

DOCKETED

Docket Number:	08-AFC-03C
Project Title:	Marsh Landing Generating Station Compliance
TN #:	249525
Document Title:	Part 4 - 2022 Marsh landing CEC Annual Report
Description:	Annual Compliance Operations Report 2022, Part 4
Filer:	David Frandsen
Organization:	NRG
Submitter Role:	Applicant
Submission Date:	3/31/2023 8:56:05 AM
Docketed Date:	3/31/2023



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, 2022

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	07/11/2022



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

July 11, 2022

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

**Subject: 2022 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 2022 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, 2022. This report includes monthly flow data and quarterly analytical data required to be collected in 2022. Semiannual analytical data was submitted with the first quarterly report for 2022. Data are summarized in the attached tables.

It should be noted that a Special Discharge Permit (#SDP-0601-1229) was obtained from Delta Diablo for the period of June 1 – June 30, 2022 which allowed for an increased flow rate of 34 gpm which when added to our current permit (0311963-S0) of 21 gpm allowed for a total discharge flow rate of 55 GPM with a daily total discharge of 79,200 Gallons per day.

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 2022 Monthly Flow Data
Table 3:	May 2022 Monthly Flow Data
Table 4:	June 2022 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 2022
Report Type	Quarterly

Constituent	Sample Date	Permit Limit	Result	Units
Field pH	4/19/2022	6-10	7.6	S.U.
BOD	4/19/2022	-	33	mg/L
COD	4/19/2022	-	50	mg/L
Arsenic	4/19/2022	0.15	0.00051	mg/L
Cadmium	4/19/2022	0.1	0.000049 J	mg/L
Chromium	4/19/2022	0.5	0.00066	mg/L
Copper	4/19/2022	0.5	0.015	mg/L
Iron	4/19/2022	-	0.18	mg/L
Lead	4/19/2022	0.5	ND	mg/L
Mercury	4/19/2022	0.003	ND	mg/L
Molybdenum	4/19/2022	-	0.0016	mg/L
Nickel	4/19/2022	0.5	0.0042	mg/L
Selenium	4/19/2022	0.25	0.00017 J	mg/L
Silver	4/19/2022	0.2	ND	mg/L
Zinc	4/19/2022	1.0	0.045	mg/L
TDS	4/19/2022	-	340	mg/L
TSS	4/19/2022	-	14.4	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-22
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuous, measured by flow meter
Sample Date	4/1/2022 - 4/30/2022
Permit Limits (s.u.)	NTE 30,240 gpd. NTE 21 gpm +10% (23.1 gpm) for 15 consecutive minutes or 30 minutes in a 24-hour period

Day	Total Flow (gpd)	Instantaneous Max (gpm)	Minutes per Day of Flow exceeding 23.1 gpm
1	0	0.00	
2	0	0.00	
3	0	0.00	
4	4,921	19.62	
5	8,980	19.58	
6	2,799	19.68	
7	6,984	19.60	
8	0	0.00	
9	0	0.00	
10	0	0.00	
11	514	16.82	
12	0	0.00	
13	0	0.00	
14	0	0.00	
15	0	0.00	
16	492	12.06	
17	0	0.00	
18	16,870	19.91	
19	25,250	19.74	
20	0	0.00	
21	6,311	19.66	
22	3,843	19.58	
23	5,812	19.57	
24	0	0.00	
25	4,980	19.63	
26	28,026	19.66	
27	6,823	19.59	
28	0	0.00	
29	448	16.67	
30	0	0.00	

Total Monthly Flow (gal)	123,052	Did flow exceed limits?	NO
Daily Max Flow (gpd)	28,026	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	4,102		

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-22
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuous, measured by flow meter
Sample Date	5/1/2022 - 5/31/2022
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	6,315	20.38	
3	11,647	19.16	
4	2,014	18.88	
5	8,100	20.21	
6	0	0.00	
7	0	0.00	
8	0	0.00	
9	474	16.76	
10	0	0.00	
11	4,187	19.41	
12	4,543	19.16	
13	5,174	19.13	
14	5,766	19.10	
15	0	0.00	
16	14,981	19.13	
17	1,765	19.04	
18	3,455	20.44	
19	4,377	19.14	
20	1,636	19.08	
21	9,694	19.07	
22	0	0.00	
23	4,569	19.15	
24	6,436	19.11	
25	0	0.00	
26	10,838	19.15	
27	0	0.00	
28	0	0.00	
29	0	0.00	
30	4,693	19.28	
31	8,794	19.23	

Total Monthly Flow (gal)	119,458	Did flow exceed limits?	NO
Daily Max Flow (gpd)	14,981	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	3,853		

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-22
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuous, measured by flow meter
Sample Date	6/1/2022 - 6/30/2022
Permit Limits (s.u.)	NTE 79,200 gpd. NTE 55 gpm +10% (60.5 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 60.5 gpm
1	9,367	36.10	
2	2	1.86	
3	451	16.89	
4	0	0.00	
5	0	0.00	
6	6,770	25.10	
7	0	0.00	
8	9,429	35.22	
9	0	0.00	
10	22,308	28.00	
11	7,657	27.89	
12	0	0.00	
13	13,164	36.60	
14	17,842	36.92	
15	39,194	50.37	
16	0	0.00	
17	0	0.00	
18	0	0.00	
19	0	0.00	
20	8,726	36.65	
21	17,003	51.11	
22	64,879	50.55	
23	24,000	51.06	
24	36,620	50.09	
25	4,055	36.90	
26	0	0.00	
27	6,547	29.76	
28	2,690	30.00	
29	5,262	37.25	
30	5,054	37.30	

* - Permit Flows from June 1 - June 30 were increased under permit #SDP-0601-1229 to 55 GPM with a total daily flow of 79,200 gallons per day.

Total Monthly Flow (gal)	301,018	Did flow exceed limits?	NO
Daily Max Flow (gpd)	64,879	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	10,034		

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 4500-H+B
Unit:								standard
Reporting Limit:								0.18
Method Detection Limit:								0.06
FAC Combined Waste Water	ML-22-045	4/19/22	1300	4/19/22	1300	Wastewater	Grab	7.6

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

Environmental Engineer: David Frandsen
Signature: David Frandsen
Date: April 19, 2022

Sampling Technologist: James E Robinson
Signature: James E. Robinson
Date: 19-Apr-22



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2204A69

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: 04/19/2022

Analytical Report reviewed & approved for release on 04/26/2022 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: 2204A69

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
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 (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: NRG Energy, LLC

WorkOrder: 2204A69

Project: Marsh Landing DDSD Quarterly

Analytical Qualifiers

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

Quality Control Qualifiers

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



Analytical Report

Client: NRG Energy, LLC
Date Received: 04/19/2022 17:33
Date Prepared: 04/20/2022
Project: Marsh Landing DDSQ Quarterly

WorkOrder: 2204A69
Extraction Method: SM5210B
Analytical Method: SM5210 B
Unit: mg/L

Biochemical Oxygen Demand (BOD)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2204A69-001B	Water	04/19/2022 13:00	WetChem	243938

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
BOD	33	16	16	4	04/25/2022 11:53

Analyst(s): MGO



Analytical Report

Client: NRG Energy, LLC
Date Received: 04/19/2022 17:33
Date Prepared: 04/21/2022
Project: Marsh Landing DDSQ Quarterly

WorkOrder: 2204A69
Extraction Method: SM5220 D-1997
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
FAC Combined Wastewater	2204A69-001A	Water	04/19/2022 13:00	SPECTROPHOTOMETER2	243995

Analytes	Result	MDL	RL	DF	Date Analyzed
COD	50	9.5	10	1	04/21/2022 18:45

Analyst(s): NYG



Analytical Report

Client: NRG Energy, LLC
Date Received: 04/19/2022 17:33
Date Prepared: 04/21/2022
Project: Marsh Landing DDSD Quarterly

WorkOrder: 2204A69
Extraction Method: E200.8
Analytical Method: E200.8
Unit: mg/L

Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2204A69-001E	Water	04/19/2022 13:00	ICP-MS5 186SMPL.d	243847

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Arsenic	0.00051		0.000074	0.00050	1	04/21/2022 21:35
Cadmium	0.000049	J	0.000043	0.00050	1	04/21/2022 21:35
Chromium	0.00066		0.00028	0.00050	1	04/21/2022 21:35
Copper	0.015		0.00075	0.0015	1	04/21/2022 21:35
Iron	0.18		0.026	0.050	1	04/21/2022 21:35
Lead	ND		0.00019	0.00050	1	04/21/2022 21:35
Mercury	ND		0.000033	0.000050	1	04/21/2022 21:35
Molybdenum	0.0016		0.00013	0.00050	1	04/21/2022 21:35
Nickel	0.0042		0.00033	0.00050	1	04/21/2022 21:35
Selenium	0.00017	J	0.00016	0.00050	1	04/21/2022 21:35
Silver	ND		0.000092	0.00050	1	04/21/2022 21:35
Zinc	0.045		0.014	0.020	1	04/21/2022 21:35

Surrogates	REC (%)	Limits
Terbium	113	70-130

Analyst(s): AL



Analytical Report

Client: NRG Energy, LLC
Date Received: 04/19/2022 17:33
Date Prepared: 04/21/2022
Project: Marsh Landing DDSQ Quarterly

WorkOrder: 2204A69
Extraction Method: SM2540 C-1997
Analytical Method: SM2540 C-1997
Unit: mg/L

Total Dissolved Solids

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2204A69-001C	Water	04/19/2022 13:00	WetChem	244027

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Total Dissolved Solids	340	10.0	10.0	1	04/22/2022 10:45

Analyst(s): HAD



Analytical Report

Client: NRG Energy, LLC
Date Received: 04/19/2022 17:33
Date Prepared: 04/26/2022
Project: Marsh Landing DDSQ Quarterly

WorkOrder: 2204A69
Extraction Method: SM2540 D-1997
Analytical Method: SM2540 D-1997
Unit: mg/L

Total Suspended Solids

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2204A69-001D	Water	04/19/2022 13:00	WetChem	244251

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Total Suspended Solids	14.4	2.00	2.00	2	04/26/2022 15:40

Analyst(s): MGO



Quality Control Report

Client: NRG Energy, LLC

WorkOrder: 2204A69

Date Prepared: 04/20/2022

BatchID: 243938

Date Analyzed: 04/25/2022

Extraction Method: SM5210B

Instrument: WetChem

Analytical Method: SM5210 B

Matrix: Water

Unit: mg/L

Project: Marsh Landing DDSQ Quarterly

Sample ID: MB/LCS/LCSD-243938

QC Summary Report for BOD

Analyte	MB Result	MDL	RL			
BOD	ND	4.0	5.0	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
BOD	170	200	198	85	98	80-120	15.2	16



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2204A69
Date Prepared: 04/21/2022	BatchID: 243995
Date Analyzed: 04/21/2022	Extraction Method: SM5220 D-1997
Instrument: SPECTROPHOTOMETER2	Analytical Method: SM5220 D-1997
Matrix: Water	Unit: mg/L
Project: Marsh Landing DDSD Quarterly	Sample ID: MB/LCS/LCSD-243995

QC Summary Report for COD

Analyte	MB Result	MDL	RL			
COD	ND	9.5	10	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
COD	100	100	100	102	100	90-110	1.98	20



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 04/21/2022
Date Analyzed: 04/21/2022
Instrument: ICP-MS5
Matrix: Water
Project: Marsh Landing DDSD Quarterly

WorkOrder: 2204A69
BatchID: 243847
Extraction Method: E200.8
Analytical Method: E200.8
Unit: µg/L
Sample ID: MB/LCS/LCSD-243847
 2204A69-001EMS/MSD

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	540			500	108	70-130



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 04/21/2022
Date Analyzed: 04/21/2022
Instrument: ICP-MS5
Matrix: Water
Project: Marsh Landing DDSD Quarterly

WorkOrder: 2204A69
BatchID: 243847
Extraction Method: E200.8
Analytical Method: E200.8
Unit: µg/L
Sample ID: MB/LCS/LCSD-243847
 2204A69-001EMS/MSD

QC Summary Report for Metals

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Arsenic	53	53	50	106	105	85-115	0.351	20
Cadmium	55	53	50	109	107	85-115	2.41	20
Chromium	53	53	50	106	105	85-115	0.615	20
Copper	52	52	50	104	103	85-115	1.00	20
Iron	5000	5000	5000	99	100	85-115	0.304	20
Lead	52	52	50	105	104	85-115	0.865	20
Mercury	1.3	1.3	1.25	106	103	85-115	2.52	20
Molybdenum	51	51	50	101	103	85-115	1.42	20
Nickel	51	51	50	102	102	85-115	0.384	20
Selenium	52	52	50	104	104	85-115	0.154	20
Silver	51	52	50	102	103	85-115	1.19	20
Zinc	530	530	500	107	106	85-115	1.16	20

Surrogate Recovery

Terbium	540	540	500	108	107	70-130	0.285	20
---------	-----	-----	-----	-----	-----	--------	-------	----

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Arsenic	1	56	54	50	0.0005100	112	107	85-115	4.08	20
Cadmium	1	55	54	50	ND	111	107	85-115	3.39	20
Chromium	1	53	51	50	0.0006560	107	103	85-115	4.01	20
Copper	1	66	64	50	0.01528	132,F10	128,F10	85-115	3.06	20
Iron	1	5300	5100	5000	0.1797	106	103	85-115	2.85	20
Lead	1	55	53	50	ND	109	106	85-115	3.07	20
Mercury	1	1.3	1.3	1.25	ND	108	102	85-115	5.65	20
Molybdenum	1	55	55	50	0.001614	110	110	85-115	0.334	20
Nickel	1	55	54	50	0.004158	111	107	85-115	3.11	20
Selenium	1	53	51	50	ND	106	103	85-115	2.61	20
Silver	1	51	51	50	ND	102	102	85-115	0.473	20
Zinc	1	570	560	500	0.04511	113	111	85-115	2.07	20

Surrogate Recovery

Terbium	1	570	550	500		113	110	70-130	2.89	20
---------	---	-----	-----	-----	--	-----	-----	--------	------	----



Quality Control Report

Client: NRG Energy, LLC

WorkOrder: 2204A69

Date Prepared: 04/21/2022

BatchID: 244027

Date Analyzed: 04/22/2022

Extraction Method: SM2540 C-1997

Instrument: WetChem

Analytical Method: SM2540 C-1997

Matrix: Water

Unit: mg/L

Project: Marsh Landing DDSQ Quarterly

Sample ID: MB/LCS/LCSD-244027

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	980	966	1000	98	97	80-120	1.44	10



Quality Control Report

Client: NRG Energy, LLC

WorkOrder: 2204A69

Date Prepared: 04/26/2022

BatchID: 244251

Date Analyzed: 04/26/2022

Extraction Method: SM2540 D-1997

Instrument: WetChem

Analytical Method: SM2540 D-1997

Matrix: Water

Unit: mg/L

Project: Marsh Landing DDSQ Quarterly

Sample ID: MB/LCS/LCSD-244251

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	82.0	88.0	100	82	88	80-120	7.06	10



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2204A69

ClientCode: GOA

QuoteID: 212372

- 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: 04/19/2022
Date Logged: 04/19/2022

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
2204A69-001	FAC Combined Wastewater	Water	4/19/2022 13:00	<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	

Project Manager: Susan Thompson

Prepared by: Adrianna Cardoza

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: 2204A69
QC Level: LEVEL 2
Date Logged: 4/19/2022

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

WaterTrax WriteOn 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	FAC Combined Wastewater	Water	SM5220D (COD)	2	aVOA w/ H2SO4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4/19/2022 13:00	5 days	4/26/2022	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"/>	4/19/2022 13:00	7 days	4/28/2022	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"/>	4/19/2022 13:00	5 days	4/26/2022	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"/>	4/19/2022 13:00	5 days	4/26/2022	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"/>	4/19/2022 13:00	5 days	4/26/2022	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).

- 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.

22041A69

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@calwaterenergy.com P.O. No.: 4501914176				Plant: Marsh Landing Title: DDSD Quarterly Phase: David Frandsen Manager:				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	BOD	TDS	TSS	
ML-22-040	19-Apr-22	1300	DDSD	Quarterly	Wastewater	C-24	FAC Combined Wastewater	2	Amber VOAs	43	H ₂ SO ₄ (pH<2, 4°C)	X				
ML-22-041	19-Apr-22	1300	DDSD	Quarterly	Wastewater	C-24	FAC Combined Wastewater	1	HDPE Bottle	1,000	None (ZHS, 4°C)		X			
ML-22-042	19-Apr-22	1300	DDSD	Quarterly	Wastewater	C-24	FAC Combined Wastewater	1	HDPE Bottle	500	None (4°C)			X		
ML-22-043	19-Apr-22	1300	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@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.								
PRINTED NAME	SIGNATURE	COMPANY	DATE	TIME												
Sampled by	James E. Robinson.	<i>James E. Rob.</i>	NRG Energy Services	19-Apr-22	1300											
Relinquished by	James E. Robinson.	<i>James E. Rob.</i>	NRG Energy Services	19-Apr-22	1733											
Received by	<i>Agulshina v.</i>	<i>Agulshina v.</i>	McCampbell Analytical, Inc.	19-Apr-22	1733											
Relinquished by																
Received by																
Relinquished by																
Received by																

1-DC
WET

22041A69

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: 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.				
ML-22-044	19-Apr-22	1300	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: James E. Robinson.			<i>James E. Robn.</i>			NRG Energy Services			19-Apr-22		1300				
Relinquished by: James E. Robinson.			<i>James E. Robn.</i>			NRG Energy Services			19-Apr-22		1733				
Received by: <i>Agustina V.</i>			<i>Agustina V.</i>			McCampbell Analytical, Inc.			19-Apr-22		1733				
Relinquished by:															
Received by:															
Relinquished by:															
Received by:															

1.00
 WET



Sample Receipt Checklist

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

Date and Time Received: **4/19/2022 17:33**
Date Logged: **4/19/2022**
Received by: **Agustina Venegas**
Logged by: **Adrianna Cardoza**

WorkOrder No: **2204A69** Matrix: Water
Carrier: Client Drop-In

Chain of Custody (COC) Information

- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Sample IDs noted by Client on COC? Yes No
- Date and Time of collection noted by Client on COC? Yes No
- Sampler's name noted on COC? Yes No
- COC agrees with Quote? Yes No NA

Sample Receipt Information

- Custody seals intact on shipping container/cooler? Yes No NA
- Custody seals intact on sample bottles? Yes No NA
- Shipping container/cooler in good condition? Yes No
- Samples in proper containers/bottles? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes No NA
- Samples Received on Ice? Yes No

(Ice Type: WET ICE)

- Sample/Temp Blank temperature Temp: 1°C NA
- ZHS conditional analyses: VOA meets zero headspace requirement (VOCs, TPHg/BTEX, RSK)? Yes No NA
- Sample labels checked for correct preservation? Yes No
- pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)? Yes No NA

UCMR Samples:

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

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)



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, 2022

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	<i>Daniel Leach for Joe Moura</i>
Duly Authorized Representative Print	Joe Moura
Date	<i>Oct 14, 2022</i>



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

October 10, 2022

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

**Subject: 2022 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 2022 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, 2022. This report includes monthly flow data and quarterly and semiannual analytical data required to be collected in 2022. 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.

It should be noted that a Special Discharge Permit (#SDP-0701-1230) was obtained from Delta Diablo for the period of July 1 – Oct. 31, 2022 which allowed for an increased flow rate of 34 gpm which when added to our current permit (0311963-S0) of 21 gpm allowed for a total discharge flow rate of 55 GPM with a daily total discharge of 79,200 Gallons per day.

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

Sincerely,

A handwritten signature in blue ink that reads "Daniel Leach for Joe Moura". The signature is written in a cursive style.

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 2022 Monthly Flow Data
Table 4:	August 2022 Monthly Flow Data
Table 5:	September 2022 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	July - September 2022
Report Type	Quarterly

Constituent	Sample Date	Permit Limit	Result	Units
Field pH	7/19/2022	6-10	7.9	S.U.
BOD	7/19/2022	-	ND	mg/L
COD	7/19/2022	-	66.0	mg/L
Arsenic	7/19/2022	0.15	0.00068	mg/L
Cadmium	7/19/2022	0.1	ND	mg/L
Chromium	7/19/2022	0.5	0.00049 J	mg/L
Copper	7/19/2022	0.5	0.013	mg/L
Iron	7/19/2022	-	0.11	mg/L
Lead	7/19/2022	0.5	ND	mg/L
Mercury	7/19/2022	0.003	ND	mg/L
Molybdenum	7/19/2022	-	0.0021	mg/L
Nickel	7/19/2022	0.5	0.0039	mg/L
Selenium	7/19/2022	0.25	0.00023 J	mg/L
Silver	7/19/2022	0.2	ND	mg/L
Zinc	7/19/2022	1.0	0.029	mg/L
TDS	7/19/2022	-	444.0	mg/L
TSS	7/19/2022	-	7.4	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 estimate.

Table 2
 Semiannual 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	July - September 2022
Report Type	Semiannual

Constituent	Sample Date	Permit Limit	Result	Units
Cyanide	7/19/2022	0.20	ND	mg/L
Total Phenolics (EPA 420.4)	7/19/2022	1.0	ND	mg/L
Ammonia as N	7/19/2022	200	6.0	mg/L
Oil and Grease Animal/Vegetable (HEM)	7/19/2022	300	54	mg/L
Oil and Grease Petroleum/Mineral (SGT-HEM)	7/19/2022	100	1.4	mg/L
<u>TOXIC ORGANICS</u>				
Bromodichloromethane	7/19/2022	-	0.0029	mg/L
Bromoform	7/19/2022	-	0.00067	mg/L
Chloroform	7/19/2022	-	0.0017	mg/L
Dibromochloromethane	7/19/2022	-	0.0030	mg/L
<u>TOTAL TOXIC ORGANICS</u>	7/19/2022	2.0	0.0083	mg/L

mg/L = Milligrams per liter

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

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-22
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuous, measured by flow meter
Sample Date	7/1/2022 - 7/31/2022
Permit Limits (s.u.)	NTE 79,200 gpd. NTE 55 gpm +10% 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 60.5 gpm
1	0	0.00	
2	0	0.00	
3	0	0.00	
4	0	0.00	
5	465	15.44	
6	2,837	26.05	
7	4,550	28.59	
8	8,717	37.56	
9	0	0.00	
10	0	0.00	
11	437	16.59	
12	11	11.29	
13	0	0.00	
14	0	0.00	
15	0	0.00	
16	0	0.00	
17	0	0.00	
18	19,958	31.47	
19	28,323	49.35	
20	10,129	48.39	
21	2,335	37.08	
22	0	0.00	
23	0	0.00	
24	0	0.00	
25	13,134	36.80	
26	1,986	36.86	
27	11,022	48.97	
28	9,643	35.90	
29	548	16.99	
30	6,116	27.12	
31	0	0.00	

* - Permit Flows in July were increased with a [Special Discharge Permit \(SDP-0701-1230\)](#) to 55 GPM with a maximum total daily flow of 79,200 gallons per day.

Total Monthly Flow (gal)	120,211	Did flow exceed limits?	NO
Daily Max Flow (gpd)	79,200	Flow above daily max (79,200 gpd)?	NO
Average Monthly Flow (gpd)	3,878		

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-22		
Report Type	Quarterly		
Constituent	Flow		
Sample Type	Continuous, measured by flow meter		
Sample Date	8/1/2022 - 8/31/2022		
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 79,200 gpd. NTE 55 gpm +10% (60.5 gpm) for 15 consecutive minutes or 30 minutes in a 24-hour period		
			Minutes per Day of Flow exceeding 60.5 gpm
Day	Total Flow (gpd)	Instantaneous Max (gpm)	
1	6,987	36.28	
2	7,326	28.48	
3	8,683	36.94	
4	0	0.00	
5	3,864	26.06	
6	6,877	29.23	
7	0	0.00	
8	7,468	35.30	
9	3,276	35.86	
10	3,767	25.61	
11	3,750	28.65	
12	494	17.09	
13	0	0.00	
14	0	0.00	
15	13,133	36.35	
16	23,783	48.61	
17	25,652	48.53	
18	5,999	29.04	
19	9,170	37.75	
20	0	0.00	
21	449	16.45	
22	0	0.00	
23	5,760	23.16	
24	2,213	24.74	
25	464	16.28	
26	4,790	35.58	
27	2,690	36.12	
28	428	15.80	
29	8,223	47.06	
30	14,455	37.08	
31	18,755	50.82	

* - Permit Flows from July 1 - October 31 were increased under permit #SDP-0701-1230 to 55 GPM with a total daily flow of 79,200 gallons per day.

Total Monthly Flow (gal)	188,455	Did flow exceed limits?	NO
Daily Max Flow (gpd)	79,200	Flow above daily max (79,200 gpd)?	NO
Average Monthly Flow (gpd)	6,079		

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-22
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuous, measured by flow meter
Sample Date	9/1/2022 - 9/31/2022
Permit Limits (s.u.)	NTE 79,200 gpd. NTE 55 gpm +10% (60.5 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 60.5 gpm
1	45,657	50.80	
2	71,999	50.66	
3	48,334	50.11	
4	31,474	50.91	
5	49,247	51.06	
6	74,572	54.54	
7	76,414	54.56	
8	77,441	54.80	
9	77,757	54.39	
10	76,619	54.09	
11	50,572	52.78	
12	0	0.00	
13	363	15.51	
14	8,371	37.12	
15	0	0.00	
16	411	16.47	
17	6,445	27.84	
18	0	0.00	
19	0	0.00	
20	0	0.00	
21	423	16.53	
22	9,522	35.31	
23	0	0.00	
24	0	0.00	
25	427	16.32	
26	0	0.00	
27	0	0.00	
28	0	0.00	
29	0	0.00	
30	11,023	47.05	

* - Permit Flows from July 1 - October 31 were increased under permit #SDP-0701-1230 to 55 GPM with a total daily flow of 79,200 gallons per day.

Total Monthly Flow (gal)	717,072	Did flow exceed limits?	NO
Daily Max Flow (gpd)	79,200	Flow above daily max (79,200 gpd)?	NO
Average Monthly Flow (gpd)	23,902		

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
FAC Combined Waste Water	ML-22-075	7/19/22	1413	7/19/22	1413	Wastewater	Grab	7.9

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

Environmental Engineer David Frandsen

Signature: David Frandsen

Date: July 21, 2022

Sampling Technologist: James E Robinson

Signature: James E. Rob.

Date: 19-Jul-22



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2207A76

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: 07/19/2022

Analytical Report reviewed & approved for release on 07/27/2022 by:

Jennifer Lagerbom
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: 2207A76

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
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 (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: NRG Energy, LLC

WorkOrder: 2207A76

Project: Marsh Landing DDSD Quarterly

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
Date Received: 07/19/2022 15:58
Date Prepared: 07/20/2022
Project: Marsh Landing DDSD Quarterly

WorkOrder: 2207A76
Extraction Method: SM5210B
Analytical Method: SM5210 B
Unit: mg/L

Biochemical Oxygen Demand (BOD)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2207A76-001B	Water	07/19/2022 14:00	WetChem	249945

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
BOD	ND	40	40	10	07/25/2022 14:11

Analyst(s): JRA

Analytical Comments: i9



Analytical Report

Client: NRG Energy, LLC
Date Received: 07/19/2022 15:58
Date Prepared: 07/20/2022
Project: Marsh Landing DDSQ Quarterly

WorkOrder: 2207A76
Extraction Method: SM5220 D-1997
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
FAC Combined Wastewater	2207A76-001A	Water	07/19/2022 14:00	SPECTROPHOTOMETER2	249965

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
COD	66	9.5	10	1	07/20/2022 12:28

Analyst(s): NYG



Analytical Report

Client: NRG Energy, LLC
Date Received: 07/19/2022 15:58
Date Prepared: 07/20/2022
Project: Marsh Landing DDSD Quarterly

WorkOrder: 2207A76
Extraction Method: E200.8
Analytical Method: E200.8
Unit: mg/L

Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2207A76-001E	Water	07/19/2022 14:00	ICP-MS5 146SMPL.d	249857

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Arsenic	0.00068		0.000074	0.00050	1	07/20/2022 16:55
Cadmium	ND		0.000043	0.00050	1	07/20/2022 16:55
Chromium	0.00049	J	0.00028	0.00050	1	07/20/2022 16:55
Copper	0.013		0.00075	0.0015	1	07/20/2022 16:55
Iron	0.11		0.026	0.050	1	07/20/2022 16:55
Lead	ND		0.00019	0.00050	1	07/20/2022 16:55
Mercury	ND		0.000033	0.000050	1	07/20/2022 16:55
Molybdenum	0.0021		0.00013	0.00050	1	07/20/2022 16:55
Nickel	0.0039		0.00033	0.00050	1	07/20/2022 16:55
Selenium	0.00023	J	0.00016	0.00050	1	07/20/2022 16:55
Silver	ND		0.000092	0.00050	1	07/20/2022 16:55
Zinc	0.029		0.014	0.020	1	07/20/2022 16:55

Surrogates	REC (%)	Limits
Terbium	111	70-130

Analyst(s): AL



Analytical Report

Client: NRG Energy, LLC

WorkOrder: 2207A76

Date Received: 07/19/2022 15:58

Extraction Method: SM2540 C-1997

Date Prepared: 07/19/2022

Analytical Method: SM2540 C-1997

Project: Marsh Landing DDSD Quarterly

Unit: mg/L

Total Dissolved Solids

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2207A76-001C	Water	07/19/2022 14:00	WetChem	249904

Analytes	Result	MDL	RL	DF	Date Analyzed
Total Dissolved Solids	444	10.0	10.0	1	07/19/2022 19:50

Analyst(s): JRA



Analytical Report

Client: NRG Energy, LLC

WorkOrder: 2207A76

Date Received: 07/19/2022 15:58

Extraction Method: SM2540 D-1997

Date Prepared: 07/20/2022

Analytical Method: SM2540 D-1997

Project: Marsh Landing DDSD Quarterly

Unit: mg/L

Total Suspended Solids

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2207A76-001D	Water	07/19/2022 14:00	WetChem	249947

Analytes	Result	MDL	RL	DF	Date Analyzed
Total Suspended Solids	7.40	1.00	1.00	1	07/20/2022 13:55

Analyst(s): MGO



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 07/20/2022
Date Analyzed: 07/25/2022
Instrument: WetChem
Matrix: Water
Project: Marsh Landing DDSQ Quarterly

WorkOrder: 2207A76
BatchID: 249945
Extraction Method: SM5210B
Analytical Method: SM5210 B
Unit: mg/L
Sample ID: MB/LCS/LCSD-249945

QC Summary Report for BOD

Analyte	MB Result	MDL	RL			
BOD	ND	4.0	4.0	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
BOD	180	200	198	93	103	80-120	10.8	16



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 07/20/2022
Date Analyzed: 07/20/2022
Instrument: SPECTROPHOTOMETER2
Matrix: Water
Project: Marsh Landing DDSD Quarterly

WorkOrder: 2207A76
BatchID: 249965
Extraction Method: SM5220 D-1997
Analytical Method: SM5220 D-1997
Unit: mg/L
Sample ID: MB/LCS/LCSD-249965
 2207A76-001AMS/MSD

QC Summary Report for COD

Analyte	MB Result	MDL	RL			
COD	ND	9.5	10	-	-	-

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

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
COD	1	150	150	100	66.00	82	80	80-120	1.36	20



Quality Control Report

Client: NRG Energy, LLC

WorkOrder: 2207A76

Date Prepared: 07/20/2022

BatchID: 249857

Date Analyzed: 07/20/2022

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-249857

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	560			500	112	70-130
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Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Arsenic	54	53	50	107	106	85-115	0.938	20
Cadmium	53	54	50	106	107	85-115	0.878	20
Chromium	53	53	50	107	106	85-115	0.431	20
Copper	55	55	50	110	110	85-115	0.164	20
Iron	5200	5100	5000	105	103	85-115	1.71	20
Lead	52	52	50	104	104	85-115	0.168	20
Mercury	1.3	1.2	1.25	102	98	85-115	3.99	20
Molybdenum	52	52	50	104	104	85-115	0.339	20
Nickel	53	53	50	106	106	85-115	0.0867	20
Selenium	54	53	50	108	107	85-115	0.860	20
Silver	52	53	50	105	106	85-115	1.60	20
Zinc	540	540	500	109	107	85-115	1.17	20

Surrogate Recovery

Terbium	560	560	500	111	111	70-130	0.0747	20
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Quality Control Report

Client: NRG Energy, LLC

WorkOrder: 2207A76

Date Prepared: 07/19/2022

BatchID: 249904

Date Analyzed: 07/19/2022

Extraction Method: SM2540 C-1997

Instrument: WetChem

Analytical Method: SM2540 C-1997

Matrix: Water

Unit: mg/L

Project: Marsh Landing DDSQ Quarterly

Sample ID: MB/LCS/LCSD-249904

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	1020	1000	100	102	80-120	1.39	10



Quality Control Report

Client: NRG Energy, LLC

WorkOrder: 2207A76

Date Prepared: 07/20/2022

BatchID: 249947

Date Analyzed: 07/20/2022

Extraction Method: SM2540 D-1997

Instrument: WetChem

Analytical Method: SM2540 D-1997

Matrix: Water

Unit: mg/L

Project: Marsh Landing DDSQ Quarterly

Sample ID: MB/LCS/LCSD-249947

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	87.0	95.0	100	87	95	80-120	8.79	10



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2207A76

ClientCode: GOA

QuoteID: 212372

- 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
4900 N. Scottsdale Road, Ste. 5000
Scottsdale, AZ 85251
invoices@clearwayenergy.coupahost.co

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

**Date Received: 07/19/2022
Date Logged: 07/19/2022**

Lab ID	ClientSampleID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
2207A76-001	FAC Combined Wastewater	Water	7/19/2022 14:00	<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	

Project Manager: Susan Thompson

Prepared by: Cassandra Gallegos

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: 2207A76
QC Level: LEVEL 2
Date Logged: 7/19/2022

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

WaterTrax WriteOn 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)	2	aVOA w/ H2SO4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7/19/2022 14:00	5 days	7/26/2022	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"/>	7/19/2022 14:00	7 days	7/28/2022	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"/>	7/19/2022 14:00	5 days	7/26/2022	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"/>	7/19/2022 14:00	5 days	7/26/2022	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"/>	7/19/2022 14:00	5 days	7/26/2022	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.

2207A76

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@coastalenergy.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	BOD	TDS	TSS
ML-22-061	19-Jul-22	1400	DDSD	Quarterly	Wastewater	C-24	FAC Combined Wastewater	2	Amber VOAs	43	H ₂ SO ₄ (pH<2, 4°C)	X			
ML-22-062	19-Jul-22	1400	DDSD	Quarterly	Wastewater	C-24	FAC Combined Wastewater	1	HDPE Bottle	1,000	None (ZHS, 4°C)		X		
ML-22-063	19-Jul-22	1400	DDSD	Quarterly	Wastewater	C-24	FAC Combined Wastewater	1	HDPE Bottle	500	None (4°C)			X	
ML-22-064	19-Jul-22	1400	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@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.							
PRINTED NAME			SIGNATURE			COMPANY		DATE		TIME					
Sampled by James E. Robinson.			<i>James E. Rob.</i>			NRG Energy Services		19-Jul-22		1400					
Relinquished by James E. Robinson.			<i>James E. Rob.</i>			NRG Energy Services		19-Jul-22		<i>1558</i>					
Received by <i>AGUSTINAV</i>			<i>AGUSTINAV</i>			McCampbell Analytical, Inc.		19-Jul-22		<i>1558</i>					
Relinquished by															
Received by															
Relinquished by															
Received by															

2.70 WEA

2207A76

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: 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-22-065	19-Jul-22	1400	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@nrq.com E-mail CC: james.robinson@nrq.com , joe.moura@nrq.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: James E. Robinson.			<i>James E. Robinson</i>			NRG Energy Services			19-Jul-22		1400				
Relinquished by: James E. Robinson.			<i>James E. Robinson</i>			NRG Energy Services			19-Jul-22		1558				
Received by: <i>Agustin</i>			<i>Agustin</i>			McCampbell Analytical, Inc.			19-Jul-22		1559				
Relinquished by:															
Received by:															
Relinquished by:															
Received by:															



Sample Receipt Checklist

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

Date and Time Received: **7/19/2022 15:58**
 Date Logged: **7/19/2022**
 Received by: **Agustina Venegas**
 Logged by: **Cassandra Gallegos**

WorkOrder №: **2207A76** Matrix: Water
 Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input 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: 2.7°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:



Alpha

Alpha Analytical Laboratories, Inc.

email: clientservices@alpha-labs.com

Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

02 August 2022

McC Campbell Analytical/Alpha Quote 222315

Attn: Lab Reports

1534 Willow Pass Rd.

Pittsburg, CA 94565

RE: Water Quality- J-flags

Work Order: 22G3451

Enclosed are the results of analyses for samples received by the laboratory on 07/27/22 22:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sheri Speaks

Sheri L. Speaks

Project Manager



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

McC Campbell Analytical/Alpha Quote 222315 1534 Willow Pass Rd. Pittsburg CA, 94565	Project Manager: Lab Reports Project: Water Quality- J-flags Project Number: 2207A70	Reported: 08/02/22 10:04
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Bay Area: 262 Rickenbacker Circle | Livermore, CA 94551 | 925-828-6226 | ELAP# 2728
Central Valley: 9090 Union Park Way Suite 113 | Elk Grove, CA 95624 | 916-686-5190 | ELAP# 2922
North Bay: 737 Southpoint Blvd Unit D | Petaluma, CA 94954 | 707-769-3128 | ELAP# 2303
San Diego: 2722 Loker Avenue West Suite A | Carlsbad, CA 92010 | 760-930-2555 | ELAP# 3055
Los Angeles: 1230 E. 223rd Street Suite 205 | Carson, CA 90745 | 424-267-5032 | Service Center

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FAC Combined Wastewater	22G3451-01	Water	07/19/22 14:00	07/27/22 22:50



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
 Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

McCampbell Analytical/Alpha Quote 222315 1534 Willow Pass Rd. Pittsburg CA, 94565	Project Manager: Lab Reports Project: Water Quality- J-flags Project Number: 2207A70	Reported: 08/02/22 10:04
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Miscellaneous Physical/Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	ELAP#	Notes
FAC Combined Wastewater (22G3451-01) Water Sampled: 07/19/22 14:00 Received: 07/27/22 22:50												
Cyanide (total)	ND	0.0020	0.0050	mg/L	1	AH23132	08/01/22 04:52	08/01/22 13:08	10-204-00-1-X	MAP	1551	U



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
 Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

McCampbell Analytical/Alpha Quote 222315 1534 Willow Pass Rd. Pittsburg CA, 94565	Project Manager: Lab Reports Project: Water Quality- J-flags Project Number: 2207A70	Reported: 08/02/22 10:04
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Miscellaneous Physical/Conventional Chemistry Parameters - Quality Control

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch AH23132 - General Preparation

Blank (AH23132-BLK1)			Prepared & Analyzed: 08/01/22								
Cyanide (total)	ND	0.0020	0.0050	mg/L							U
LCS (AH23132-BS1)			Prepared & Analyzed: 08/01/22								
Cyanide (total)	0.208	0.0020	0.0050	mg/L	0.200		104	85-115			
Duplicate (AH23132-DUP1)			Source: 22G3226-01			Prepared & Analyzed: 08/01/22					
Cyanide (total)	ND	0.0020	0.0050	mg/L		0.00215			200	25	U
Matrix Spike (AH23132-MS1)			Source: 22G3226-01			Prepared & Analyzed: 08/01/22					
Cyanide (total)	0.198	0.0020	0.0050	mg/L	0.200	0.00215	97.8	85-115			
Matrix Spike (AH23132-MS2)			Source: 22G3460-01			Prepared & Analyzed: 08/01/22					
Cyanide (total)	0.218	0.0020	0.0050	mg/L	0.200	0.00394	107	85-115			
Matrix Spike Dup (AH23132-MSD1)			Source: 22G3226-01			Prepared & Analyzed: 08/01/22					
Cyanide (total)	0.194	0.0020	0.0050	mg/L	0.200	0.00215	95.8	85-115	2.04	25	



Alpha Analytical Laboratories, Inc. email: clientservices@alpha-labs.com
Corporate: 208 Mason Street | Ukiah, CA 95482 | T: 707-468-0401 | F: 707-468-5267 | ELAP# 1551

McC Campbell Analytical/Alpha Quote 222315
1534 Willow Pass Rd.
Pittsburg CA, 94565

Project Manager: Lab Reports
Project: Water Quality- J-flags
Project Number: 2207A70

Reported:
08/02/22 10:04

Notes and Definitions

- U Analyte included in analysis, but not detected at or above MDL.
- ND Analyte NOT DETECTED at or above the reporting limit
- dry Sample results reported on a dry weight basis
- MDL Method detection limit
- Rec Recovery
- RPD Relative Percent Difference

Non-accredited analytes are reported only when ELAP accreditation for a requested analyte method pair is not available. For a list of accredited analytes, view our certificates at the Company link on our website at www.alpha-labs.com or contact your Project Manager directly.

McC Campbell Analytical, Inc.

1534 Willow Pass Rd
 Pittsburg, CA 94565-1701
 Phone: (925) 252-9262
 Fax: (925) 252-9269

SUB CHAIN-OF-CUSTODY RECORD

20

WorkOrder: 2207A70

ClientCode: GOA

EDF: NO

Subcontractor:

Alpha Analytical Laboratories
 262 Rickenbacker Circle

Livermore, CA 94551

RUSH!

J-flag

QC Level: LEVEL 2

Project Name: Marsh Landing DDSD Semi-Annual

Project Number: 2207A70

2293451

MAI Lab ID	ClientSampID	Source Name	PS Code	Matrix	Collection Date	TAT	Requested Tests (see Legend below)							
							1	2	3	4	5	6		
2207A70-001C	FAC Combined Wastewater			Water	7/19/2022 14:00	STD	1							

Test Legend:

1	Kelada-01 (Cyanide, Total)	2		3	
4		5		6	

Comments: **PLEASE USE 'CLIENT ID' AS THE SAMPLE ID AND EMAIL ASAP!**
PLEASE ANALYZE FOR TOTAL CYANIDE
J-FLAG
SHORT HOLD TIME RUSH 3 DAY

Please email results to Cassandra Gallegos at subdata@mcccampbell.com upon completion.

Relinquished by:	Date/Time	Received by:	Date/Time
Cassandra Gallegos	7-27-22	Rel & Rec By JE	7/27/22 @ 22:50

je



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2207A70

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: 07/19/2022

Analytical Report reviewed & approved for release on 07/27/2022 by:

Yen Cao

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: 2207A70

Project: Marsh Landing DDSD 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
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 (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: NRG Energy, LLC

WorkOrder: 2207A70

Project: Marsh Landing DDSD Semi-Annual

Analytical Qualifiers

- 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: 07/19/2022 15:58
Date Prepared: 07/25/2022
Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2207A70
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
FAC Combined Wastewater	2207A70-001B	Water	07/19/2022 14:00	O&G	250376

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
SGT-HEM	1.4	J	0.75	5.2	1	07/26/2022 15:30

Analyst(s): HN



Analytical Report

Client: NRG Energy, LLC
Date Received: 07/19/2022 15:58
Date Prepared: 07/25/2022
Project: Marsh Landing DDS Semi-Annual

WorkOrder: 2207A70
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
FAC Combined Wastewater	2207A70-001A	Water	07/19/2022 14:00	O&G	250375

Analytes	Result	MDL	RL	DF	Date Analyzed
HEM	54	1.3	5.0	1	07/26/2022 14:00

Analyst(s): HN



Analytical Report

Client: NRG Energy, LLC
Date Received: 07/19/2022 15:58
Date Prepared: 07/19/2022
Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2207A70
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
FAC Combined Wastewater	2207A70-001F	Water	07/19/2022 14:00	GC40 07222283.d	249854

Analytes	Result	MDL	RL	DF	Date Analyzed
Aldrin	ND	0.000000	0.0000020	2	07/23/2022 04:51
a-BHC	ND	0.000000	0.0000020	2	07/23/2022 04:51
b-BHC	ND	0.000001	0.0000020	2	07/23/2022 04:51
d-BHC	ND	0.000000	0.0000020	2	07/23/2022 04:51
g-BHC	ND	0.000000	0.0000020	2	07/23/2022 04:51
Chlordane (Technical)	ND	0.000004	0.000040	2	07/23/2022 04:51
p,p-DDD	ND	0.000000	0.0000020	2	07/23/2022 04:51
p,p-DDE	ND	0.000000	0.0000020	2	07/23/2022 04:51
p,p-DDT	ND	0.000000	0.0000020	2	07/23/2022 04:51
Dieldrin	ND	0.000000	0.0000020	2	07/23/2022 04:51
Endosulfan I	ND	0.000000	0.0000020	2	07/23/2022 04:51
Endosulfan II	ND	0.000000	0.0000020	2	07/23/2022 04:51
Endosulfan sulfate	ND	0.000000	0.0000040	2	07/23/2022 04:51
Endrin	ND	0.000000	0.0000020	2	07/23/2022 04:51
Endrin aldehyde	ND	0.000001	0.0000020	2	07/23/2022 04:51
Heptachlor	ND	0.000000	0.0000020	2	07/23/2022 04:51
Heptachlor epoxide	ND	0.000000	0.0000020	2	07/23/2022 04:51
Toxaphene	ND	0.000004	0.000040	2	07/23/2022 04:51
Aroclor1016	ND	0.000003	0.000040	2	07/23/2022 04:51
Aroclor1221	ND	0.000004	0.000040	2	07/23/2022 04:51
Aroclor1232	ND	0.000007	0.000040	2	07/23/2022 04:51
Aroclor1242	ND	0.000005	0.000040	2	07/23/2022 04:51
Aroclor1248	ND	0.000003	0.000040	2	07/23/2022 04:51
Aroclor1254	ND	0.000003	0.000040	2	07/23/2022 04:51
Aroclor1260	ND	0.000005	0.000040	2	07/23/2022 04:51

Surrogates	REC (%)	Limits	Date Analyzed
Decachlorobiphenyl	86	60-130	07/23/2022 04:51

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



Analytical Report

Client: NRG Energy, LLC
Date Received: 07/19/2022 15:58
Date Prepared: 07/21/2022
Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2207A70
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
FAC Combined Wastewater	2207A70-001H	Water	07/19/2022 14:00	GC10 07212210.D	250198

Analytes	Result	MDL	RL	DF	Date Analyzed
Acrolein (Propenal)	ND	0.0039	0.0050	1	07/21/2022 16:22
Acrylonitrile	ND	0.00023	0.0020	1	07/21/2022 16:22
2-Chloroethyl Vinyl Ether	ND	0.00044	0.0010	1	07/21/2022 16:22

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	71	70-130	07/21/2022 16:22

Analyst(s): LT



Analytical Report

Client: NRG Energy, LLC
Date Received: 07/19/2022 15:58
Date Prepared: 07/23/2022
Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2207A70
Extraction Method: E624.1
Analytical Method: E624.1
Unit: mg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2207A70-001G	Water	07/19/2022 14:00	GC45 07232222.D	250263

Analytes	Result	MDL	RL	DF	Date Analyzed
Benzene	ND	0.00012	0.00020	1	07/23/2022 21:58
Bromodichloromethane	0.0029	0.000025	0.000050	1	07/23/2022 21:58
Bromoform	0.00067	0.00031	0.00050	1	07/23/2022 21:58
Bromomethane	ND	0.00018	0.00050	1	07/23/2022 21:58
Carbon tetrachloride	ND	0.000028	0.000050	1	07/23/2022 21:58
Chlorobenzene	ND	0.00011	0.00050	1	07/23/2022 21:58
Chloroethane	ND	0.00020	0.00050	1	07/23/2022 21:58
Chloroform	0.0017	0.000091	0.00010	1	07/23/2022 21:58
Chloromethane	ND	0.00028	0.00050	1	07/23/2022 21:58
Dibromochloromethane	0.0030	0.000026	0.00015	1	07/23/2022 21:58
1,2-Dichlorobenzene	ND	0.00016	0.00050	1	07/23/2022 21:58
1,3-Dichlorobenzene	ND	0.00012	0.00050	1	07/23/2022 21:58
1,4-Dichlorobenzene	ND	0.000093	0.00050	1	07/23/2022 21:58
1,1-Dichloroethane	ND	0.00015	0.00050	1	07/23/2022 21:58
1,2-Dichloroethane (1,2-DCA)	ND	0.000011	0.000020	1	07/23/2022 21:58
1,1-Dichloroethene	ND	0.000009	0.000010	1	07/23/2022 21:58
trans-1,2-Dichloroethene	ND	0.00011	0.00050	1	07/23/2022 21:58
1,2-Dichloropropane	ND	0.000019	0.00020	1	07/23/2022 21:58
cis-1,3-Dichloropropene	ND	0.00021	0.00050	1	07/23/2022 21:58
trans-1,3-Dichloropropene	ND	0.00028	0.00050	1	07/23/2022 21:58
Ethylbenzene	ND	0.00014	0.00050	1	07/23/2022 21:58
Methylene chloride	ND	0.00074	0.0020	1	07/23/2022 21:58
1,1,2,2-Tetrachloroethane	ND	0.000011	0.000020	1	07/23/2022 21:58
Tetrachloroethene	ND	0.00016	0.00020	1	07/23/2022 21:58
Toluene	ND	0.00017	0.00050	1	07/23/2022 21:58
1,1,1-Trichloroethane	ND	0.00011	0.00050	1	07/23/2022 21:58
1,1,2-Trichloroethane	ND	0.00011	0.00020	1	07/23/2022 21:58
Trichloroethene	ND	0.00025	0.00050	1	07/23/2022 21:58
Trichlorofluoromethane	ND	0.00014	0.00050	1	07/23/2022 21:58
Vinyl chloride	ND	0.000004	0.0000050	1	07/23/2022 21:58

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	94	70-130	07/23/2022 21:58
Toluene-d8	90	70-130	07/23/2022 21:58
4-BFB	97	70-130	07/23/2022 21:58

Analyst(s): ANL



Analytical Report

Client: NRG Energy, LLC
Date Received: 07/19/2022 15:58
Date Prepared: 07/19/2022
Project: Marsh Landing DDS Semi-Annual

WorkOrder: 2207A70
Extraction Method: E625.1
Analytical Method: E625.1
Unit: mg/L

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2207A70-0011	Water	07/19/2022 14:00	GC48 07202216.D	249829

Analytes	Result	MDL	RL	DF	Date Analyzed
Acenaphthene	ND	0.000010	0.000026	5	07/20/2022 16:12
Acenaphthylene	ND	0.000004	0.000026	5	07/20/2022 16:12
Anthracene	ND	0.000014	0.000026	5	07/20/2022 16:12
Benzidine	ND	0.012	0.026	5	07/20/2022 16:12
Benzo (a) anthracene	ND	0.000062	0.00026	5	07/20/2022 16:12
Benzo (a) pyrene	ND	0.000016	0.000026	5	07/20/2022 16:12
Benzo (b) fluoranthene	ND	0.000029	0.00010	5	07/20/2022 16:12
Benzo (g,h,i) perylene	ND	0.000026	0.00010	5	07/20/2022 16:12
Benzo (k) fluoranthene	ND	0.000027	0.00010	5	07/20/2022 16:12
Bis (2-chloroethoxy) Methane	ND	0.0013	0.0052	5	07/20/2022 16:12
Bis (2-chloroethyl) Ether	ND	0.000010	0.000026	5	07/20/2022 16:12
Bis (2-chloroisopropyl) Ether	ND	0.000078	0.00026	5	07/20/2022 16:12
Bis (2-ethylhexyl) Phthalate	ND	0.00023	0.0010	5	07/20/2022 16:12
4-Bromophenyl Phenyl Ether	ND	0.00078	0.0052	5	07/20/2022 16:12
Butylbenzyl Phthalate	ND	0.000038	0.00026	5	07/20/2022 16:12
4-Chloro-3-methylphenol	ND	0.0019	0.0052	5	07/20/2022 16:12
2-Chloronaphthalene	ND	0.0011	0.0052	5	07/20/2022 16:12
2-Chlorophenol	ND	0.000067	0.00026	5	07/20/2022 16:12
4-Chlorophenyl Phenyl Ether	ND	0.0011	0.0052	5	07/20/2022 16:12
Chrysene	ND	0.000010	0.000026	5	07/20/2022 16:12
Dibenzo (a,h) anthracene	ND	0.000029	0.00010	5	07/20/2022 16:12
Di-n-butyl Phthalate	ND	0.000093	0.00026	5	07/20/2022 16:12
1,2-Dichlorobenzene	ND	0.00088	0.0052	5	07/20/2022 16:12
1,3-Dichlorobenzene	ND	0.0014	0.0052	5	07/20/2022 16:12
1,4-Dichlorobenzene	ND	0.0014	0.0052	5	07/20/2022 16:12
3,3-Dichlorobenzidine	ND	0.000012	0.000026	5	07/20/2022 16:12
2,4-Dichlorophenol	ND	0.000016	0.000052	5	07/20/2022 16:12
Diethyl Phthalate	ND	0.000083	0.00026	5	07/20/2022 16:12
2,4-Dimethylphenol	ND	0.0025	0.0052	5	07/20/2022 16:12
Dimethyl Phthalate	ND	0.000025	0.000052	5	07/20/2022 16:12
4,6-Dinitro-2-methylphenol	ND	0.0098	0.026	5	07/20/2022 16:12
2,4-Dinitrophenol	ND	0.0020	0.0052	5	07/20/2022 16:12
2,4-Dinitrotoluene	ND	0.00010	0.00026	5	07/20/2022 16:12
2,6-Dinitrotoluene	ND	0.000098	0.00026	5	07/20/2022 16:12
Di-n-octyl Phthalate	ND	0.0040	0.0052	5	07/20/2022 16:12
1,2-Diphenylhydrazine	ND	0.0010	0.0052	5	07/20/2022 16:12
Fluoranthene	ND	0.000014	0.000052	5	07/20/2022 16:12

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Analytical Report

Client: NRG Energy, LLC
Date Received: 07/19/2022 15:58
Date Prepared: 07/19/2022
Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2207A70
Extraction Method: E625.1
Analytical Method: E625.1
Unit: mg/L

Semi-Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2207A70-0011	Water	07/19/2022 14:00	GC48 07202216.D	249829

Analytes	Result	MDL	RL	DF	Date Analyzed
Fluorene	ND	0.000015	0.000052	5	07/20/2022 16:12
Hexachlorobenzene	ND	0.000008	0.000026	5	07/20/2022 16:12
Hexachlorobutadiene	ND	0.000010	0.000026	5	07/20/2022 16:12
Hexachlorocyclopentadiene	ND	0.012	0.026	5	07/20/2022 16:12
Hexachloroethane	ND	0.000015	0.000052	5	07/20/2022 16:12
Indeno (1,2,3-cd) pyrene	ND	0.000037	0.00010	5	07/20/2022 16:12
Isophorone	ND	0.0048	0.010	5	07/20/2022 16:12
Naphthalene	ND	0.000062	0.00026	5	07/20/2022 16:12
Nitrobenzene	ND	0.0015	0.0052	5	07/20/2022 16:12
2-Nitrophenol	ND	0.0088	0.026	5	07/20/2022 16:12
4-Nitrophenol	ND	0.0083	0.026	5	07/20/2022 16:12
N-Nitrosodimethylamine	ND	0.0098	0.026	5	07/20/2022 16:12
N-Nitrosodiphenylamine	ND	0.0012	0.0052	5	07/20/2022 16:12
N-Nitrosodi-n-propylamine	ND	0.0018	0.0052	5	07/20/2022 16:12
Pentachlorophenol	ND	0.00046	0.0013	5	07/20/2022 16:12
Phenanthrene	ND	0.000013	0.000026	5	07/20/2022 16:12
Phenol	ND	0.00030	0.0010	5	07/20/2022 16:12
Pyrene	ND	0.000009	0.000026	5	07/20/2022 16:12
1,2,4-Trichlorobenzene	ND	0.00098	0.0052	5	07/20/2022 16:12
2,4,6-Trichlorophenol	ND	0.000020	0.000052	5	07/20/2022 16:12

Surrogates	REC (%)	Limits	Date Analyzed
2-Fluorophenol	46	30-130	07/20/2022 16:12
Phenol-d5	31	20-130	07/20/2022 16:12
Nitrobenzene-d5	63	60-130	07/20/2022 16:12
2-Fluorobiphenyl	73	50-130	07/20/2022 16:12
2,4,6-Tribromophenol	67	60-130	07/20/2022 16:12
4-Terphenyl-d14	48	40-130	07/20/2022 16:12

Analyst(s): LAT

Analytical Comments: a3



Analytical Report

Client: NRG Energy, LLC
Date Received: 07/19/2022 15:58
Date Prepared: 07/20/2022
Project: Marsh Landing DDS Semi-Annual

WorkOrder: 2207A70
Extraction Method: E350.1
Analytical Method: E350.1
Unit: mg/L

Ammonia As Nitrogen

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2207A70-001E	Water	07/19/2022 14:00	WC_SKALAR 220720A1_30	249939

Analytes	Result	MDL	RL	DF	Date Analyzed
Ammonia, total as N	6.0	0.096	0.10	1	07/20/2022 10:32

Analyst(s): CC



Analytical Report

Client: NRG Energy, LLC
Date Received: 07/19/2022 15:58
Date Prepared: 07/20/2022
Project: Marsh Landing DDS Semi-Annual

WorkOrder: 2207A70
Extraction Method: E420.4
Analytical Method: E420.4
Unit: mg/L

Phenolics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2207A70-001D	Water	07/19/2022 14:00	WC_SKALAR 220720B1_50	249969

<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	07/20/2022 15:24

Analyst(s): CC



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2207A70
Date Prepared: 07/26/2022	BatchID: 250376
Date Analyzed: 07/26/2022	Extraction Method: E1664A_SG
Instrument: O&G	Analytical Method: E1664A
Matrix: Water	Unit: mg/L
Project: Marsh Landing DDS D Semi-Annual	Sample ID: MB/LCS/LCSD-250376

QC Summary Report for E1664A

Analyte	MB Result	MDL	RL			
SGT-HEM	ND	0.72	5.0	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
SGT-HEM	8.4	8.6	10.42	81	82	64-132	1.63	30



Quality Control Report

Client:	NRG Energy, LLC	WorkOrder:	2207A70
Date Prepared:	07/26/2022	BatchID:	250375
Date Analyzed:	07/26/2022	Extraction Method:	E1664A
Instrument:	O&G	Analytical Method:	E1664A
Matrix:	Water	Unit:	mg/L
Project:	Marsh Landing DDSA Semi-Annual	Sample ID:	MB/LCS/LCSD-250375

QC Summary Report for E1664A

Analyte	MB Result	MDL	RL			
HEM	ND	1.3	5.0	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
HEM	18	18	20.83	87	85	78-114	2.32	30



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2207A70
Date Prepared: 07/19/2022	BatchID: 249854
Date Analyzed: 07/20/2022	Extraction Method: E608.3/SW3620B
Instrument: GC40	Analytical Method: E608.3
Matrix: Water	Unit: µg/L
Project: Marsh Landing DDS D Semi-Annual	Sample ID: MB/LCS/LCSD-249854

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	0.050			0.05	100	60-130

(Cont.)



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 07/19/2022
Date Analyzed: 07/20/2022
Instrument: GC40
Matrix: Water
Project: Marsh Landing DDS Semi-Annual

WorkOrder: 2207A70
BatchID: 249854
Extraction Method: E608.3/SW3620B
Analytical Method: E608.3
Unit: µg/L
Sample ID: MB/LCS/LCSD-249854

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	0.047	0.050	0.050	94	101	60-130	6.77	20
a-BHC	0.049	0.052	0.050	97	104	70-130	6.64	20
b-BHC	0.045	0.048	0.050	89	96	70-130	7.20	20
d-BHC	0.053	0.057	0.050	105	114	70-130	7.66	20
g-BHC	0.049	0.053	0.050	98	105	60-130	7.21	20
a-Chlordane	0.048	0.051	0.050	95	101	60-130	6.14	20
g-Chlordane	0.050	0.053	0.050	99	106	70-130	6.16	20
p,p-DDD	0.053	0.057	0.050	106	113	70-130	6.96	20
p,p-DDE	0.054	0.057	0.050	107	114	70-130	6.29	20
p,p-DDT	0.057	0.061	0.050	114	123	70-130	7.12	20
Dieldrin	0.049	0.053	0.050	98	106	70-130	6.99	20
Endosulfan I	0.048	0.051	0.050	96	102	70-130	6.86	20
Endosulfan II	0.051	0.055	0.050	102	110	70-130	7.12	20
Endosulfan sulfate	0.050	0.054	0.050	101	108	70-130	7.06	20
Endrin	0.055	0.059	0.050	109	117	70-130	7.33	20
Endrin aldehyde	0.046	0.049	0.050	91	99	60-130	7.73	20
Endrin ketone	0.049	0.053	0.050	99	107	60-130	7.40	20
Heptachlor	0.050	0.054	0.050	101	108	70-130	6.78	20
Heptachlor epoxide	0.048	0.051	0.050	95	102	70-130	6.86	20
Methoxychlor	0.056	0.060	0.050	112	121	70-130	7.00	20
Aroclor1016	0.15	0.15	0.15	99	99	70-130	0.499	20
Aroclor1260	0.15	0.15	0.15	101	98	70-130	2.97	20
Surrogate Recovery								
Decachlorobiphenyl	0.051	0.053	0.050	103	106	60-130	2.88	20



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2207A70
Date Prepared: 07/21/2022	BatchID: 250198
Date Analyzed: 07/21/2022	Extraction Method: E624.1
Instrument: GC10	Analytical Method: E624.1
Matrix: Water	Unit: µg/L
Project: Marsh Landing DDS D Semi-Annual	Sample ID: MB/LCS/LCSD-250198

QC Summary Report for E624.1

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acrolein (Propenal)	ND	3.9	5.0	-	-	-
Acrylonitrile	ND	0.23	2.0	-	-	-
2-Chloroethyl Vinyl Ether	ND	0.44	1.0	-	-	-
Surrogate Recovery						
Dibromofluoromethane	18			25	71	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acrolein (Propenal)	20	17	20	101	84	71-140	17.9	20
Acrylonitrile	19	17	20	97	83	67-145	16.1	20
2-Chloroethyl Vinyl Ether	23	18	20	116	92	70-124	23.6,F2	20
Surrogate Recovery								
Dibromofluoromethane	18	18	25	71	71	70-130	0.811	20



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 07/23/2022 - 07/24/2022
Date Analyzed: 07/23/2022 - 07/24/2022
Instrument: GC45
Matrix: Water
Project: Marsh Landing DDS Semi-Annual

WorkOrder: 2207A70
BatchID: 250263
Extraction Method: E624.1
Analytical Method: E624.1
Unit: µg/L
Sample ID: MB/LCS/LCSD-250263

QC Summary Report for E624.1

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Benzene	ND	0.12	0.20	-	-	-
Bromodichloromethane	ND	0.025	0.050	-	-	-
Bromoform	ND	0.31	0.50	-	-	-
Bromomethane	ND	0.18	0.50	-	-	-
Carbon Disulfide	ND	0.18	0.50	-	-	-
Carbon tetrachloride	ND	0.028	0.050	-	-	-
Chlorobenzene	ND	0.11	0.50	-	-	-
Chloroethane	ND	0.20	0.50	-	-	-
Chloroform	ND	0.091	0.10	-	-	-
Chloromethane	ND	0.28	0.50	-	-	-
Dibromochloromethane	ND	0.026	0.15	-	-	-
1,2-Dichlorobenzene	ND	0.16	0.50	-	-	-
1,3-Dichlorobenzene	ND	0.12	0.50	-	-	-
1,4-Dichlorobenzene	ND	0.093	0.50	-	-	-
1,1-Dichloroethane	ND	0.15	0.50	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.011	0.020	-	-	-
1,1-Dichloroethene	ND	0.0094	0.010	-	-	-
trans-1,2-Dichloroethene	ND	0.11	0.50	-	-	-
1,2-Dichloropropane	ND	0.019	0.20	-	-	-
cis-1,3-Dichloropropene	ND	0.21	0.50	-	-	-
trans-1,3-Dichloropropene	ND	0.28	0.50	-	-	-
Ethylbenzene	ND	0.14	0.50	-	-	-
Methylene chloride	ND	0.74	2.0	-	-	-
1,1,2,2-Tetrachloroethane	ND	0.011	0.020	-	-	-
Tetrachloroethene	ND	0.16	0.20	-	-	-
Toluene	ND	0.17	0.50	-	-	-
1,1,1-Trichloroethane	ND	0.11	0.50	-	-	-
1,1,2-Trichloroethane	ND	0.11	0.20	-	-	-
Trichloroethene	ND	0.25	0.50	-	-	-
Trichlorofluoromethane	ND	0.14	0.50	-	-	-
Vinyl chloride	ND	0.0043	0.0050	-	-	-

Surrogate Recovery

Dibromofluoromethane	23	25	92	70-130
Toluene-d8	23	25	91	70-130
4-BFB	2.5	2.5	99	70-130

(Cont.)



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 07/23/2022 - 07/24/2022
Date Analyzed: 07/23/2022 - 07/24/2022
Instrument: GC45
Matrix: Water
Project: Marsh Landing DDS Semi-Annual

WorkOrder: 2207A70
BatchID: 250263
Extraction Method: E624.1
Analytical Method: E624.1
Unit: µg/L
Sample ID: MB/LCS/LCSD-250263

QC Summary Report for E624.1

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Benzene	3.6	3.8	4	89	96	60-130	8.06	20
Bromodichloromethane	3.6	3.9	4	90	97	60-130	8.28	20
Bromoform	3.9	4.2	4	98	106	50-130	7.32	20
Bromomethane	4.5	5.4	4	112	135,F2	50-130	18.9	20
Carbon Disulfide	3.7	4.0	4	93	99	60-130	6.85	20
Carbon tetrachloride	3.6	3.9	4	89	98	60-130	9.38	20
Chlorobenzene	3.8	4.2	4	96	104	60-130	8.77	20
Chloroethane	3.7	4.1	4	93	102	60-140	8.76	20
Chloroform	3.6	3.9	4	90	98	60-130	8.43	20
Chloromethane	3.3	3.6	4	82	89	50-130	8.53	20
Dibromochloromethane	3.9	4.2	4	97	105	50-130	7.82	20
1,2-Dichlorobenzene	4.1	4.4	4	102	110	60-130	7.46	20
1,3-Dichlorobenzene	3.9	4.2	4	97	105	60-130	7.66	20
1,4-Dichlorobenzene	4.0	4.3	4	101	109	60-130	7.62	20
1,1-Dichloroethane	3.6	3.9	4	89	97	50-130	8.85	20
1,2-Dichloroethane (1,2-DCA)	3.5	3.8	4	88	95	60-130	7.69	20
1,1-Dichloroethene	4.0	4.4	4	100	109	60-130	8.93	20
trans-1,2-Dichloroethene	3.7	4.1	4	93	102	60-130	8.74	20
1,2-Dichloropropane	3.7	4.0	4	92	99	60-130	7.31	20
cis-1,3-Dichloropropene	3.8	4.1	4	94	102	60-130	7.59	20
trans-1,3-Dichloropropene	3.8	4.1	4	95	103	60-130	7.41	20
Ethylbenzene	3.6	3.9	4	90	98	60-130	8.66	20
Methylene chloride	3.6	3.9	4	89	98	50-130	9.23	20
1,1,2,2-Tetrachloroethane	4.2	4.4	4	105	111	60-130	5.52	20
Tetrachloroethene	4.0	4.3	4	99	107	60-130	8.25	20
Toluene	3.6	3.9	4	89	97	60-130	8.32	20
1,1,1-Trichloroethane	3.5	3.8	4	88	96	60-130	8.52	20
1,1,2-Trichloroethane	3.9	4.2	4	97	104	60-130	6.84	20
Trichloroethene	3.9	4.2	4	97	106	60-130	8.31	20
Trichlorofluoromethane	3.8	4.1	4	94	102	60-130	7.88	20
Vinyl chloride	3.8	4.2	4	95	104	60-130	8.81	20
Surrogate Recovery								
Dibromofluoromethane	23	23	25	92	92	70-130	0.948	20
Toluene-d8	23	23	25	90	91	70-130	0.140	20
4-BFB	2.5	2.5	2.5	99	99	70-130	0.203	20



Quality Control Report

Client:	NRG Energy, LLC	WorkOrder:	2207A70
Date Prepared:	07/19/2022	BatchID:	249829
Date Analyzed:	07/19/2022	Extraction Method:	E625.1
Instrument:	GC47	Analytical Method:	E625.1
Matrix:	Water	Unit:	µg/L
Project:	Marsh Landing DDS Semi-Annual	Sample ID:	MB/LCS/LCSD-249829

QC Summary Report for E625.1

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acenaphthene	ND	0.0020	0.0050	-	-	-
Acenaphthylene	ND	0.00093	0.0050	-	-	-
Anthracene	ND	0.0027	0.0050	-	-	-
Benzidine	ND	2.4	5.0	-	-	-
Benzo (a) anthracene	ND	0.012	0.050	-	-	-
Benzo (a) pyrene	ND	0.0031	0.0050	-	-	-
Benzo (b) fluoranthene	ND	0.0056	0.020	-	-	-
Benzo (g,h,i) perylene	ND	0.0051	0.020	-	-	-
Benzo (k) fluoranthene	ND	0.0052	0.020	-	-	-
Bis (2-chloroethoxy) Methane	ND	0.25	1.0	-	-	-
Bis (2-chloroethyl) Ether	ND	0.0020	0.0050	-	-	-
Bis (2-chloroisopropyl) Ether	ND	0.015	0.050	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	0.045	0.20	-	-	-
4-Bromophenyl Phenyl Ether	ND	0.15	1.0	-	-	-
Butylbenzyl Phthalate	0.0085,J	0.0074	0.050	-	-	-
4-Chloro-3-methylphenol	ND	0.37	1.0	-	-	-
2-Chloronaphthalene	ND	0.22	1.0	-	-	-
2-Chlorophenol	ND	0.013	0.050	-	-	-
4-Chlorophenyl Phenyl Ether	ND	0.22	1.0	-	-	-
Chrysene	ND	0.0020	0.0050	-	-	-
Dibenzo (a,h) anthracene	ND	0.0056	0.020	-	-	-
Di-n-butyl Phthalate	0.032,J	0.018	0.050	-	-	-
1,2-Dichlorobenzene	ND	0.17	1.0	-	-	-
1,3-Dichlorobenzene	ND	0.28	1.0	-	-	-
1,4-Dichlorobenzene	ND	0.28	1.0	-	-	-
3,3-Dichlorobenzidine	ND	0.0024	0.0050	-	-	-
2,4-Dichlorophenol	ND	0.0030	0.010	-	-	-
Diethyl Phthalate	ND	0.016	0.050	-	-	-
2,4-Dimethylphenol	ND	0.49	1.0	-	-	-
Dimethyl Phthalate	ND	0.0048	0.010	-	-	-
4,6-Dinitro-2-methylphenol	ND	1.9	5.0	-	-	-
2,4-Dinitrophenol	ND	0.38	1.0	-	-	-
2,4-Dinitrotoluene	ND	0.020	0.050	-	-	-
2,6-Dinitrotoluene	ND	0.019	0.050	-	-	-
Di-n-octyl Phthalate	ND	0.77	1.0	-	-	-
1,2-Diphenylhydrazine	ND	0.20	1.0	-	-	-
Fluoranthene	ND	0.0027	0.010	-	-	-
Fluorene	ND	0.0029	0.010	-	-	-

(Cont.)



Quality Control Report

Client:	NRG Energy, LLC	WorkOrder:	2207A70
Date Prepared:	07/19/2022	BatchID:	249829
Date Analyzed:	07/19/2022	Extraction Method:	E625.1
Instrument:	GC47	Analytical Method:	E625.1
Matrix:	Water	Unit:	µg/L
Project:	Marsh Landing DDS Semi-Annual	Sample ID:	MB/LCS/LCSD-249829

QC Summary Report for E625.1

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Hexachlorobenzene	ND	0.0016	0.0050	-	-	-
Hexachlorobutadiene	ND	0.0020	0.0050	-	-	-
Hexachlorocyclopentadiene	ND	2.3	5.0	-	-	-
Hexachloroethane	ND	0.0029	0.010	-	-	-
Indeno (1,2,3-cd) pyrene	ND	0.0072	0.020	-	-	-
Isophorone	ND	0.92	2.0	-	-	-
Naphthalene	ND	0.012	0.050	-	-	-
Nitrobenzene	ND	0.29	1.0	-	-	-
2-Nitrophenol	ND	1.7	5.0	-	-	-
4-Nitrophenol	ND	1.6	5.0	-	-	-
N-Nitrosodimethylamine	ND	1.9	5.0	-	-	-
N-Nitrosodiphenylamine	ND	0.23	1.0	-	-	-
N-Nitrosodi-n-propylamine	ND	0.35	1.0	-	-	-
Pentachlorophenol	ND	0.089	0.25	-	-	-
Phenanthrene	ND	0.0026	0.0050	-	-	-
Phenol	ND	0.057	0.20	-	-	-
Pyrene	ND	0.0019	0.0050	-	-	-
1,2,4-Trichlorobenzene	ND	0.19	1.0	-	-	-
2,4,6-Trichlorophenol	ND	0.0038	0.010	-	-	-

Surrogate Recovery

2-Fluorophenol	4.4			5	87	30-130
Phenol-d5	4.6			5	93	20-130
Nitrobenzene-d5	4.4			5	88	60-130
2-Fluorobiphenyl	5.2			5	103	50-130
2,4,6-Tribromophenol	4.4			5	89	60-130
4-Terphenyl-d14	3.2			5	64	40-130

(Cont.)



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 07/19/2022
Date Analyzed: 07/19/2022
Instrument: GC47
Matrix: Water
Project: Marsh Landing DDS Semi-Annual

WorkOrder: 2207A70
BatchID: 249829
Extraction Method: E625.1
Analytical Method: E625.1
Unit: µg/L
Sample ID: MB/LCS/LCSD-249829

QC Summary Report for E625.1

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acenaphthene	0.24	0.22	0.25	96	90	50-130	7.12	25
Acenaphthylene	0.21	0.19	0.25	83	78	60-130	6.50	25
Anthracene	0.26	0.26	0.25	103	102	60-130	0.597	25
Benzidine	12	11	25	46	43	20-130	7.54	25
Benzo (a) anthracene	0.26	0.26	0.25	104	104	60-130	0.415	25
Benzo (a) pyrene	0.35	0.34	0.25	140,F5	137,F5	60-130	2.24	25
Benzo (b) fluoranthene	0.30	0.29	0.25	119	117	60-130	1.38	25
Benzo (g,h,i) perylene	0.27	0.26	0.25	109	103	50-130	5.68	25
Benzo (k) fluoranthene	0.26	0.25	0.25	104	98	60-130	5.21	25
Bis (2-chloroethoxy) Methane	4.9	4.7	5	99	94	65-130	5.13	25
Bis (2-chloroethyl) Ether	0.25	0.24	0.25	100	95	60-130	5.17	25
Bis (2-chloroisopropyl) Ether	0.25	0.23	0.25	102	94	60-130	8.31	25
Bis (2-ethylhexyl) Phthalate	0.45	0.46	0.25	182,F5	184,F5	60-130	1.17	25
4-Bromophenyl Phenyl Ether	4.4	4.3	5	88	86	65-130	2.61	25
Butylbenzyl Phthalate	0.31	0.32	0.25	125	127	60-140	1.20	25
4-Chloro-3-methylphenol	3.8	3.7	5	76	75	65-130	1.62	25
2-Chloronaphthalene	4.7	4.3	5	94	86	65-130	8.91	25
2-Chlorophenol	0.25	0.23	0.25	98	92	60-130	6.40	25
4-Chlorophenyl Phenyl Ether	4.2	4.0	5	84	80	65-130	6.00	25
Chrysene	0.26	0.25	0.25	102	102	70-130	0.789	25
Dibenzo (a,h) anthracene	0.26	0.26	0.25	104	103	50-130	0.631	25
Di-n-butyl Phthalate	0.29	0.29	0.25	117	118	60-130	1.06	25
1,2-Dichlorobenzene	4.2	4.0	5	84	79	60-130	5.69	25
1,3-Dichlorobenzene	4.0	3.7	5	81	74	60-130	9.27	25
1,4-Dichlorobenzene	4.0	3.7	5	79	74	60-130	7.04	25
3,3-Dichlorobenzidine	0.28	0.29	0.25	112	115	60-130	2.20	25
2,4-Dichlorophenol	0.22	0.21	0.25	88	84	60-130	4.47	25
Diethyl Phthalate	0.25	0.24	0.25	99	94	65-130	4.59	25
2,4-Dimethylphenol	3.4	3.2	5	67	64	60-130	4.71	25
Dimethyl Phthalate	0.26	0.25	0.25	104	99	60-130	4.81	25
4,6-Dinitro-2-methylphenol	26	26	25	105	106	60-130	1.12	25
2,4-Dinitrophenol	4.2	4.2	5	85	84	50-130	1.55	25
2,4-Dinitrotoluene	0.25	0.24	0.25	100	97	70-130	2.88	25
2,6-Dinitrotoluene	0.24	0.23	0.25	94	93	65-140	1.64	25
Di-n-octyl Phthalate	6.0	5.9	5	121	118	70-130	2.52	25
1,2-Diphenylhydrazine	4.4	4.3	5	88	86	65-130	2.37	25
Fluoranthene	0.28	0.28	0.25	110	111	65-130	0.304	25
Fluorene	0.25	0.24	0.25	101	94	65-130	6.66	25

(Cont.)



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 07/19/2022
Date Analyzed: 07/19/2022
Instrument: GC47
Matrix: Water
Project: Marsh Landing DDS Semi-Annual

WorkOrder: 2207A70
BatchID: 249829
Extraction Method: E625.1
Analytical Method: E625.1
Unit: µg/L
Sample ID: MB/LCS/LCSD-249829

QC Summary Report for E625.1

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Hexachlorobenzene	0.27	0.26	0.25	109	106	60-130	3.22	25
Hexachlorobutadiene	0.28	0.26	0.25	112	104	60-130	7.67	25
Hexachlorocyclopentadiene	20	19	25	80	74	50-130	7.70	25
Hexachloroethane	0.24	0.23	0.25	97	91	40-130	6.65	25
Indeno (1,2,3-cd) pyrene	0.33	0.33	0.25	133,F5	130	50-130	1.98	25
Isophorone	4.9	4.8	5	98	97	50-130	1.47	25
Naphthalene	0.22	0.21	0.25	89	85	50-130	4.76	25
Nitrobenzene	4.8	4.6	5	96	92	60-130	3.57	25
2-Nitrophenol	24	24	25	98	95	70-130	3.42	25
4-Nitrophenol	25	24	25	101	95	30-130	5.87	25
N-Nitrosodimethylamine	21	20	25	85	81	30-130	4.48	25
N-Nitrosodiphenylamine	5.3	5.2	5	107	104	65-130	2.84	25
N-Nitrosodi-n-propylamine	4.4	4.2	5	88	85	50-130	3.33	25
Pentachlorophenol	1.2	1.3	1.25	97	101	60-130	3.70	25
Phenanthrene	0.26	0.25	0.25	102	100	65-130	1.88	25
Phenol	0.93	0.87	1	93	87	30-130	6.62	25
Pyrene	0.28	0.28	0.25	111	111	70-130	0.586	25
1,2,4-Trichlorobenzene	4.3	4.0	5	85	81	65-130	4.92	25
2,4,6-Trichlorophenol	0.24	0.22	0.25	95	89	65-130	5.89	25
Surrogate Recovery								
2-Fluorophenol	4.2	4.1	5	84	83	30-130	2.09	25
Phenol-d5	4.4	4.5	5	89	90	20-130	1.54	25
Nitrobenzene-d5	4.5	4.6	5	90	92	60-130	2.85	25
2-Fluorobiphenyl	4.6	4.5	5	93	90	50-130	2.87	25
2,4,6-Tribromophenol	5.1	5.3	5	102	106	60-130	4.18	25
4-Terphenyl-d14	3.4	3.5	5	68	69	40-130	1.43	25



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 07/20/2022
Date Analyzed: 07/20/2022
Instrument: WC_SKALAR
Matrix: Water
Project: Marsh Landing DDS Semi-Annual

WorkOrder: 2207A70
BatchID: 249939
Extraction Method: E350.1
Analytical Method: E350.1
Unit: mg/L
Sample ID: MB/LCS/LCSD-249939
 2207A70-001EMS/MSD

QC Summary Report for E350.1

Analyte	MB Result	MDL	RL			
Ammonia, total as N	ND	0.096	0.10	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Ammonia, total as N	4.1	4.2	4	103	104	88-113	0.818	20

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Ammonia, total as N	1	10	10	4	6.0	101	103	80-120	0.809	20



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2207A70
Date Prepared: 07/20/2022	BatchID: 249969
Date Analyzed: 07/20/2022	Extraction Method: E420.4
Instrument: WC_SKALAR	Analytical Method: E420.4
Matrix: Water	Unit: µg/L
Project: Marsh Landing DDS Semi-Annual	Sample ID: MB/LCS/LCSD-249969

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	38	37	40	96	92	80-120	3.82	20



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2207A70

ClientCode: GOA

QuoteID: 212372

- WaterTrax
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 EQulS
 Dry-Weight
 Email
 HardCopy
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 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
4900 N. Scottsdale Road, Ste. 5000
Scottsdale, AZ 85251
invoices@clearwayenergy.coupahost.co

Requested TAT: 5 days;

Date Received: 07/19/2022

Date Logged: 07/19/2022

Lab ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
2207A70-001	FAC Combined Wastewater	Water	7/19/2022 14:00	<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	10	PRDisposal Fee	11		12	

Project Manager: Susan Thompson

Prepared by: Cassandra Gallegos

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 Semi-Annual

Work Order: 2207A70
QC Level: LEVEL 2
Date Logged: 7/19/2022

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

WaterTrax WriteOn 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	E1664A (HEM; Oil & Grease w/o S.G. Clean-Up)	1	1LA w/ HCl	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7/19/2022 14:00	5 days	7/26/2022	Present	<input type="checkbox"/>	<input type="checkbox"/>
001B	FAC Combined Wastewater	Water	E1664A (SGT- HEM; Non-polar Material)	1	1LA w/ HCl	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7/19/2022 14:00	5 days	7/26/2022	Present	<input type="checkbox"/>	<input type="checkbox"/>
001C	FAC Combined Wastewater	Water	Kelada-01 (Cyanide, Total)	1	250mL aHDPE w/ NaOH	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7/19/2022 14:00	5 days	7/26/2022	Present	<input type="checkbox"/>	<input type="checkbox"/>
001D	FAC Combined Wastewater	Water	E420.4 (Phenolics)	1	250mL aG w/ H2SO4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7/19/2022 14:00	5 days	7/26/2022	Present	<input type="checkbox"/>	<input type="checkbox"/>
001E	FAC Combined Wastewater	Water	E350.1 (Ammonia)	1	250mL aG w/ EDA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7/19/2022 14:00	5 days	7/26/2022	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: 2207A70
QC Level: LEVEL 2
Date Logged: 7/19/2022

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

WaterTrax WriteOn EDF Excel EQUS 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	FAC Combined Wastewater	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, 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"/>	7/19/2022 14:00	5 days	7/26/2022	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: 2207A70
QC Level: LEVEL 2
Date Logged: 7/19/2022

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	FAC Combined Wastewater	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"/>	7/19/2022 14:00	5 days	7/26/2022	Present	<input type="checkbox"/>	<input type="checkbox"/>
001H	FAC Combined Wastewater	Water	E624.1 (ACRO, ACRY, & 2-CEVE)	2	VOA, Unpres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7/19/2022 14:00	5 days	7/26/2022	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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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 DDSD Semi-Annual

Work Order: 2207A70
QC Level: LEVEL 2
Date Logged: 7/19/2022

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

WaterTrax WriteOn 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
00II	FAC Combined Wastewater	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"/>	7/19/2022 14:00	5 days	7/26/2022	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 DDSD Semi-Annual

Work Order: 2207A70
QC Level: LEVEL 2
Date Logged: 7/19/2022

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

WaterTrax WriteOn 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
			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).

- 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.

2207A70

Chain of Custody

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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-22-066	19-Jul-22	1400	DDSD	Semi-Annual	Wastewater	Grab	FAC Combined Wastewater	1	Amber Glass Jar	1	Hydrochloric Acid (pH<2, 4°C)	X			
ML-22-067	19-Jul-22	1400	DDSD	Semi-Annual	Wastewater	Grab	FAC Combined Wastewater	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: James E. Robinson.			<i>James E. Rob.</i>			NRG Energy Services		19-Jul-22		1400					
Relinquished by: James E. Robinson.			<i>James E. Rob.</i>			NRG Energy Services		19-Jul-22		1558					
Received by: <i>AGUSTINAV</i>			<i>AGUSTINAV</i>			McCampbell Analytical, Inc.		19-Jul-22		1558					
Relinquished by:															
Received by:															
Relinquished by:															
Received by:															

2.70127

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Chain of Custody

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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				Cyanide* (Kellada-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-22-068	19-Jul-22	1400	DDSD	Semi-Annual	Wastewater	Grab	FAC Combined Wastewater	1	HDPE Bottle	250	HNO3 (pH<2)	X						
ML-22-069	19-Jul-22	1400	DDSD	Semi-Annual	Wastewater	Grab	FAC Combined Wastewater	1	Amber Glass Jar	500	H ₂ SO ₄ (pH<2, 4°C)		X					
ML-22-070	19-Jul-22	1400	DDSD	Semi-Annual	Wastewater	C-24	FAC Combined Wastewater	1	Amber Glass Jar	500	H ₂ SO ₄ (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: James E. Robinson.			<i>James E. Rob.</i>			NRG Energy Services			19-Jul-22		1400							
Relinquished by: James E. Robinson.			<i>James E. Rob.</i>			NRG Energy Services			19-Jul-22		1558							
Received by: <i>Agustina</i>			<i>Agustina</i>			McCampbell Analytical, Inc.			19-Jul-22		1558							
Relinquished by:																		
Received by:																		
Relinquished by:																		
Received by:																		

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Chain of Custody

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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					
McCampbell Analytical, Inc. Attention: 1534 Willow Pass Road, Pittsburg, CA 94565-1701 Address: 925.252.9262/ 925.252.9269 Phone/Fax:				Marsh Landing LLC Accounts Payable Attention: invoices@clearwaterenergy.com Address: 4501914176 P.O. No:				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-22-071	19-Jul-22	1400	DDSD	Semi-Annual	Water	Grab	FAC Combined Wastewater	1	Amber Glass	1,000	None (4°C)	X					
ML-22-072	19-Jul-22	1400	DDSD	Semi-Annual	Water	Grab	FAC Combined Wastewater	2	Clear VOA	43	HCL (ZHS, pH<2, 4°C)		X				
ML-22-073	19-Jul-22	1400	DDSD	Semi-Annual	Water	Grab	FAC Combined Wastewater	2	Clear VOA	43	None (4°C)			X			
ML-22-074	19-Jul-22	1400	DDSD	Semi-Annual	Water	Grab	FAC Combined Wastewater	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.robison@nrg.com E-mail CC: joel.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 James E. Robinson.			<i>James E. Robison</i>			NRG Energy Services		19-Jul-22		1400							
Relinquished by James E. Robinson.			<i>James E. Robison</i>			NRG Energy Services		19-Jul-22		1558							
Received by <i>Agustina</i>			<i>Agustina</i>			McCampbell Analytical, Inc.		19-Jul-22		1558							
Relinquished by																	
Received by																	
Relinquished by																	
Received by																	



Sample Receipt Checklist

Client Name: **NRG Energy, LLC**
 Project: **Marsh Landing DDSD Semi-Annual**
 WorkOrder №: **2207A70** Matrix: Water
 Carrier: Client Drop-In

Date and Time Received: **7/19/2022 15:58**
 Date Logged: **7/19/2022**
 Received by: **Agustina Venegas**
 Logged by: **Cassandra Gallegos**

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: 2.7°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:

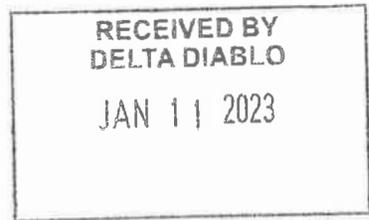


Industrial User Report Checklist And Certification Statement Form

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.

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	October 1-December 31, 2022

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	1/11/2023



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

January 11, 2023

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

**Subject: 2022 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 2022 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, 2022. This report includes monthly flow data and quarterly analytical data required to be collected in 2022. 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 2022 Monthly Flow Data
Table 3: November 2022 Monthly Flow Data
Table 4: December 2022 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	FAC Combined
Sample Station Description	Local Limits FAC Combined Wastewater
Reporting Period	October - December 2022
Report Type	Quarterly

Constituent	Sample Date	Permit Limit	Result	Units
Field pH	10/18/2022	6-10	7.3	S.U.
BOD	10/18/2022	-	ND	mg/L
COD	10/18/2022	-	22	mg/L
Arsenic	10/18/2022	0.15	0.00046 J	mg/L
Cadmium	10/18/2022	0.1	ND	mg/L
Chromium	10/18/2022	0.5	0.00042 J	mg/L
Copper	10/18/2022	0.5	0.0100	mg/L
Iron	10/18/2022	-	0.11	mg/L
Lead	10/18/2022	0.5	ND	mg/L
Mercury	10/18/2022	0.003	ND	mg/L
Molybdenum	10/18/2022	-	0.00096	mg/L
Nickel	10/18/2022	0.5	0.0026	mg/L
Selenium	10/18/2022	0.25	ND	mg/L
Silver	10/18/2022	0.2	ND	mg/L
Zinc	10/18/2022	1.0	0.028	mg/L
TDS	10/18/2022	-	340	mg/L
TSS	10/18/2022	-	5.80	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.

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	Outfall #4
Sample Station Description	Flow Monitoring Structure
Reporting Period	October, 2022
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuously Measured (Rosemount 8705 Flanged Magnetic Flow Meter)
Sample Date	10/1/2022 - 10/31/2022
Permit Limits (s.u.)	NTE 79,200 gpd. NTE 55 gpm +10% (60.5 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 60.5 gpm
1	5,407	27.89	
2	-	0.00	
3	-	0.00	
4	412	16.37	
5	-	0.00	
6	6,290	34.83	
7	6,534	27.67	
8	1,752	27.82	
9	-	0.00	
10	9,704	35.86	
11	-	0.00	
12	7,699	28.02	
13	2,923	28.15	
14	-	0.00	
15	570	17.21	
16	-	0.00	
17	8,174	21.58	
18	23,611	48.38	
19	5,776	25.41	
20	2,740	26.24	
21	586	27.67	
22	-	0.00	
23	872	24.48	
24	-	0.00	
25	-	0.00	
26	14,521	46.10	
27	1,348	35.53	
28	6,302	26.22	
29	3,243	26.90	
30	-	0.00	
31	3,325	20.00	

* - Permit Flows from July 1 - October 31 were increased under permit #SDP-0701-1230 to 55 GPM with a total daily flow of 79,200 gallons per day.

Total Monthly Flow (gal)	111,788	Did flow exceed limits?	NO
Daily Max Flow (gpd)	79,200	Flow above daily max (79,200 gpd)?	NO
Average Monthly Flow (gpd)	3,606		

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
Sample Station Location	Outfall #4
Sample Station Description	Flow Monitoring Structure
Reporting Period	November, 2022
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuously Measured (Rosemount 8705 Flanged Magnetic Flow Meter)
Sample Date	11/1/2022 - 11/30/2022
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	11,199	19.57	
2	-	0.00	
3*	11,361	19.68	
4	6,897	19.83	
5	5,848	19.57	
6	439	17.29	
7	-	0.00	
8	7,074	20.20	
9	-	0.00	
10	17,405	19.62	
11	4,198	19.55	
12	-	0.00	
13	-	0.00	
14	-	0.00	
15	-	0.00	
16	6,052	20.81	
17	4,041	19.72	
18	-	0.00	
19	-	0.00	
20	-	0.00	
21	-	0.00	
22	452	16.48	
23	-	0.00	
24	-	0.00	
25	773	19.84	
26	7,381	19.73	
27	-	0.00	
28	4,985	19.78	
29	7,755	19.63	
30	-	0.00	

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

Total Monthly Flow (gal)	95,860	Did flow exceed limits?	NO
Daily Max Flow (gpd)	17,405	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	3,195		

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
Sample Station Location	Outfall #4
Sample Station Description	Flow Monitoring Structure
Reporting Period	December, 2022
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuously Measured (Rosemount 8705 Flanged Magnetic Flow Meter)
Sample Date	12/1/2022 - 12/31/2022
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	14	12.60	
2	-	0.00	
3	-	0.00	
4	12,647	19.83	
5	4,646	20.91	
6	7,554	19.67	
7	6,522	19.93	
8	3,727	19.59	
9	447	16.75	
10	-	0.00	
11	-	0.00	
12	12,516	20.98	
13	565	19.65	
14	5,374	19.84	
15	5,647	19.59	
16	-	0.00	
17	-	0.00	
18	-	0.00	
19	-	0.00	
20	-	0.00	
21	445	14.38	
22	-	0.00	
23	2,931	20.94	
24	7,800	20.05	
25	-	0.00	
26	-	0.00	
27	7,594	19.82	
28	470	16.37	
29	-	0.00	
30	13,514	20.75	
31	23,177	19.82	

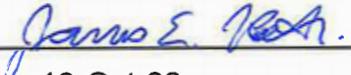
Total Monthly Flow (gal)	115,589	Did flow exceed limits?	NO
Daily Max Flow (gpd)	23,177	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	3,729		

NPDES Monthly Analytical Report

Sample Point	Sample Number	Sample Date <small>(m/d/y)</small>	Sample Collection Time	Date Analyzed <small>(m/d/y)</small>	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
FAC Combined Waste Water	ML-22-105	10/18/22	10:00	10/18/22	10:00	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: Oct 18, '22

Sampling Technologist: James E Robinson
 Signature: 
 Date: 18-Oct-22



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2210A91

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: 10/18/2022

Analytical Report reviewed & approved for release on 10/27/2022 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: 2210A91

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	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.
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 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.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: NRG Energy, LLC

WorkOrder: 2210A91

Project: Marsh Landing DDSD Quarterly

Analytical Qualifiers

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

i5 The sample dilutions set up for the BOD analysis did not meet the oxygen depletion criterion of at least 2 mg/l, therefore the reported result is an estimated value only.



Analytical Report

Client: NRG Energy, LLC
Date Received: 10/18/2022 12:12
Date Prepared: 10/20/2022
Project: Marsh Landing DDSD Quarterly

WorkOrder: 2210A91
Extraction Method: SM5210B
Analytical Method: SM5210 B
Unit: mg/L

Biochemical Oxygen Demand (BOD)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2210A91-001B	Water	10/18/2022 10:00	WetChem	256590

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
BOD	ND	60	60	15	10/25/2022 13:14

Analyst(s): JRA

Analytical Comments: i5



Analytical Report

Client: NRG Energy, LLC

Date Received: 10/18/2022 12:12

Date Prepared: 10/19/2022

Project: Marsh Landing DDSD Quarterly

WorkOrder: 2210A91

Extraction Method: SM5220 D-1997

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
FAC Combined Wastewater	2210A91-001A	Water	10/18/2022 10:00	SPECTROPHOTOMETER2	256494

Analytes	Result	MDL	RL	DF	Date Analyzed
COD	22	9.5	10	1	10/19/2022 15:18

Analyst(s): RB



Analytical Report

Client: NRG Energy, LLC
Date Received: 10/18/2022 12:12
Date Prepared: 10/19/2022
Project: Marsh Landing DDSD Quarterly

WorkOrder: 2210A91
Extraction Method: E200.8
Analytical Method: E200.8
Unit: mg/L

Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2210A91-001E	Water	10/18/2022 10:00	ICP-MS5 155SMPL.d	256493

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Arsenic	0.00046	J	0.000074	0.00050	1	10/20/2022 12:54
Cadmium	ND		0.000043	0.00050	1	10/20/2022 12:54
Chromium	0.00042	J	0.00028	0.00050	1	10/20/2022 12:54
Copper	0.010		0.00075	0.0015	1	10/20/2022 12:54
Iron	0.11		0.026	0.050	1	10/20/2022 12:54
Lead	ND		0.00019	0.00050	1	10/20/2022 12:54
Mercury	ND		0.000033	0.000050	1	10/20/2022 12:54
Molybdenum	0.00096		0.00013	0.00050	1	10/20/2022 12:54
Nickel	0.0026		0.00033	0.00050	1	10/20/2022 12:54
Selenium	ND		0.00016	0.00050	1	10/20/2022 12:54
Silver	ND		0.000092	0.00050	1	10/20/2022 12:54
Zinc	0.028		0.014	0.020	1	10/20/2022 12:54

Surrogates	REC (%)	Limits
Terbium	109	70-130

Analyst(s): WV



Analytical Report

Client: NRG Energy, LLC

Date Received: 10/18/2022 12:12

Date Prepared: 10/19/2022

Project: Marsh Landing DDSD Quarterly

WorkOrder: 2210A91

Extraction Method: SM2540 C-1997

Analytical Method: SM2540 C-1997

Unit: mg/L

Total Dissolved Solids

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2210A91-001C	Water	10/18/2022 10:00	WetChem	256538

Analytes	Result	MDL	RL	DF	Date Analyzed
Total Dissolved Solids	340	10.0	10.0	1	10/19/2022 17:35

Analyst(s): JRA



Analytical Report

Client: NRG Energy, LLC
Date Received: 10/18/2022 12:12
Date Prepared: 10/25/2022
Project: Marsh Landing DDSQ Quarterly

WorkOrder: 2210A91
Extraction Method: SM2540 D-1997
Analytical Method: SM2540 D-1997
Unit: mg/L

Total Suspended Solids

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2210A91-001D	Water	10/18/2022 10:00	WetChem	256862

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Total Suspended Solids	5.80	1.00	1.00	1	10/25/2022 10:10

Analyst(s): MGO



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 10/20/2022
Date Analyzed: 10/25/2022
Instrument: WetChem
Matrix: Water
Project: Marsh Landing DDSQ Quarterly

WorkOrder: 2210A91
BatchID: 256590
Extraction Method: SM5210B
Analytical Method: SM5210 B
Unit: mg/L
Sample ID: MB-256590

QC Summary Report for BOD

Analyte	MB Result	MDL	RL	-	-	-
BOD	ND	4.0	4.0	-	-	-



Quality Control Report

Client: NRG Energy, LLC	WorkOrder: 2210A91
Date Prepared: 10/19/2022	BatchID: 256494
Date Analyzed: 10/19/2022	Extraction Method: SM5220 D-1997
Instrument: SPECTROPHOTOMETER2	Analytical Method: SM5220 D-1997
Matrix: Water	Unit: mg/L
Project: Marsh Landing DDSD Quarterly	Sample ID: MB/LCS/LCSD-256494

QC Summary Report for COD

Analyte	MB Result	MDL	RL			
COD	ND	9.5	10	-	-	-

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



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 10/19/2022
Date Analyzed: 10/20/2022
Instrument: ICP-MS5
Matrix: Water
Project: Marsh Landing DDSD Quarterly

WorkOrder: 2210A91
BatchID: 256493
Extraction Method: E200.8
Analytical Method: E200.8
Unit: µg/L
Sample ID: MB/LCS/LCSD-256493

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	53	54	50	107	107	85-115	0.0168	20
Cadmium	52	52	50	105	104	85-115	0.896	20
Chromium	53	54	50	106	109	85-115	2.47	20
Copper	53	53	50	106	107	85-115	0.175	20
Iron	5100	5200	5000	101	104	85-115	2.81	20
Lead	54	53	50	107	106	85-115	0.731	20
Mercury	1.2	1.3	1.25	99	101	85-115	2.08	20
Molybdenum	51	53	50	102	106	85-115	3.83	20
Nickel	53	53	50	107	106	85-115	0.500	20
Selenium	56	54	50	111	107	85-115	3.88	20
Silver	51	51	50	101	102	85-115	1.01	20
Zinc	540	540	500	109	108	85-115	0.346	20

Surrogate Recovery

Terbium	530	540	500	106	107	70-130	1.02	20
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Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 10/19/2022
Date Analyzed: 10/19/2022
Instrument: WetChem
Matrix: Water
Project: Marsh Landing DDSQ Quarterly

WorkOrder: 2210A91
BatchID: 256538
Extraction Method: SM2540 C-1997
Analytical Method: SM2540 C-1997
Unit: mg/L
Sample ID: MB/LCS/LCSD-256538
 2210A91-001C

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	950	986	1000	95	99	80-120	3.72	10

Analyte	SAMP Result	DUP Result		RPD	RPD Limit
Total Dissolved Solids	340	346		1.75	10



Quality Control Report

Client: NRG Energy, LLC

WorkOrder: 2210A91

Date Prepared: 10/25/2022

BatchID: 256862

Date Analyzed: 10/25/2022

Extraction Method: SM2540 D-1997

Instrument: WetChem

Analytical Method: SM2540 D-1997

Matrix: Water

Unit: mg/L

Project: Marsh Landing DDSQ Quarterly

Sample ID: MB/LCS/LCSD-256862

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	95.0	94.0	100	95	94	80-120	1.06	10



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2210A91

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: 4501905749
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: **10/18/2022**

Date Logged: **10/18/2022**

Lab ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
2210A91-001	FAC Combined Wastewater	Water	10/18/2022 10:00	<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: 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 DDSD Quarterly

Work Order: 2210A91
QC Level: LEVEL 2
Date Logged: 10/18/2022

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	FAC Combined Wastewater	Water	SM5220D (COD)	2	aVOA w/ H2SO4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10/18/2022 10:00	5 days	10/25/2022	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"/>	10/18/2022 10:00	7 days	10/27/2022	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"/>	10/18/2022 10:00	5 days	10/25/2022	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"/>	10/18/2022 10:00	5 days	10/25/2022	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"/>	10/18/2022 10:00	5 days	10/25/2022	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.

2210A91

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@clearwaveenergy.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-22-100	18-Oct-22	1000	DDSD	Quarterly	Wastewater	C-24	FAC Combined Wastewater	2	Amber VOAs	43	H ₂ SO ₄ (pH<2, 4°C)	X			
ML-22-101	18-Oct-22	1000	DDSD	Quarterly	Wastewater	C-24	FAC Combined Wastewater	1	HDPE Bottle	1,000	None (ZHS, 4°C)		X		
ML-22-102	18-Oct-22	1000	DDSD	Quarterly	Wastewater	C-24	FAC Combined Wastewater	1	HDPE Bottle	500	None (4°C)			X	
ML-22-103	18-Oct-22	1000	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: James E. Robinson.			<i>James E. Rob.</i>			NRG Energy Services		18-Oct-22		1000					
Relinquished by: James E. Robinson.			<i>James E. Rob.</i>			NRG Energy Services		18-Oct-22		11:45					
Received by: <i>RYAN ROBINSON</i>			<i>[Signature]</i>			McC Campbell Analytical, Inc. <i>NRG</i>		18-Oct-22		11:45					
Relinquished by: <i>RYAN ROBINSON</i>			<i>[Signature]</i>			<i>NRG</i>		<i>10/18/22</i>		<i>1212</i>					
Received by: <i>AGUSTINA V.</i>			<i>[Signature]</i>			<i>NRG</i>		<i>10/18/2022</i>		<i>1212p</i>					
Relinquished by:															
Received by:															

A. Garcia

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: 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.					
ML-22-104	18-Oct-22	1000	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: James E. Robinson.			<i>James E. Rob.</i>			NRG Energy Services		18-Oct-22		1000						
Relinquished by: James E. Robinson.			<i>James E. Rob.</i>			NRG Energy Services		18-Oct-22		10:45						
Received by: RYAN ROBINSON			<i>[Signature]</i>			McC Campbell Analytical, Inc. - NRG		18-Oct-22		11:45						
Relinquished by: RYAN ROBINSON			<i>[Signature]</i>			NRG		10/18/22		12:12						
Received by: AGUSTINAV.			<i>[Signature]</i>			MAT		10/18/2022		12:24						
Relinquished by:																
Received by:																



Sample Receipt Checklist

Client Name: NRG Energy, LLC
 Project: Marsh Landing DDSD Quarterly
 WorkOrder No: 2210A91 Matrix: Water
 Carrier: Client Drop-In

Date and Time Received: 10/18/2022 12:12
 Date Logged: 10/18/2022
 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: 4.9°C		NA <input type="checkbox"/>
ZHS conditional analyses: VOA meets zero headspace requirement (VOCs, TPHg/BTEX, RSK)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>

UCMR Samples:

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

Comments: