	500	None (4°C)			X	
ML-23-109	11/8/23	1100	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								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. Please report all results with the units of mg/L. RESULTS AND PRICING PER QUOTE ID: 212372. *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			11-8-23			1100			
Relinquished by: Ryan Robinson 925-864-7701						NRG Energy Services			11/8/23			1228			
Received by:						McCampbell Analytical, Inc.			11/8/23			1228			
Relinquished by:									3.1week						
Received by:															
Relinquished by:															
Received by:															

2311501

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@clearwayenergy.com P.O. No.: 4501914176				Plant: Marsh Landing Title: DDSD Phase: Quarterly Manager: David Frandsen				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-23-110	11/8/23	1100	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: 212372. *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			11-8-23		1100				
Relinquished by: Ryan Robinson 925-864-7701						NRG Energy Services			11/8/23		1228				
Received by:						McCampbell Analytical, Inc.			11/8/23		1228				
Relinquished by:															
Received by:															
Relinquished by:															
Received by:															



Sample Receipt Checklist

Client Name: NRG Energy, LLC
 Project: Marsh Landing DDSD Quarterly
 WorkOrder No: 2311501 Matrix: Water
 Carrier: Client Drop-In

Date and Time Received: 11/8/2023 12:28
 Date Logged: 11/8/2023
 Received by: Lilly Ortiz
 Logged by: Valerie Alfaro

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 checked="" type="checkbox"/>	NA <input 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: 3.1°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: