

DOCKETED

Docket Number:	08-AFC-03C
Project Title:	Marsh Landing Generating Station Compliance
TN #:	242515-8
Document Title:	2021 CEC Annual Compliance Report Part 6
Description:	Annual Compliance Operations Report
Filer:	David Frandsen
Organization:	NRG
Submitter Role:	Applicant
Submission Date:	3/31/2022 12:36:45 PM
Docketed Date:	4/1/2022

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Marsh Landing Generating Station	Chemical Location	CERS ID	10480876
Facility Name	Marsh Landing Generating Station	HAZARDOUS WASTE STORAGE	Facility ID	07-000-774528
	3201C Wilbur Ave, Antioch 94509		Status	Submitted on 2/18/2022 2:20 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)			
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS	CAS No.
	USED OIL	Gallons	110	55	30	1000	- Health	Lubricating Oils, used	90 %		70514-12-4
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Carcinogenicity	Water/Solids	10 %		7732-18-5
		Liquid	Steel Drum		Ambient	221	- Health				
	Map: 2 Grid: C4	<u>Type</u>			<u>Temperature</u>		Reproductive				
		Waste	Days on Site: 365		Ambient		Toxicity				
							- Health Skin				
							Corrosion				
							Irritation				
							- Health				
							Respiratory Skin				
							Sensitization				
							- Health Serious				
							Eye Damage Eye				
							Irritation				
							- Health Specific				
							Target Organ				
							Toxicity				
							- Health				
							Aspiration Hazard				
							- Health Germ				
							Cell Mutagenicity				
	OILY RAGS AND SPILL DEBRIS	Pounds	1000	500	250	1900	- Physical				
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Flammable				
		Solid	Steel Drum, Box		Ambient	352	- Physical				
	Map: 2 Grid: C4	<u>Type</u>			<u>Temperature</u>		SelfHeating				
		Waste	Days on Site: 365		Ambient		- Health				
							Carcinogenicity				
							- Health				
							Reproductive				
							Toxicity				
							- Health Skin				
							Corrosion				
							Irritation				
							- Health				
							Respiratory Skin				
							Sensitization				
							- Health Serious				
							Eye Damage Eye				
							Irritation				
							- Health Specific				
							Target Organ				
							Toxicity				
							- Health Germ				
							Cell Mutagenicity				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Marsh Landing Generating Station	Chemical Location	CERS ID	10480876
Facility Name	Marsh Landing Generating Station	LAYDOWN YARD	Facility ID	07-000-774528
	3201C Wilbur Ave, Antioch 94509		Status	Submitted on 2/18/2022 2:20 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 2.2 - Nonflammable Gases	NITROGEN	Cu. Feet	3000	500	2000			- Physical Gas		
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>		Under Pressure		
	7727-37-9	Gas	Cylinder		> Ambient			- Physical		
	Map: 2 Grid: C11	<u>Type</u>			<u>Temperature</u>			Explosive		
		Pure	Days on Site: 365		Ambient			- Health Simple		
								Asphyxiant		

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Marsh Landing Generating Station	Chemical Location				CERS ID	10480876
Facility Name	Marsh Landing Generating Station	MACHINE SHOP				Facility ID	07-000-774528
	3201C Wilbur Ave, Antioch 94509					Status	Submitted on 2/18/2022 2:20 PM

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Marsh Landing Generating Station	Chemical Location					CERS ID	10480876		
Facility Name	Marsh Landing Generating Station	MAIN AIR COMPRESSORS				Facility ID	07-000-774528			
3201C Wilbur Ave, Antioch 94509						Status	Submitted on 2/18/2022 2:20 PM			
						Annual Waste	Hazardous Components			
							(For mixture only)			
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Federal Hazard				
			Max. Daily	Largest Cont.	Avg. Daily	Amount	Categories	Component Name	% Wt	EHS CAS No.
	COMPRESSOR OIL	Gallons	14	5	12		- Health Hazard	Base Oil	90 %	
	CAS No	State	Storage Container		Pressue	Waste Code	Not Otherwise	Dialkyl Thiophosphate Ester	1 %	268567-32-4
		Liquid	Other		Ambient		Classified	Alkaryl amine	2 %	68411-46-1
	Map: 2 Grid: D6	Type			Temperature					
		Mixture	Days on Site: 365		Ambient					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Marsh Landing Generating Station	Chemical Location	CERS ID	10480876
Facility Name	Marsh Landing Generating Station	OIL WATER SEPARATORS NEAR U1 SWITCHYARD & NORTH OF UNITS 2&3	Facility ID	07-000-774528
	3201C Wilbur Ave, Antioch 94509		Status	Submitted on 2/18/2022 2:20 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
	OILY WATER	Gallons	3000	2000	3000		- Health			
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Carcinogenicity			
		Liquid	Other		Ambient		- Health			
	Map: 2 Grid: D6, H4	<u>Type</u>			<u>Temperature</u>		Reproductive			
		Mixture	Days on Site: 365		Ambient		Toxicity			
							- Health Skin			
							Corrosion			
							Irritation			
							- Health			
							Respiratory Skin			
							Sensitization			
							- Health Serious			
							Eye Damage Eye			
							Irritation			
							- Health Specific			
							Target Organ			
							Toxicity			
							- Health			
							Aspiration Hazard			
							- Health Germ			
							Cell Mutagenicity			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Marsh Landing Generating Station	Chemical Location	CERS ID	10480876
Facility Name	Marsh Landing Generating Station	PORTABLE TANKS AT COVERED PARKING LOT AND TURBINES (as needed)	Facility ID	07-000-774528
	3201C Wilbur Ave, Antioch 94509		Status	Submitted on 2/18/2022 2:20 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
	CLEANBLADE GTC 1000	Gallons	575	400	50		- Health	FATTY ALCOLHOL ALKOXYLATE	15 %	69227-21-0
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Carcinogenicity	PROPYLENE GLYCOL N-BUTYL	5 %	5131-66-8
		<u>Liquid</u>	Tank Wagon		<u>Ambient</u>		- Health	ETHER		
	Map: 2 Grid: D12, F3-F8	<u>Type</u>			<u>Temperature</u>		Reproductive	SEBACIC ACID	2 %	70103-35-4
		<u>Mixture</u>	Days on Site: 365		<u>Ambient</u>		Toxicity	DIETHANOLAMINE	1 %	111-42-2
							- Health Skin			
							Corrosion			
							Irritation			
							- Health			
							Respiratory Skin			
							Sensitization			
							- Health Serious			
							Eye Damage Eye			
							Irritation			
							- Health Specific			
							Target Organ			
							Toxicity			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Marsh Landing Generating Station	Chemical Location	CERS ID	10480876
Facility Name	Marsh Landing Generating Station	REFUELING TRUCK	Facility ID	07-000-774528
	3201C Wilbur Ave, Antioch 94509		Status	Submitted on 2/18/2022 2:20 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 3 - Flammable and Combustible Liquids	DIESEL FUEL NO. 2	Gallons	50	50	25		- Physical	DIESEL FUEL NO. 2	98 %	68476-34-6
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Flammable			
Combustible Liquid, Class II	68476-34-6	Liquid	Other		Ambient		- Health	RENEWABLE DIESEL	10 %	
	Map: 2 Grid: D12	<u>Type</u>			<u>Temperature</u>		Carcinogenicity	FATTY ACID METHYL ESTERS	3 %	
		Mixture	Days on Site: 365		Ambient		- Health Acute	NAPHTHALENE	0 %	91-20-3
							Toxicity			
							- Health Skin			
							Corrosion			
							Irritation			
							- Health			
							Respiratory Skin			
							Sensitization			
							- Health Specific			
							Target Organ			
							Toxicity			
							- Health			
							Aspiration Hazard			
DOT: 3 - Flammable and Combustible Liquids	GASOLINE (Unleaded)	Gallons	50	50	25		- Physical	GASOLINE	100 %	86290-81-5
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Flammable			
Flammable Liquid, Class I-B		Liquid	Other		Ambient		- Health	TOLUENE	20 %	108-88-3
	Map: 2 Grid: D12	<u>Type</u>			<u>Temperature</u>		Carcinogenicity	XYLENE	8 %	1330-20-7
		Mixture	Days on Site: 365		Ambient		- Health	PENTANE	7 %	540-84-1
							Reproductive	BUTANE	6 %	106-97-8
							Toxicity			
							- Health Skin			
							Corrosion			
							Irritation			
							- Health Serious			
							Eye Damage Eye			
							Irritation			
							- Health Specific			
							Target Organ			
							Toxicity			
							- Health			
							Aspiration Hazard			
							- Health Germ			
							Cell Mutagenicity			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Marsh Landing Generating Station		Chemical Location				CERS ID	10480876		
Facility Name Marsh Landing Generating Station		SPARE TRANSFORMER NORTH OF WAREHOUSE				Facility ID	07-000-774528		
3201C Wilbur Ave, Antioch 94509						Status	Submitted on 2/18/2022 2:20 PM		
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)	
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt
DOT: 2.2 - Nonflammable Gases	NITROGEN	Cu. Feet	300	150	150		- Physical Gas		
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Under Pressure		
	7727-37-9	Gas	Cylinder		> Ambient		- Physical		
	<u>Map: 2</u>	<u>Type</u>			<u>Temperature</u>		Explosive		
	Grid: G11	Pure	Days on Site: 365		Ambient		- Health Simple		
							Asphyxiant		

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Marsh Landing Generating Station				Chemical Location	CERS ID	10480876			
Facility Name	Marsh Landing Generating Station				SWITCHYARD	Facility ID	07-000-774528			
	3201C Wilbur Ave, Antioch 94509					Status	Submitted on 2/18/2022 2:20 PM			
						Annual Waste Amount	Hazardous Components (For mixture only)			
DOT Code/Fire Haz. Class	Common Name	Unit	Max. Daily	Largest Cont.	Avg. Daily	Federal Hazard Categories	Component Name	% Wt	EHS	CAS No.
	HYDRAULIC OIL	Gallons	90	15	90	- Health Acute	Gas Oils	85 %		64742-79-6
	CAS No	State	Storage Container		Pressue	Waste Code	Toxicity	Butylated hydroxytoluene	0 %	128-37-0
		Liquid	Aboveground Tank		Ambient		- Health Skin			
	Map: 2	Grid: H3-H7	Type		Temperature		Corrosion			
			Mixture	Days on Site: 365		Ambient		Irritation		
							- Health Aspiration Hazard			
DOT: 2.2 - Nonflammable Gases	SULFUR HEXAFLUORIDE	Cu. Feet	3015	503	3015	- Physical Gas				
	CAS No	State	Storage Container		Pressue	Waste Code	Under Pressure			
	2551-62-4	Gas	Other		> Ambient		- Physical			
	Map: 2	Grid: H3-H7	Type		Temperature		Explosive			
			Pure	Days on Site: 365		Ambient		- Health Simple Asphyxiant		

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Marsh Landing Generating Station	Chemical Location	CERS ID	10480876
Facility Name	Marsh Landing Generating Station	TA FANS	Facility ID	07-000-774528
	3201C Wilbur Ave, Antioch 94509		Status	Submitted on 2/18/2022 2:20 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
	LUBE OIL	Gallons	864	108	680		- Health Hazard			
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Not Otherwise			
		Liquid	Other		Ambient		Classified			
	Map: 2 Grid: E3-E7	<u>Type</u>			<u>Temperature</u>					
		Mixture	Days on Site: 365		Ambient					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Marsh Landing Generating Station	Chemical Location	CERS ID	10480876
Facility Name	Marsh Landing Generating Station	Transformers Throughout (GSU, AUX, and SPARE)	Facility ID	07-000-774528
	3201C Wilbur Ave, Antioch 94509		Status	Submitted on 2/18/2022 2:20 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)			
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS	CAS No.
	MINERAL OIL, HYTRANS 61	Gallons	87893	15224	87893		- Health	DISTILLATES, PETROLEUM	99 %		64742-53-6
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Respiratory Skin	2, 6-DI-BUTYL-P-CRESOL (BHT)	1 %		128-37-0
		<u>Liquid</u>	<u>Other</u>		<u>Ambient</u>		Sensitization				
	Map: 2 Grid: G3-G7, G11	<u>Type</u>			<u>Temperature</u>		- Health Serious				
		<u>Mixture</u>	Days on Site: 365		<u>Ambient</u>		Eye Damage Eye				
							Irritation				
							- Health				
							Aspiration Hazard				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.		Marsh Landing Generating Station				Chemical Location		CERS ID		10480876	
Facility Name		Marsh Landing Generating Station				TURBINES		Facility ID		07-000-774528	
		3201C Wilbur Ave, Antioch 94509						Status		Submitted on 2/18/2022 2:20 PM	
						Annual Waste		Hazardous Components			
										(For mixture only)	
DOT Code/Fire Haz. Class		Common Name		Unit	Max. Daily	Largest Cont.	Avg. Daily	Amount	Federal Hazard	Component Name	
		LUBE OIL		Gallons	26000	7244	24200		- Health Hazard		
		CAS No		State	Storage Container		Pressue	Waste Code	Not Otherwise		
		64742-54-7		Liquid	Other		Ambient		Classified		
		Map: 2 Grid: F4-F8		Type			Temperature				
				Mixture	Days on Site: 365		Ambient				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Marsh Landing Generating Station				Chemical Location		CERS ID	10480876			
Facility Name	Marsh Landing Generating Station				TURBINES AND ELECTRICAL PACKAGES			Facility ID	07-000-774528		
	3201C Wilbur Ave, Antioch 94509							Status	Submitted on 2/18/2022 2:20 PM		
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)			
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS	CAS No.
	FM 200 FIRE SUPPRESSION	Pounds	5376	562	5376	- Physical Gas	1,1,1,2,3,3,3-	100 %	431-89-0		
	CAS No	State	Storage Container		Pressue	Under Pressure	HEPTAFLUROPROPANE				
	431-89-0	Gas	Cylinder		> Ambient	Waste Code	- Physical	NITROGEN	7727-37-9		
	Map: 2 Grid: G3-G8	Type			Temperature	Explosive					
		Pure	Days on Site: 365		Ambient	- Health Simple					
						Asphyxiant					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Marsh Landing Generating Station		Chemical Location				CERS ID	10480876		
Facility Name Marsh Landing Generating Station		TURNING GEAR LUBE OIL				Facility ID	07-000-774528		
3201C Wilbur Ave, Antioch 94509						Status	Submitted on 2/18/2022 2:20 PM		
						Annual Waste	Hazardous Components		
						Amount	(For mixture only)		
DOT Code/Fire Haz. Class		Common Name	Unit	Quantities		Federal Hazard			
			Max. Daily	Largest Cont.	Avg. Daily	Categories	Component Name	% Wt	EHS CAS No.
		LUBE OIL	Gallons	76	19	76	- Health Hazard		
		CAS No	State	Storage Container		Pressue	Waste Code	Not Otherwise	
			Liquid	Other		Ambient		Classified	
		Map: 2 Grid: G3-G8	Type			Temperature			
			Mixture	Days on Site: 365		Ambient			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Marsh Landing Generating Station				Chemical Location		CERS ID	10480876		
Facility Name	Marsh Landing Generating Station				Various Air Receivers		Facility ID	07-000-774528		
	3201C Wilbur Ave, Antioch 94509						Status	Submitted on 2/18/2022 2:20 PM		
							Hazardous Components (For mixture only)			
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories			
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 2.2 - Nonflammable Gases	AIR	Cu. Feet	3753	2115	2369		- Physical Gas			
	CAS No	State	Storage Container		Pressue	Waste Code	Under Pressure			
	132259-10-0	Gas	Aboveground Tank		> Ambient					
	Map: 2 Grid: C3-G8	Type			Temperature					
		Pure	Days on Site: 365		Ambient					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Marsh Landing Generating Station				Chemical Location	CERS ID		10480876			
Facility Name	Marsh Landing Generating Station				WAREHOUSE	Facility ID		07-000-774528			
3201C Wilbur Ave, Antioch 94509							Status		Submitted on 2/18/2022 2:20 PM		
					Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)				
DOT Code/Fire Haz. Class	Common Name	Unit	Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS	CAS No.
	NITROGEN, NITRIC OXIDE, CARBON MONOXIDE	Cu. Feet	3000	250	1500		- Physical Gas	NITROGEN	100 %		7727-37-9
		State	Storage Container		Pressue	Waste Code	Under Pressure	NITRIC OXIDE		✓	10102-43-9
		Gas	Cylinder		> Ambient		- Physical	CARBON MONOXIDE			630-08-0
	CAS No	Type			Temperature		Explosive	NITROGEN OXIDES			10102-44-0
	Map: 2 Grid: H12	Mixture	Days on Site: 365		Ambient		- Health Simple Asphyxiant				
	NITROGEN, NITRIC OXIDE	Cu. Feet	3000	150	2400		- Physical Gas	NITROGEN	100 %		7727-37-9
		State	Storage Container		Pressue	Waste Code	Under Pressure	NITRIC OXIDE		✓	10102-43-9
		Gas	Cylinder		> Ambient		- Physical	NITROGEN OXIDES			10102-44-7
	CAS No	Type			Temperature		Explosive				
	Map: 2 Grid: H12	Mixture	Days on Site: 365		Ambient		- Health Simple Asphyxiant				
	NITROGEN, OXYGEN, CARBON MONOXIDE	Cu. Feet	3300	150	2250		- Physical Gas	NITROGEN	89 %		7727-37-9
		State	Storage Container		Pressue	Waste Code	Under Pressure	OXYGEN	10 %		7782-44-7
		Gas	Cylinder		> Ambient		- Physical	CARBON MONOXIDE	0 %		630-08-0
	CAS No	Type			Temperature		Explosive				
	Map: 2 Grid: H12	Mixture	Days on Site: 365		Ambient		- Health Reproductive Toxicity				
DOT: 2.2 - Nonflammable Gases	ULTRA ZERO COMPRESSED AIR	Cu. Feet	1200	300	900		- Physical Gas				
		State	Storage Container		Pressue	Waste Code	Under Pressure				
		Gas	Cylinder		> Ambient		- Physical				
	CAS No	Type			Temperature		Explosive				
	Map: 2 Grid: H12	Mixture	Days on Site: 365		Ambient						
DOT: 2.1 - Flammable Gases	METHANE MIXTURE	Cu. Feet	500	250	250		- Physical	ETHANE	100 %		74-84-0
	CHROMATOGRAPH CAL GAS	State	Storage Container		Pressue	Waste Code	Flammable	METHANE	100 %		74-82-8
		Gas	Cylinder		> Ambient		- Physical Gas	PROPANE	100 %		74-98-6
	CAS No	Type			Temperature		Under Pressure	NITROGEN	10 %		7727-37-9
	Map: 2 Grid: H12	Mixture	Days on Site: 365		Ambient		- Physical Explosive				
DOT: 2.2 - Nonflammable Gases	NITROGEN	Cu. Feet	22800	500	12000		- Physical Gas				
		State	Storage Container		Pressue	Waste Code	Under Pressure				
	CAS No	Gas	Cylinder		> Ambient		- Physical				
	7727-37-9	Type			Temperature		Explosive				
	Map: 2 Grid: H12	Pure	Days on Site: 365		Ambient		- Health Simple Asphyxiant				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Marsh Landing Generating Station	Chemical Location	CERS ID	10480876
Facility Name	Marsh Landing Generating Station	WAREHOUSE	Facility ID	07-000-774528
	3201C Wilbur Ave, Antioch 94509		Status	Submitted on 2/18/2022 2:20 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 8 - Corrosives (Liquids and Solids)	LEAD ACID BATTERIES	Pounds	300	300	300		- Physical	Sulfuric Acid	40 %	✓ 7664-93-9
Corrosive, Water Reactive, Class 2, Toxic, Oxidizing, Class 1	CAS No. ☒ EHS Map: 2 Grid: H12	State Liquid Type Mixture	Storage Container Other Days on Site: 365		Pressue Ambient Temperature Ambient	Waste Code	- Flammable - Physical Explosive - Physical Corrosive To Metal - Health Carcinogenicity - Health Acute Toxicity - Health Reproductive Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity			
	NITROGEN, CARBON MONOXIDE	Cu. Feet	750	150	450		- Physical Gas Under Pressure - Physical Explosive - Health Simple Asphyxiant	NITROGEN CARBON MONOXIDE	100 %	7727-37-9 630-08-0
	CAS No. Map: 2 Grid: H12	State Gas Type Mixture	Storage Container Cylinder Days on Site: 365		Pressue > Ambient Temperature Ambient	Waste Code				
DOT: 2.2 - Nonflammable Gases	HELIUM	Cu. Feet	1200	300	600		- Physical Gas Under Pressure - Physical Explosive - Health Simple Asphyxiant			
	CAS No. 7440-59-7 Map: 2 Grid: H12	State Gas Type Pure	Storage Container Cylinder Days on Site: 365		Pressue > Ambient Temperature Ambient	Waste Code				
DOT: 2.1 - Flammable Gases	HYDROGEN	Cu. Feet	900	300	600		- Physical Flammable - Physical Gas Under Pressure - Physical Explosive - Health Simple Asphyxiant			
Flammable Gas	CAS No. 1333-74-0 Map: 2 Grid: H12	State Gas Type Pure	Storage Container Cylinder Days on Site: 365		Pressue > Ambient Temperature Ambient	Waste Code				

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Marsh Landing Generating Station	Chemical Location				CERS ID	10480876				
Facility Name	Marsh Landing Generating Station	WAREHOUSE FLAMMABLE CABINET				Facility ID	07-000-774528				
	3201C Wilbur Ave, Antioch 94509					Status	Submitted on 2/18/2022 2:20 PM				
					Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)				
DOT Code/Fire Haz. Class	Common Name	Unit	Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS	CAS No.
DOT: 3 - Flammable and Combustible Liquids	DIESEL FUEL NO. 2	Gallons	10	5	10		- Physical	DIESEL FUEL NO. 2	100 %		68476-34-6
	CAS No	State	Storage Container		Pressue	Waste Code	Flammable				
Combustible Liquid, Class II	68476-34-6	Liquid	Other		Ambient		- Health	RENEWABLE DIESEL	10 %		
	Map: 2 Grid: H12	Type			Temperature		Carcinogenicity	FATTY ACID METHYL ESTERS	3 %		
		Mixture	Days on Site: 365		Ambient		- Health Acute	NAPTHALENE	0 %		91-20-3
							Toxicity				
							- Health Skin				
							Corrosion				
							Irritation				
							- Health				
							Respiratory Skin				
							Sensitization				
							- Health Specific				
							Target Organ				
							Toxicity				
							- Health				
							Aspiration Hazard				
DOT: 3 - Flammable and Combustible Liquids	GASOLINE (Unleaded)	Gallons	20	5	20		- Physical	GASOLINE	100 %		86290-81-5
	CAS No	State	Storage Container		Pressue	Waste Code	Flammable				
Flammable Liquid, Class I-B		Liquid	Other		Ambient		- Health	TOLUENE	20 %		108-88-3
	Map: 2 Grid: H12	Type			Temperature		Carcinogenicity	XYLENE	8 %		1330-20-7
		Mixture	Days on Site: 365		Ambient		- Health	PENTANE	7 %		540-84-1
							Reproductive	BUTANE	6 %		106-97-8
							Toxicity				
							- Health Skin				
							Corrosion				
							Irritation				
							- Health Serious				
							Eye Damage Eye				
							Irritation				
							- Health Specific				
							Target Organ				
							Toxicity				
							- Health				
							Aspiration Hazard				
							- Health Germ				
							Cell Mutagenicity				
	ULTRA COOLANT	Gallons	16	5.3	11		- Health Hazard	Polypropylene glycol	65 %		
	CAS No	State	Storage Container		Pressue	Waste Code	Not Otherwise	Pentaerythritol ester	27 %		
		Liquid	Plastic Bottle or Jug		Ambient		Classified	Alkylated diphenylamine	5 %		68411-46-1
	Map: 2 Grid: H12	Type			Temperature			Barium dinonyl-naphthalene	0 %		25619-56-1
		Mixture	Days on Site: 365		Ambient			sulfonate			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org.	Marsh Landing Generating Station				Chemical Location		CERS ID	10480876			
Facility Name	Marsh Landing Generating Station				WATER TREATMENT BUILDING			Facility ID	07-000-774528		
	3201C Wilbur Ave, Antioch 94509							Status	Submitted on 2/18/2022 2:20 PM		
						Annual Waste			Hazardous Components (For mixture only)		
DOT Code/Fire Haz. Class	Common Name	Unit	Quantities				Federal Hazard				
			Max. Daily	Largest Cont.	Avg. Daily	Amount	Categories	Component Name	% Wt	EHS	CAS No.
DOT: 8 - Corrosives (Liquids and Solids)	SODIUM BISULFITE 35% - 40%, BWT-104	Gallons	350	350	200		- Health Acute	SODIUM BISULFITE			7631-90-5
		State	Storage Container		Pressue		Toxicity				
		Liquid	Tote Bin		Ambient	Waste Code	- Health Skin				
							Corrosion				
Corrosive, Highly Toxic	CAS No 7631-90-5 Map: 2 Grid: C4	Type			Temperature		Irritation				
		Mixture	Days on Site: 365		Ambient		- Health Serious				
						Eye Damage Eye					
						Irritation					
	RO-505	Gallons	350	350	190		- Health Acute	2-Propenoic acid, homopolymer	14 %		9003-01-4
		State	Storage Container		Pressue	Waste Code	Toxicity	Polyoxalkylenes, C4-6,	20 %		68918-96-7
		Liquid	Tote Bin		Ambient		- Health Skin	propoxylated			
							Corrosion	2 Propenoic acid, telomer	8 %		97953-25-8
	CAS No	Type			Temperature		Irritation				
		Mixture	Days on Site: 365		Ambient		- Health Serious				
						Eye Damage Eye					
						Irritation					
							- Health				
							Aspiration Hazard				
	SODIUM HYPOCHLORITE 12.5%	Gallons	325	325	100		- Health Skin	SODIUM HYPOCHLORITE	13 %		7681-52-9
		State	Storage Container		Pressue	Waste Code	Corrosion	SODIUM HYDROXIDE	1 %		1310-73-2
		Liquid	Tote Bin		Ambient		Irritation				
							- Health Serious				
	CAS No	Type			Temperature		Eye Damage Eye				
		Mixture	Days on Site: 365		Ambient		Irritation				

Marsh Landing Generating Station

Annual Compliance Report

3.3 HAZ-8

The site specific security plan has been reviewed and updated and is available on site for viewing.

- All current project employees and appropriate contractor background investigations have been performed and a certification statement has been appended to the operations security plan.
- The operation security plan includes all current hazardous material transport vendor certifications for security plans and employee background investigations.

Marsh Landing Generating Station

Annual Compliance Report

3.4 SOIL & WATER-5

- See attached Quarterly Industrial User Compliance Reports to DDSD.



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

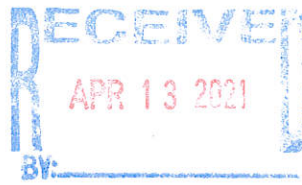
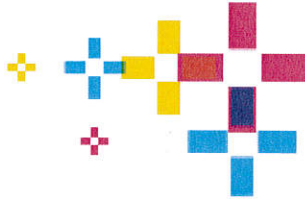
Certification Statement

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	January 1-March 31, 2021

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	4/7/2021



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

April 7, 2021

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

**Subject: 2021 First Quarterly (January 1-March 31) Self-Monitoring Report
Marsh Landing LLC, Marsh Landing Generating Station,
Industrial Wastewater Discharge Permit 0311963-S**

This letter documents the transmittal of the 2021 First 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 January 1 through March 31, 2021. This report includes monthly flow data and quarterly, semiannual, and annual analytical data required to be collected in 2021. Data are summarized in the attached tables.

Additionally, enclosed is documentation of the flow meter calibrations performed in January 2021 for compliance with the Annual Flow Measurement Device Calibration requirement in the Industrial Wastewater Discharge Permit.

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

If you have any questions, please contact Mr. David Frandsen, Environmental Specialist at david.frandsen@nrg.com or call 925.779-6695

Sincerely,



Joe Moura

Plant Manager
Marsh Landing LLC
Marsh Landing Generating Station

Attachments

Table 1:	Quarterly Results for Combined Wastewater (FAC Combined)
Table 2:	Semiannual Results for Combined Wastewater (FAC Combined)
Table 3:	Annual Results for Combined Wastewater (FAC Combined)
Table 4:	January 2021 Monthly Flow Data
Table 5:	February 2021 Monthly Flow Data
Table 6:	March 2021 Monthly Flow Data

Attachment 1:	pH COC
Attachment 2:	Analytical Reports
Attachment 3:	Annual Flow Measurement Device Calibration Record

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	January - March 2021
Report Type	Quarterly

Constituent	Sample Date	Permit Limit	Result	Units
Field pH	2/5/2021	6-10	7.6	S.U.
BOD	2/5/2021	-	4.6	mg/L
COD	2/5/2021	-	43	mg/L
Arsenic	2/5/2021	0.15	0.00049 J	mg/L
Cadmium	2/5/2021	0.1	ND	mg/L
Chromium	2/5/2021	0.5	0.00044 J	mg/L
Copper	2/5/2021	0.5	0.0047	mg/L
Iron	2/5/2021	-	0.100	mg/L
Lead	2/5/2021	0.5	ND	mg/L
Mercury	2/5/2021	0.003	ND	mg/L
Molybdenum	2/5/2021	-	0.0011	mg/L
Nickel	2/5/2021	0.5	0.002	mg/L
Selenium	2/5/2021	0.25	ND	mg/L
Silver	2/5/2021	0.2	ND	mg/L
Zinc	2/5/2021	1.0	0.150	mg/L
TDS	2/5/2021	-	276	mg/L
TSS	2/5/2021	-	2.20	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
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	January - July 2021
Report Type	Semiannual

Constituent	Sample Date	Permit Limit	Result	Units
Cyanide	2/5/2021	0.20	0.00078 J	mg/L
Total Phenolics (EPA 420.4)	2/5/2021	1.0	ND	mg/L
Ammonia as N	2/5/2021	200	1.7	mg/L
Oil and Grease Animal/Vegetable (HEM)	2/5/2021	300	3.2 J	mg/L
Oil and Grease Petroleum/Mineral (SGT-HEM)	2/5/2021	100	ND	mg/L
ORGANICS (EPA 624.1, 625.1, 608.3)				
<i>Bromodichloromethane</i>	2/5/2021	-	0.0027	mg/L
<i>Bromoform</i>	2/5/2021	-	0.00077	mg/L
<i>Chloroform</i>	2/5/2021	-	0.0012	mg/L
<i>Dibromochloromethane</i>	2/5/2021	-	0.0032	mg/L
<i>Bis (2-Ethylhexyl) Phthalate</i>	2/5/2021	-	.00013 J	mg/L
<i>Benzylbutyl Phthalate</i>	2/5/2021	-	0.000027 J	mg/L
<i>Di-n-butyl Phthalate</i>	2/5/2021	-	0.000025 JB	mg/L
<i>Diethyl Phthalate</i>	2/5/2021	-	0.000030 J	mg/L
<i>Dimethyl Phthalate</i>	2/5/2021	-	0.0000048 J	mg/L
TOTAL TOXIC ORGANICS	2/5/2021	2.0	0.00787	mg/L

J = The reported concentration is an estimated value and is not included in Total Toxic Organic totals.

B = Analyte detected in the associated Method blank and in the sample.

mg/L = Milligrams per Liter

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

Table 3
Annual 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	January - December 2021
Report Type	Annual

Constituent	Sample Date	Permit Limit	Result	Units
Sulfide	2/5/2021	-	0.045 J	mg/L
Sulfate	2/5/2021	-	40	mg/L

J = The reported concentration is an estimated value.

mg/L = Milligrams per Liter

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	January, 2021
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuous, measured by flow meter
Sample Date	1/1/2021 - 1/31/2021
Permit Limits (s.u.)	NTE 30,240 gpd. NTE 21 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 21 (+10% = 23.1)
1	3,039	19.69	
2	8,218	19.58	
3	0	0.00	
4	4,067	19.58	
5	9,324	19.61	
6	0	0.00	
7	5,162	25.65	1
8	5,252	21.00	
9	4,339	19.57	
10	0	0.00	
11	0	0.00	
12	0	0.00	
13	3,516	19.58	
14	7,859	19.60	
15	6,645	20.62	
16	4,410	19.59	
17	0	0.00	
18	0	0.00	
19	0	0.00	
20	5,785	19.64	
21	4,177	19.59	
22	9,675	19.67	
23	463	15.73	
24	0	0.00	
25	4,207	19.93	
26	4,395	19.57	
27	9,929	20.13	
28	20,738	19.63	
29	3,217	19.57	
30	7,909	19.59	
31	0	0.00	

Total Monthly Flow (gal)	132,325	Did flow exceed limits?	NO
Daily Max Flow (gpd)	20,738	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	4,269		

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	February, 2021
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuous, measured by flow meter
Sample Date	2/1/2021 - 2/29/2021
Permit Limits (s.u.)	NTE 30,240 gpd. NTE 21 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 21 (+10% = 23.1)
1	0	0.00	
2	0	0.00	
3	0	0.00	
4	13,598	19.96	
5	11,730	20.16	
6	6,840	19.62	
7	0	0.00	
8	6,498	19.90	
9	6,260	19.61	
10	2,963	18.39	
11	7,938	20.53	
12	6,171	19.59	
13	5,852	19.59	
14	0	0.00	
15	0	0.00	
16	0	0.00	
17	4,325	20.73	
18	8,664	19.70	
19	2,838	19.58	
20	7,998	19.60	
21*	446	16.04	
22*	3,060	19.07	
23	13,073	20.66	
24	3,302	19.61	
25	6,771	19.57	
26	1,753	18.49	
27	8,531	20.43	
28	0	0.00	

Total Monthly Flow (gal)	128,610	Did flow exceed limits?	NO
Daily Max Flow (gpd)	13,598	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	4,593		

Table 6
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	March, 2021
Report Type	Quarterly
Constituent	Flow
Sample Type	Continuous, measured by flow meter
Sample Date	3/1/2021 - 3/31/2021
Permit Limits (s.u.)	NTE 30,240 gpd. NTE 21 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 21 (+10% = 23.1)
1	3,651	19.88	
2	7,011	19.57	
3	2,889	19.31	
4	7,476	20.53	
5	13,308	19.71	
6	0	0.00	
7	0	0.00	
8	3,321	20.64	
9	15,918	19.61	
10	4,473	19.81	
11	7,608	19.59	
12	3,084	20.01	
13	7,905	19.62	
14	397	15.99	
15	0	0.00	
16	0	0.00	
17	6,386	19.86	
18	6,570	19.58	
19	1,602	17.68	
20	9,321	21.07	
21	0	0.00	
22	413	15.98	
23	0	0.00	
24	0	0.00	
25	0	0.00	
26	2,856	19.95	
27	12,912	19.61	
28	396	16.12	
29	2,405	16.78	
30	10,996	20.33	
31	3,567	19.75	

Total Monthly Flow (gal)	134,468	Did flow exceed limits?	NO
Daily Max Flow (gpd)	15,918	Flow above daily max (30,240 gpd)?	NO
Average Monthly Flow (gpd)	4,338		

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-21-033	2/5/21	1400	2/5/21	1400	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:

Feb 8, 2021

Sampling Technologist: James E Robinson

Signature:

James E Robinson

Date:

5-Feb-21



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2102365

Report Created for: NRG Energy, LLC

3201 Wilbur Avenue
Antioch, CA 94509

Project Contact: David Frandsen

Project P.O.: 4501905749

Project: Marsh Landing, DDSD Quarterly

Project Received: 02/05/2021

Analytical Report reviewed & approved for release on 02/16/2021 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
Project: Marsh Landing, DDSD Quarterly
WorkOrder: 2102365

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
N/A	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)



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
<http://www.mcccampbell.com> / E-mail: main@mcccampbell.com

Glossary of Terms & Qualifier Definitions

Client: NRG Energy, LLC
Project: Marsh Landing, DDSD Quarterly
WorkOrder: 2102365

Analytical Qualifiers

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



Analytical Report

Client: NRG Energy, LLC

Date Received: 02/05/2021 17:02

Date Prepared: 02/05/2021

Project: Marsh Landing, DDSO Quarterly

WorkOrder: 2102365

Extraction Method: SM5210B

Analytical Method: SM5210 B-2001

Unit: mg/L

Biochemical Oxygen Demand (BOD)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2102365-001B	Water	02/05/2021 14:00	WetChem	214668

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
BOD	4.6	4.0	4.0	1	02/10/2021 18:58

Analyst(s): HAD



Analytical Report

Client: NRG Energy, LLC

Date Received: 02/05/2021 17:02

Date Prepared: 02/12/2021

Project: Marsh Landing, DDSO Quarterly

WorkOrder: 2102365

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	2102365-001A	Water	02/05/2021 14:00	SPECTROPHOTOMETER	215185

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
COD	43	7.2	10	1	02/12/2021 18:00

Analyst(s): NYG



Analytical Report

Client: NRG Energy, LLC

Date Received: 02/05/2021 17:02

Date Prepared: 02/08/2021

Project: Marsh Landing, DDSQ Quarterly

WorkOrder: 2102365

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	2102365-001E	Water	02/05/2021 14:00	ICP-MS2 157SMPL.D	214725

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Arsenic	0.00049	J	0.00012	0.00050	1	02/10/2021 03:47
Cadmium	ND		0.000060	0.00050	1	02/10/2021 03:47
Chromium	0.00044	J	0.00036	0.00050	1	02/10/2021 03:47
Copper	0.0047		0.00043	0.00050	1	02/10/2021 03:47
Iron	0.10		0.058	0.10	1	02/10/2021 03:47
Lead	ND		0.00032	0.00050	1	02/10/2021 03:47
Mercury	ND		0.000033	0.000050	1	02/10/2021 03:47
Molybdenum	0.0011		0.00021	0.00050	1	02/10/2021 03:47
Nickel	0.0021		0.00058	0.0010	1	02/10/2021 03:47
Selenium	ND		0.00018	0.00050	1	02/10/2021 03:47
Silver	ND		0.000042	0.00050	1	02/10/2021 03:47
Zinc	0.15		0.011	0.020	1	02/10/2021 03:47

Surrogates	REC (%)	Limits
Terbium	106	70-130

Analyst(s): DB



Analytical Report

Client: NRG Energy, LLC

Date Received: 02/05/2021 17:02

Date Prepared: 02/08/2021

Project: Marsh Landing, DDS D Quarterly

WorkOrder: 2102365

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	2102365-001C	Water	02/05/2021 14:00	WetChem	214807

Analytes	Result	MDL	RL	DF	Date Analyzed
Total Dissolved Solids	276	10.0	10.0	1	02/09/2021 15:05

Analyst(s): HAD



Analytical Report

Client: NRG Energy, LLC

Date Received: 02/05/2021 17:02

Date Prepared: 02/09/2021

Project: Marsh Landing, DDS D Quarterly

WorkOrder: 2102365

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	2102365-001D	Water	02/05/2021 14:00	WetChem	214820

Analytes	Result	MDL	RL	DF	Date Analyzed
Total Suspended Solids	2.20	1.00	1.00	1	02/09/2021 15:45

Analyst(s): PHU



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 02/05/2021

Date Analyzed: 02/10/2021

Instrument: WetChem

Matrix: Water

Project: Marsh Landing, DDSD Quarterly

WorkOrder: 2102365

BatchID: 214668

Extraction Method: SM5210B

Analytical Method: SM5210 B-2001

Unit: mg/L

Sample ID: MB/LCS/LCSD-214668

QC Summary Report for BOD

Analyte	MB Result	MDL	RL			
BOD	ND	4.00	4.00	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
BOD	182	188	198	92	95	80-120	2.97	16



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 02/12/2021

Date Analyzed: 02/12/2021

Instrument: SPECTROPHOTOMETER

Matrix: Water

Project: Marsh Landing, DDSD Quarterly

WorkOrder: 2102365

BatchID: 215185

Extraction Method: SM5220 D-1997

Analytical Method: SM5220 D-1997

Unit: mg/L

Sample ID: MB/LCS/LCSD-215185

QC Summary Report for COD

Analyte	MB Result	MDL	RL			
COD	ND	7.20	10.0	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
COD	97.0	94.0	100	97	94	90-110	3.14	20



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 02/08/2021

Date Analyzed: 02/08/2021 - 02/09/2021

Instrument: ICP-MS5

Matrix: Water

Project: Marsh Landing, DDSD Quarterly

WorkOrder: 2102365

BatchID: 214725

Extraction Method: E200.8

Analytical Method: E200.8

Unit: µg/L

Sample ID: MB/LCS/LCSD-214725

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Arsenic	ND	0.120	0.500	-	-	-
Cadmium	ND	0.0600	0.500	-	-	-
Chromium	ND	0.360	0.500	-	-	-
Copper	ND	0.430	0.500	-	-	-
Iron	ND	58.0	100	-	-	-
Lead	ND	0.320	0.500	-	-	-
Mercury	ND	0.0330	0.0500	-	-	-
Molybdenum	ND	0.210	0.500	-	-	-
Nickel	ND	0.580	1.00	-	-	-
Selenium	ND	0.180	0.500	-	-	-
Silver	ND	0.0420	0.500	-	-	-
Zinc	ND	11.0	20.0	-	-	-

Surrogate Recovery

Terbium	521	500	104	70-130
---------	-----	-----	-----	--------

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Arsenic	54.2	53.2	50	108	106	85-115	1.77	20
Cadmium	52.8	51.4	50	106	103	85-115	2.71	20
Chromium	51.8	51.3	50	104	103	85-115	1.10	20
Copper	54.0	53.1	50	108	106	85-115	1.64	20
Iron	5080	4990	5000	102	100	85-115	1.81	20
Lead	50.7	50.5	50	101	101	85-115	0.551	20
Mercury	1.22	1.23	1.25	98	99	85-115	0.651	20
Molybdenum	50.0	48.7	50	100	97	85-115	2.71	20
Nickel	53.6	52.9	50	107	106	85-115	1.24	20
Selenium	53.7	52.5	50	107	105	85-115	2.25	20
Silver	51.0	49.2	50	102	98	85-115	3.55	20
Zinc	550	548	500	110	110	85-115	0.329	20

Surrogate Recovery

Terbium	534	523	500	107	105	70-130	2.02	20
---------	-----	-----	-----	-----	-----	--------	------	----



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 02/08/2021

Date Analyzed: 02/09/2021

Instrument: WetChem

Matrix: Water

Project: Marsh Landing, DDSD Quarterly

WorkOrder: 2102365

BatchID: 214807

Extraction Method: SM2540 C-1997

Analytical Method: SM2540 C-1997

Unit: mg/L

Sample ID: MB/LCS/LCSD-214807
2102365-001C

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	968	994	1000	97	99	80-120	2.65	10

Analyte	SAMP Result	DUP Result		RPD	RPD Limit
Total Dissolved Solids	276	250		9.89	10



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 02/09/2021

Date Analyzed: 02/09/2021

Instrument: WetChem

Matrix: Water

Project: Marsh Landing, DDSD Quarterly

WorkOrder: 2102365

BatchID: 214820

Extraction Method: SM2540 D-1997

Analytical Method: SM2540 D-1997

Unit: mg/L

Sample ID: MB/LCS/LCSD-214820

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	96.0	101	100	96	101	80-120	5.08	10



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 2102365

ClientCode: GOA

☐ WaterTrax ☐ WriteOn ☐ 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.com

Requested TATs:

**5 days;
7 days;**

Date Received: 02/05/2021

Date Logged: 02/05/2021

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
2102365-001	FAC Combined Wastewater	Water	2/5/2021 14:00	☐	B	A	E	A	C	D						

Test Legend:

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

Project Manager: Angela Rydelius

Prepared by: Nancy Palacios

Comments: Use QUOTE 192976 for any Marsh Landing projects to get correct analyte list. Always report in mg/L.

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



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mcccampbell.com / E-mail: main@mcccampbell.com

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: 2102365

QC Level:

Date Logged: 2/5/2021

Comments: Use QUOTE 192976 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	Head Space	Dry-Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	SubOut
001A	FAC Combined Wastewater	Water	SM5220D (COD)	1	aVOA w/ H2SO4	☐	☐	2/5/2021 14:00	5 days	2/12/2021	None	☐	
001B	FAC Combined Wastewater	Water	SM5210B (BOD)	1	500mL HDPE, unprsv.	☐	☐	2/5/2021 14:00	7 days	2/17/2021	None	☐	
001C	FAC Combined Wastewater	Water	SM2540C (TDS)	1	500mL HDPE, unprsv.	☐	☐	2/5/2021 14:00	5 days	2/12/2021	None	☐	
001D	FAC Combined Wastewater	Water	SM2540D (TSS)	1	1L HDPE, unprsv.	☐	☐	2/5/2021 14:00	5 days	2/12/2021	None	☐	
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	☐	☐	2/5/2021 14:00	5 days	2/12/2021	None	☐	

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.

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

2102365

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@clearwaterenergy.com P.O. No.: 4501905749		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-21-017	5-Feb-21	1400	DDSD	Quarterly	Wastewater	C-24	FAC Combined Wastewater	1	Amber Glass Jar	250	H ₂ SO ₄ (pH<2, 4°C)	X			
ML-21-018	5-Feb-21	1400	DDSD	Quarterly	Wastewater	C-24	FAC Combined Wastewater	1	HDPE Bottle	1,000	None (ZHS, 4°C)		X		
ML-21-019	5-Feb-21	1400	DDSD	Quarterly	Wastewater	C-24	FAC Combined Wastewater	1	HDPE Bottle	500	None (4°C)			X	
ML-21-020	5-Feb-21	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. RESULTS AND PRICING PER QUOTE ID: 203270. *Include sample description with client sample ID.							
PRINTED NAME			SIGNATURE			COMPANY			DATE			TIME			
Sampled by: James E Robinson			<i>James E. Robinson</i>			Marsh Landing LLC			5-Feb-21			1400			
Relinquished by: James E Robinson			<i>James E. Robinson</i>			Marsh Landing LLC			5-Feb-21			1702			
Received by: <i>Lilly Ortiz</i>			<i>Lilly Ortiz</i>			McCampbell Analytical, Inc			5-Feb-21						
Relinquished by:															
Received by:															
Relinquished by:															
Received by:															

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

2102365

SAMPLES SUBMITTED TO				SEND INVOICE TO				PROJECT				ANALYSIS REQUEST			
Laboratory: McC Campbell Analytical, Inc. ELAP Cert. No.: 1644 Address: 1534 Willow Pass Road, Pittsburg, CA 94565-1701 Phone/Fax: 925.252.9262/ 925.252.9269				Company: Marsh Landing LLC Attention: Accounts Payable Address: invoices@cleanwayenergy.com P.O. No.: 4501905749				Plant: Marsh Landing Title: DDSD Phase: Quarterly Manager: David Frandsen				Total Metals¹ (EPA Method 200.8)			
SAMPLE INFORMATION								CONTAINER INFORMATION							
Sample Number	Sample Date	Sample Collection Time	Regulatory Driver	Regulatory Frequency	Sample Medium	Sample Type	Sample Description	Number	Type	Volume (each, mL)	Preserv.				
ML-21-021	5-Feb-21	1400	DDSD	Quarterly	Wastewater	C-24	FAC Combined Wastewater	1	HDPE Bottle	250	HNO3 (pH<2)	X			
HOLDING TIME: 28 days															
REPORTING 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 E-mail CC: joe.moura@nrg.com				LABORATORY NOTES RE: SAMPLE RECEIPT/CONDITION				DIRECTIONS FOR LABORATORY 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 RESULTS AND PRICING PER QUOTE ID: 203270. *Include sample description with client sample ID.							
PRINTED NAME		SIGNATURE		COMPANY		DATE		TIME							
Sampled by:		James E Robinson		Marsh Landing LLC		5-Feb-21		1400							
Relinquished by:		James E Robinson		Marsh Landing LLC		5-Feb-21		1702							
Received by:		Lilly Ortiz		McC Campbell Analytical, Inc		5-Feb-21									
Relinquished by:															
Received by:															
Relinquished by:															
Received by:															



Sample Receipt Checklist

Client Name: **NRG Energy, LLC**
Project: **Marsh Landing, DDSD Quarterly**
WorkOrder №: **2102365** Matrix: Water
Carrier: Client Drop-In

Date and Time Received: **2/5/2021 17:02**
Date Logged: **2/5/2021**
Received by: **Lilly Ortiz**
Logged by: **Nancy Palacios**

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 ☒
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: 3.6°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 353.2/4500NO ₃ : <2; 522: <4; 218.7: >8)?	Yes ☐ No ☐	NA ☒

UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes ☐ No ☐	NA ☒
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes ☐ No ☐	NA ☒

Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2102368

Report Created for: NRG Energy, LLC

3201 Wilbur Avenue
Antioch, CA 94509

Project Contact: David Frandsen

Project P.O.: 4501905749

Project: Marsh Landing DDSD Semi-Annual

Project Received: 02/05/2021

Analytical Report reviewed & approved for release on 02/12/2021 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
Project: Marsh Landing DDSD Semi-Annual
WorkOrder: 2102368

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
N/A	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
PDS D	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
Project: Marsh Landing DDSD Semi-Annual
WorkOrder: 2102368

Analytical Qualifiers

B Analyte detected in the associated Method Blank and in the sample
J Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.

Quality Control Qualifiers

F2 LCS/LCSD recovery and/or RPD/RSD is out of acceptance criteria.
F3 The surrogate standard recovery and/or RPD is outside of acceptance limits.



Analytical Report

Client: NRG Energy, LLC
Date Received: 02/05/2021 17:02
Date Prepared: 02/11/2021
Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368
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	2102368-001B	Water	02/05/2021 14:00	O&G	215154

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
SGT-HEM	ND	0.76	5.3	1	02/12/2021 10:25

Analyst(s): HN



Analytical Report

Client: NRG Energy, LLC
Date Received: 02/05/2021 17:02
Date Prepared: 02/09/2021
Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368
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	2102368-001A	Water	02/05/2021 14:00	O&G	214948

<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
HEM	3.2	J	1.4	5.3	1	02/10/2021 16:30

Analyst(s): HN



Analytical Report

Client: NRG Energy, LLC
Date Received: 02/05/2021 17:02
Date Prepared: 02/08/2021
Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368
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	2102368-001E	Water	02/05/2021 14:00	GC20 02082116.D	214735

Analytes	Result	MDL	RL	DF	Date Analyzed
Aldrin	ND	0.000000	0.0000010	1	02/08/2021 16:33
a-BHC	ND	0.000000	0.0000010	1	02/08/2021 16:33
b-BHC	ND	0.000000	0.0000010	1	02/08/2021 16:33
d-BHC	ND	0.000000	0.0000010	1	02/08/2021 16:33
g-BHC	ND	0.000000	0.0000010	1	02/08/2021 16:33
Chlordane (Technical)	ND	0.000002	0.000020	1	02/08/2021 16:33
p,p-DDD	ND	0.000000	0.0000010	1	02/08/2021 16:33
p,p-DDE	ND	0.000000	0.0000010	1	02/08/2021 16:33
p,p-DDT	ND	0.000000	0.0000010	1	02/08/2021 16:33
Dieldrin	ND	0.000000	0.0000010	1	02/08/2021 16:33
Endosulfan I	ND	0.000000	0.0000010	1	02/08/2021 16:33
Endosulfan II	ND	0.000000	0.0000010	1	02/08/2021 16:33
Endosulfan sulfate	ND	0.000000	0.0000020	1	02/08/2021 16:33
Endrin	ND	0.000000	0.0000010	1	02/08/2021 16:33
Endrin aldehyde	ND	0.000000	0.0000010	1	02/08/2021 16:33
Heptachlor	ND	0.000000	0.0000010	1	02/08/2021 16:33
Heptachlor epoxide	ND	0.000000	0.0000010	1	02/08/2021 16:33
Toxaphene	ND	0.000002	0.000020	1	02/08/2021 16:33
Aroclor1016	ND	0.000001	0.000020	1	02/08/2021 16:33
Aroclor1221	ND	0.000002	0.000020	1	02/08/2021 16:33
Aroclor1232	ND	0.000003	0.000020	1	02/08/2021 16:33
Aroclor1242	ND	0.000002	0.000020	1	02/08/2021 16:33
Aroclor1248	ND	0.000001	0.000020	1	02/08/2021 16:33
Aroclor1254	ND	0.000001	0.000020	1	02/08/2021 16:33
Aroclor1260	ND	0.000002	0.000020	1	02/08/2021 16:33

Surrogates	REC (%)	Limits	
Decachlorobiphenyl	80	60-130	02/08/2021 16:33

Analyst(s): CK



Analytical Report

Client: NRG Energy, LLC
Date Received: 02/05/2021 17:02
Date Prepared: 02/07/2021
Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368
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	2102368-001G	Water	02/05/2021 14:00	GC45 02072107.D	214700

Analytes	Result	MDL	RL	DF	Date Analyzed
Acrolein (Propenal)	ND	0.0015	0.0050	1	02/07/2021 14:19
Acrylonitrile	ND	0.00052	0.0020	1	02/07/2021 14:19
2-Chloroethyl Vinyl Ether	ND	0.00056	0.0010	1	02/07/2021 14:19

Surrogates	REC (%)	Limits	
Dibromofluoromethane	93	65-165	02/07/2021 14:19

Analyst(s): KF



Analytical Report

Client: NRG Energy, LLC
Date Received: 02/05/2021 17:02
Date Prepared: 02/08/2021
Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368
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	2102368-001F	Water	02/05/2021 14:00	GC28 02082123.D	214779

Analytes	Result	MDL	RL	DF	Date Analyzed
Benzene	ND	0.000036	0.00050	1	02/08/2021 22:49
Bromodichloromethane	0.0027	0.000027	0.00050	1	02/08/2021 22:49
Bromoform	0.00077	0.00021	0.00050	1	02/08/2021 22:49
Bromomethane	ND	0.00027	0.00050	1	02/08/2021 22:49
Carbon tetrachloride	ND	0.000047	0.00050	1	02/08/2021 22:49
Chlorobenzene	ND	0.000087	0.00050	1	02/08/2021 22:49
Chloroethane	ND	0.00016	0.00050	1	02/08/2021 22:49
Chloroform	0.0012	0.000085	0.00050	1	02/08/2021 22:49
Chloromethane	ND	0.000096	0.00050	1	02/08/2021 22:49
Dibromochloromethane	0.0032	0.000083	0.00050	1	02/08/2021 22:49
1,2-Dichlorobenzene	ND	0.000070	0.00050	1	02/08/2021 22:49
1,3-Dichlorobenzene	ND	0.000084	0.00050	1	02/08/2021 22:49
1,4-Dichlorobenzene	ND	0.000068	0.00050	1	02/08/2021 22:49
1,1-Dichloroethane	ND	0.000072	0.00050	1	02/08/2021 22:49
1,2-Dichloroethane (1,2-DCA)	ND	0.000018	0.00050	1	02/08/2021 22:49
1,1-Dichloroethene	ND	0.000015	0.00050	1	02/08/2021 22:49
trans-1,2-Dichloroethene	ND	0.00011	0.00050	1	02/08/2021 22:49
1,2-Dichloropropane	ND	0.000011	0.00050	1	02/08/2021 22:49
cis-1,3-Dichloropropene	ND	0.00010	0.00050	1	02/08/2021 22:49
trans-1,3-Dichloropropene	ND	0.00013	0.00050	1	02/08/2021 22:49
Ethylbenzene	ND	0.000081	0.00050	1	02/08/2021 22:49
Methylene chloride	ND	0.0010	0.0020	1	02/08/2021 22:49
1,1,2,2-Tetrachloroethane	ND	0.000035	0.00050	1	02/08/2021 22:49
Tetrachloroethene	ND	0.000079	0.00050	1	02/08/2021 22:49
Toluene	ND	0.00019	0.00050	1	02/08/2021 22:49
1,1,1-Trichloroethane	ND	0.000074	0.00050	1	02/08/2021 22:49
1,1,2-Trichloroethane	ND	0.00015	0.00050	1	02/08/2021 22:49
Trichloroethene	ND	0.00019	0.00050	1	02/08/2021 22:49
Trichlorofluoromethane	ND	0.000098	0.00050	1	02/08/2021 22:49
Vinyl chloride	ND	0.000052	0.00050	1	02/08/2021 22:49

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	108	70-130	02/08/2021 22:49
Toluene-d8	93	70-130	02/08/2021 22:49
4-BFB	90	70-130	02/08/2021 22:49

Analyst(s): KF



Analytical Report

Client: NRG Energy, LLC
Date Received: 02/05/2021 17:02
Date Prepared: 02/05/2021
Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368
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	2102368-001H	Water	02/05/2021 14:00			GC17 02092126.D	214606
Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed	
Acenaphthene	ND		0.000002	0.0000048	1	02/09/2021 18:04	
Acenaphthylene	ND		0.000001	0.0000048	1	02/09/2021 18:04	
Anthracene	ND		0.000004	0.0000096	1	02/09/2021 18:04	
Benzidine	ND		0.00056	0.0048	1	02/09/2021 18:04	
Benzo (a) anthracene	ND		0.000009	0.000048	1	02/09/2021 18:04	
Benzo (a) pyrene	ND		0.000002	0.0000048	1	02/09/2021 18:04	
Benzo (b) fluoranthene	ND		0.000004	0.000019	1	02/09/2021 18:04	
Benzo (g,h,i) perylene	ND		0.000008	0.000019	1	02/09/2021 18:04	
Benzo (k) fluoranthene	ND		0.000005	0.0000096	1	02/09/2021 18:04	
Bis (2-chloroethoxy) Methane	ND		0.00017	0.00096	1	02/09/2021 18:04	
Bis (2-chloroethyl) Ether	ND		0.000002	0.0000048	1	02/09/2021 18:04	
Bis (2-chloroisopropyl) Ether	ND		0.000015	0.000048	1	02/09/2021 18:04	
Bis (2-ethylhexyl) Phthalate	0.00013	J	0.000014	0.00019	1	02/09/2021 18:04	
4-Bromophenyl Phenyl Ether	ND		0.000082	0.00096	1	02/09/2021 18:04	
Butylbenzyl Phthalate	0.000027	J	0.000007	0.000048	1	02/09/2021 18:04	
4-Chloro-3-methylphenol	ND		0.00014	0.00096	1	02/09/2021 18:04	
2-Chloronaphthalene	ND		0.000062	0.00096	1	02/09/2021 18:04	
2-Chlorophenol	ND		0.000007	0.000048	1	02/09/2021 18:04	
4-Chlorophenyl Phenyl Ether	ND		0.00011	0.00096	1	02/09/2021 18:04	
Chrysene	ND		0.000008	0.0000096	1	02/09/2021 18:04	
Dibenzo (a,h) anthracene	ND		0.000008	0.0000096	1	02/09/2021 18:04	
Di-n-butyl Phthalate	0.000025	JB	0.000013	0.000048	1	02/09/2021 18:04	
1,2-Dichlorobenzene	ND		0.00014	0.00096	1	02/09/2021 18:04	
1,3-Dichlorobenzene	ND		0.00023	0.00096	1	02/09/2021 18:04	
1,4-Dichlorobenzene	ND		0.00033	0.00096	1	02/09/2021 18:04	
3,3-Dichlorobenzidine	ND		0.000002	0.000019	1	02/09/2021 18:04	
2,4-Dichlorophenol	ND		0.000002	0.0000096	1	02/09/2021 18:04	
Diethyl Phthalate	0.000030	J	0.000008	0.000048	1	02/09/2021 18:04	
2,4-Dimethylphenol	ND		0.00059	0.00096	1	02/09/2021 18:04	
Dimethyl Phthalate	0.0000048	J	0.000004	0.0000096	1	02/09/2021 18:04	
4,6-Dinitro-2-methylphenol	ND		0.0022	0.0048	1	02/09/2021 18:04	
2,4-Dinitrophenol	ND		0.00053	0.0019	1	02/09/2021 18:04	
2,4-Dinitrotoluene	ND		0.000012	0.000048	1	02/09/2021 18:04	
2,6-Dinitrotoluene	ND		0.000004	0.000048	1	02/09/2021 18:04	
Di-n-octyl Phthalate	ND		0.000016	0.000048	1	02/09/2021 18:04	
1,2-Diphenylhydrazine	ND		0.00013	0.00096	1	02/09/2021 18:04	
Fluoranthene	ND		0.000004	0.0000096	1	02/09/2021 18:04	

(Cont.)



Analytical Report

Client: NRG Energy, LLC
Date Received: 02/05/2021 17:02
Date Prepared: 02/05/2021
Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368
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	2102368-001H	Water	02/05/2021 14:00	GC17 02092126.D	214606

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Fluorene	ND		0.000004	0.0000096	1	02/09/2021 18:04
Hexachlorobenzene	ND		0.000000	0.0000048	1	02/09/2021 18:04
Hexachlorobutadiene	ND		0.000000	0.0000096	1	02/09/2021 18:04
Hexachlorocyclopentadiene	ND		0.0022	0.0048	1	02/09/2021 18:04
Hexachloroethane	ND		0.000006	0.000048	1	02/09/2021 18:04
Indeno (1,2,3-cd) pyrene	ND		0.000007	0.000019	1	02/09/2021 18:04
Isophorone	ND		0.00096	0.0019	1	02/09/2021 18:04
Naphthalene	ND		0.000005	0.000048	1	02/09/2021 18:04
Nitrobenzene	ND		0.00029	0.00096	1	02/09/2021 18:04
2-Nitrophenol	ND		0.00053	0.0048	1	02/09/2021 18:04
4-Nitrophenol	ND		0.0015	0.0048	1	02/09/2021 18:04
N-Nitrosodiphenylamine	ND		0.000087	0.00096	1	02/09/2021 18:04
N-Nitrosodi-n-propylamine	ND		0.00031	0.00096	1	02/09/2021 18:04
Pentachlorophenol	ND		0.000048	0.00024	1	02/09/2021 18:04
Phenanthrene	ND		0.000007	0.000019	1	02/09/2021 18:04
Phenol	ND		0.000019	0.00019	1	02/09/2021 18:04
Pyrene	ND		0.000004	0.0000096	1	02/09/2021 18:04
1,2,4-Trichlorobenzene	ND		0.000072	0.00096	1	02/09/2021 18:04
N-Nitrosodimethylamine	ND		0.00071	0.0048	1	02/09/2021 18:04
2,4,6-Trichlorophenol	ND		0.000003	0.0000096	1	02/09/2021 18:04

Surrogates	REC (%)	Limits	
2-Fluorophenol	44	20-130	02/09/2021 18:04
Phenol-d5	32	20-130	02/09/2021 18:04
Nitrobenzene-d5	85	30-130	02/09/2021 18:04
2-Fluorobiphenyl	67	40-130	02/09/2021 18:04
2,4,6-Tribromophenol	126	40-130	02/09/2021 18:04
Terphenyl-d14	83	40-130	02/09/2021 18:04

Analyst(s): AK



Analytical Report

Client: NRG Energy, LLC
Date Received: 02/05/2021 17:02
Date Prepared: 02/06/2021
Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368
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	2102368-001D	Water	02/05/2021 14:00	WC_SKALAR 020621A1_90	214691

Analytes	Result	MDL	RL	DF	Date Analyzed
Ammonia, total as N	1.7	0.092	0.10	1	02/06/2021 14:35

Analyst(s): RB



Analytical Report

Client: NRG Energy, LLC
Date Received: 02/05/2021 17:02
Date Prepared: 02/11/2021
Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368
Extraction Method: Kelada-01
Analytical Method: Kelada-01
Unit: mg/L

Cyanide, Total

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2102368-001C	Water	02/05/2021 14:00	WC_SKALAR 02112021F1_91	215064

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Total Cyanide	0.00078	J	0.00077	0.0010	1	02/11/2021 14:06

Analyst(s): JN



Analytical Report

Client: NRG Energy, LLC
Date Received: 02/05/2021 17:02
Date Prepared: 02/08/2021
Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368
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	2102368-001D	Water	02/05/2021 14:00	WC_SKALAR 020821A1_37	214707

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Phenolics	0.0061	0.0013	0.0020	1	02/08/2021 09:43

Analyst(s): RB



Quality Control Report

Client:	NRG Energy, LLC	WorkOrder:	2102368
Date Prepared:	02/12/2021	BatchID:	215154
Date Analyzed:	02/12/2021	Extraction Method:	E1664A_SG
Instrument:	O&G	Analytical Method:	E1664A
Matrix:	Water	Unit:	mg/L
Project:	Marsh Landing DDSD Semi-Annual	Sample ID:	MB/LCS/LCSD-215154

QC Summary Report for E1664A

Analyte	MB Result	MDL	RL			
SGT-HEM	ND	0.720	5.00	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
SGT-HEM	9.33	8.97	10.42	90	86	64-132	3.95	30



Quality Control Report

Client:	NRG Energy, LLC	WorkOrder:	2102368
Date Prepared:	02/10/2021	BatchID:	214948
Date Analyzed:	02/10/2021	Extraction Method:	E1664A
Instrument:	O&G	Analytical Method:	E1664A
Matrix:	Water	Unit:	mg/L
Project:	Marsh Landing DDSD Semi-Annual	Sample ID:	MB/LCS/LCSD-214948

QC Summary Report for E1664A

Analyte	MB Result	MDL	RL			
HEM	ND	1.30	5.00	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
HEM	18.1	18.6	20.83	87	89	78-114	2.57	30



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 02/08/2021

Date Analyzed: 02/08/2021

Instrument: GC20

Matrix: Water

Project: Marsh Landing DDS Semi-Annual

WorkOrder: 2102368

BatchID: 214735

Extraction Method: E608.3/SW3620B

Analytical Method: E608.3

Unit: µg/L

Sample ID: MB/LCS/LCSD-214735

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	0.000280	0.00100	-	-	-
a-BHC	ND	0.000310	0.00100	-	-	-
b-BHC	ND	0.000690	0.00100	-	-	-
d-BHC	ND	0.000140	0.00100	-	-	-
g-BHC	ND	0.000450	0.00100	-	-	-
a-Chlordane	ND	0.000850	0.00100	-	-	-
g-Chlordane	ND	0.000150	0.00100	-	-	-
p,p-DDD	ND	0.000110	0.00100	-	-	-
p,p-DDE	ND	0.000180	0.00100	-	-	-
p,p-DDT	ND	0.000170	0.00100	-	-	-
Dieldrin	ND	0.000140	0.00100	-	-	-
Endosulfan I	ND	0.000110	0.00100	-	-	-
Endosulfan II	ND	0.000460	0.00100	-	-	-
Endosulfan sulfate	ND	0.000330	0.00200	-	-	-
Endrin	ND	0.000180	0.00100	-	-	-
Endrin aldehyde	ND	0.000530	0.00100	-	-	-
Endrin ketone	ND	0.000260	0.00100	-	-	-
Heptachlor	ND	0.000410	0.00100	-	-	-
Heptachlor epoxide	ND	0.000250	0.00100	-	-	-
Methoxychlor	ND	0.000120	0.00100	-	-	-
Toxaphene	ND	0.00200	0.0200	-	-	-
Aroclor1016	ND	0.00190	0.0200	-	-	-
Aroclor1221	ND	0.00240	0.0200	-	-	-
Aroclor1232	ND	0.00380	0.0200	-	-	-
Aroclor1242	ND	0.00280	0.0200	-	-	-
Aroclor1248	ND	0.00180	0.0200	-	-	-
Aroclor1254	ND	0.00150	0.0200	-	-	-
Aroclor1260	ND	0.00280	0.0200	-	-	-
Surrogate Recovery						
Decachlorobiphenyl	0.0413			0.05	83	60-130

(Cont.)



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 02/08/2021

Date Analyzed: 02/08/2021

Instrument: GC20

Matrix: Water

Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368

BatchID: 214735

Extraction Method: E608.3/SW3620B

Analytical Method: E608.3

Unit: µg/L

Sample ID: MB/LCS/LCSD-214735

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	0.0470	0.0454	0.050	94	91	60-130	3.62	20
a-BHC	0.0613	0.0589	0.050	123	118	70-130	4.11	20
b-BHC	0.0489	0.0478	0.050	98	96	70-130	2.37	20
d-BHC	0.0497	0.0485	0.050	99	97	70-130	2.49	20
g-BHC	0.0446	0.0433	0.050	89	86	60-130	3.03	20
a-Chlordane	0.0497	0.0485	0.050	99	97	60-130	2.49	20
g-Chlordane	0.0478	0.0465	0.050	96	93	70-130	2.62	20
p,p-DDD	0.0559	0.0548	0.050	112	110	70-130	2.00	20
p,p-DDE	0.0500	0.0487	0.050	100	97	70-130	2.50	20
p,p-DDT	0.0531	0.0525	0.050	106	105	70-130	1.17	20
Dieldrin	0.0562	0.0549	0.050	112	110	70-130	2.33	20
Endosulfan I	0.0508	0.0495	0.050	102	99	70-130	2.48	20
Endosulfan II	0.0506	0.0498	0.050	101	100	70-130	1.56	20
Endosulfan sulfate	0.0516	0.0507	0.050	103	101	70-130	1.77	20
Endrin	0.0571	0.0560	0.050	114	112	70-130	1.96	20
Endrin aldehyde	0.0559	0.0548	0.050	112	110	60-130	1.99	20
Endrin ketone	0.0540	0.0532	0.050	108	106	60-130	1.48	20
Heptachlor	0.0565	0.0549	0.050	113	110	70-130	2.85	20
Heptachlor epoxide	0.0466	0.0453	0.050	93	91	70-130	2.71	20
Methoxychlor	0.0595	0.0586	0.050	119	117	70-130	1.66	20
Aroclor1016	0.141	0.139	0.15	94	93	70-130	1.34	20
Aroclor1260	0.136	0.134	0.15	91	89	70-130	1.40	20
Surrogate Recovery								
Decachlorobiphenyl	0.0441	0.0435	0.050	88	87	60-130	1.54	20



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 02/07/2021

Date Analyzed: 02/07/2021

Instrument: GC45

Matrix: Water

Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368

BatchID: 214700

Extraction Method: E624.1

Analytical Method: E624.1

Unit: µg/L

Sample ID: MB/LCS/LCSD-214700
2102368-001GMS/MSD

QC Summary Report for E624.1

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acrolein (Propenal)	ND	1.50	5.00	-	-	-
Acrylonitrile	ND	0.520	2.00	-	-	-
2-Chloroethyl Vinyl Ether	ND	0.560	1.00	-	-	-

Surrogate Recovery

Dibromofluoromethane	22.9			25	91	76-110
----------------------	------	--	--	----	----	--------

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acrolein (Propenal)	19.9	20.6	20	99	103	71-140	3.64	20
Acrylonitrile	19.0	20.1	20	95	101	67-145	5.48	20
2-Chloroethyl Vinyl Ether	21.4	23.7	20	107	118	70-124	10.1	20

Surrogate Recovery

Dibromofluoromethane	23.0	23.3	25	92	93	76-110	1.22	20
----------------------	------	------	----	----	----	--------	------	----

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acrolein (Propenal)	1	16.4	16.6	20	ND	82	83	24-149	0.921	20
Acrylonitrile	1	17.9	18.1	20	ND	89	90	50-151	1.00	20
2-Chloroethyl Vinyl Ether	1	19.8	18.7	20	ND	99	93	66-140	5.65	20

Surrogate Recovery

Dibromofluoromethane	1	23.6	23.8	25		94	95	78-112	0.804	20
----------------------	---	------	------	----	--	----	----	--------	-------	----



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 02/08/2021

Date Analyzed: 02/08/2021

Instrument: GC28

Matrix: Water

Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368

BatchID: 214779

Extraction Method: E624.1

Analytical Method: E624.1

Unit: µg/L

Sample ID: MB/LCS/LCSD-214779

QC Summary Report for E624.1

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Benzene	ND	0.0360	0.500	-	-	-
Bromodichloromethane	ND	0.0270	0.500	-	-	-
Bromoform	ND	0.210	0.500	-	-	-
Bromomethane	ND	0.270	0.500	-	-	-
t-Butyl alcohol (TBA)	ND	2.20	5.00	-	-	-
Carbon tetrachloride	ND	0.0470	0.500	-	-	-
Chlorobenzene	ND	0.0870	0.500	-	-	-
Chloroethane	ND	0.160	0.500	-	-	-
Chloroform	ND	0.0850	0.500	-	-	-
Chloromethane	ND	0.0960	0.500	-	-	-
Dibromochloromethane	ND	0.0830	0.500	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0750	0.500	-	-	-
1,2-Dichlorobenzene	ND	0.0700	0.500	-	-	-
1,3-Dichlorobenzene	ND	0.0840	0.500	-	-	-
1,4-Dichlorobenzene	ND	0.0680	0.500	-	-	-
1,1-Dichloroethane	ND	0.0720	0.500	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0180	0.500	-	-	-
1,1-Dichloroethene	ND	0.0150	0.500	-	-	-
trans-1,2-Dichloroethene	ND	0.110	0.500	-	-	-
1,2-Dichloropropane	ND	0.0110	0.500	-	-	-
cis-1,3-Dichloropropene	ND	0.100	0.500	-	-	-
trans-1,3-Dichloropropene	ND	0.130	0.500	-	-	-
Ethylbenzene	ND	0.0810	0.500	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.120	0.500	-	-	-
Methylene chloride	1.16,J	1.00	2.00	-	-	-
Styrene	ND	0.470	2.00	-	-	-
1,1,2,2-Tetrachloroethane	ND	0.0350	0.500	-	-	-
Tetrachloroethene	ND	0.0790	0.500	-	-	-
Toluene	ND	0.190	0.500	-	-	-
1,2,4-Trichlorobenzene	ND	0.200	0.500	-	-	-
1,1,1-Trichloroethane	ND	0.0740	0.500	-	-	-
1,1,2-Trichloroethane	ND	0.150	0.500	-	-	-
Trichloroethene	ND	0.190	0.500	-	-	-
Trichlorofluoromethane	ND	0.0980	0.500	-	-	-
Vinyl chloride	ND	0.0520	0.500	-	-	-
m,p-Xylene	ND	0.150	0.500	-	-	-
o-Xylene	ND	0.0700	0.500	-	-	-

(Cont.)



Quality Control Report

Client:	NRG Energy, LLC	WorkOrder:	2102368
Date Prepared:	02/08/2021	BatchID:	214779
Date Analyzed:	02/08/2021	Extraction Method:	E624.1
Instrument:	GC28	Analytical Method:	E624.1
Matrix:	Water	Unit:	µg/L
Project:	Marsh Landing DDSD Semi-Annual	Sample ID:	MB/LCS/LCSD-214779

QC Summary Report for E624.1

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
Dibromofluoromethane	27.3			25	109	70-130
Toluene-d8	22.4			25	90	70-130
4-BFB	2.20			2.5	88	70-130



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 02/08/2021

Date Analyzed: 02/08/2021

Instrument: GC28

Matrix: Water

Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368

BatchID: 214779

Extraction Method: E624.1

Analytical Method: E624.1

Unit: µg/L

Sample ID: MB/LCS/LCSD-214779

QC Summary Report for E624.1

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	3.38	3.88	4	85	97	60-130	13.7	20
Benzene	3.84	4.24	4	96	106	60-130	9.93	20
Bromodichloromethane	3.43	3.79	4	86	95	60-130	10.1	20
Bromoform	2.82	3.16	4	70	79	50-130	11.4	20
Bromomethane	4.12	4.44	4	103	111	50-130	7.58	20
t-Butyl alcohol (TBA)	13.5	14.1	16	84	88	50-130	4.68	20
Carbon tetrachloride	3.27	3.61	4	82	90	60-130	9.90	20
Chlorobenzene	3.44	3.83	4	86	96	60-130	10.7	20
Chloroethane	3.94	4.41	4	98	110	60-140	11.4	20
Chloroform	3.67	4.03	4	92	101	60-130	9.45	20
Chloromethane	3.67	4.10	4	92	102	50-130	10.9	20
Dibromochloromethane	3.03	3.40	4	76	85	50-130	11.6	20
1,2-Dibromoethane (EDB)	1.75	1.95	2	88	97	60-130	10.4	20
1,2-Dichlorobenzene	3.49	3.94	4	87	99	60-130	12.1	20
1,3-Dichlorobenzene	3.45	3.88	4	86	97	60-130	11.7	20
1,4-Dichlorobenzene	3.43	3.81	4	86	95	60-130	10.5	20
1,1-Dichloroethane	3.75	4.08	4	94	102	50-130	8.32	20
1,2-Dichloroethane (1,2-DCA)	3.52	3.89	4	88	97	60-130	9.90	20
1,1-Dichloroethene	3.58	3.91	4	89	98	60-130	8.97	20
trans-1,2-Dichloroethene	3.60	3.91	4	90	98	60-130	8.15	20
1,2-Dichloropropane	3.90	4.30	4	98	108	60-130	9.66	20
cis-1,3-Dichloropropene	3.50	3.88	4	87	97	60-130	10.3	20
trans-1,3-Dichloropropene	3.38	3.76	4	85	94	60-130	10.5	20
Diisopropyl ether (DIPE)	3.54	3.88	4	89	97	60-130	9.05	20
Ethylbenzene	3.47	3.88	4	87	97	60-130	11.0	20
Ethyl tert-butyl ether (ETBE)	3.47	3.85	4	87	96	60-130	10.3	20
Methyl-t-butyl ether (MTBE)	3.37	3.70	4	84	92	60-130	9.28	20
Methylene chloride	3.94	4.22	4	99	106	50-130	6.95	20
Styrene	3.35	3.74	4	84	93	60-130	10.9	20
1,1,2,2-Tetrachloroethane	3.76	4.22	4	94	105	60-130	11.3	20
Tetrachloroethene	3.16	3.50	4	79	88	60-130	10.2	20
Toluene	3.24	3.61	4	81	90	60-130	10.5	20
1,2,4-Trichlorobenzene	3.28	3.72	4	82	93	60-130	12.7	20
1,1,1-Trichloroethane	3.55	3.89	4	89	97	60-130	9.19	20
1,1,2-Trichloroethane	3.69	4.03	4	92	101	60-130	8.79	20
Trichloroethene	3.56	3.92	4	89	98	60-130	9.69	20
Trichlorofluoromethane	3.55	3.76	4	89	94	60-130	5.83	20
Vinyl chloride	1.92	2.09	2	96	104	60-130	8.56	20

(Cont.)



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 02/08/2021

Date Analyzed: 02/08/2021

Instrument: GC28

Matrix: Water

Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368

BatchID: 214779

Extraction Method: E624.1

Analytical Method: E624.1

Unit: µg/L

Sample ID: MB/LCS/LCSD-214779

QC Summary Report for E624.1

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
m,p-Xylene	6.78	7.57	8	85	95	60-130	11.0	20
o-Xylene	3.36	3.73	4	84	93	60-130	10.6	20
Surrogate Recovery								
Dibromofluoromethane	26.6	26.7	25	107	107	70-130	0.281	20
Toluene-d8	23.4	23.8	25	94	95	70-130	1.49	20
4-BFB	2.20	2.27	2.5	88	91	70-130	3.00	20



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 02/05/2021

Date Analyzed: 02/05/2021

Instrument: GC17

Matrix: Water

Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368

BatchID: 214606

Extraction Method: E625.1

Analytical Method: E625.1

Unit: µg/L

Sample ID: MB/LCS/LCSD-214606

QC Summary Report for E625.1

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Acenaphthene	ND	0.00280	0.00500	-	-	-
Acenaphthylene	ND	0.00170	0.00500	-	-	-
Anthracene	ND	0.00440	0.0100	-	-	-
Benzidine	ND	0.580	5.00	-	-	-
Benzo (a) anthracene	ND	0.0100	0.0500	-	-	-
Benzo (a) pyrene	ND	0.00250	0.00500	-	-	-
Benzo (b) fluoranthene	ND	0.00500	0.0200	-	-	-
Benzo (g,h,i) perylene	ND	0.00830	0.0200	-	-	-
Benzo (k) fluoranthene	ND	0.00520	0.0100	-	-	-
Benzyl Alcohol	ND	3.00	5.00	-	-	-
Bis (2-chloroethoxy) Methane	ND	0.180	1.00	-	-	-
Bis (2-chloroethyl) Ether	ND	0.00290	0.00500	-	-	-
Bis (2-chloroisopropyl) Ether	ND	0.0160	0.0500	-	-	-
Bis (2-ethylhexyl) Adipate	ND	0.110	1.00	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	0.0150	0.200	-	-	-
4-Bromophenyl Phenyl Ether	ND	0.0850	1.00	-	-	-
Butylbenzyl Phthalate	ND	0.00800	0.0500	-	-	-
4-Chloroaniline	ND	0.00210	0.00500	-	-	-
4-Chloro-3-methylphenol	ND	0.150	1.00	-	-	-
2-Chloronaphthalene	ND	0.0640	1.00	-	-	-
2-Chlorophenol	ND	0.00770	0.0500	-	-	-
4-Chlorophenyl Phenyl Ether	ND	0.110	1.00	-	-	-
Carbazole	ND	0.320	1.00	-	-	-
Chrysene	ND	0.00880	0.0100	-	-	-
Dibenzo (a,h) anthracene	ND	0.00830	0.0100	-	-	-
n-Decane	ND	0.230	1.00	-	-	-
Dibenzofuran	ND	0.200	1.00	-	-	-
Di-n-butyl Phthalate	0.0145,J	0.0140	0.0500	-	-	-
1,2-Dichlorobenzene	ND	0.150	1.00	-	-	-
1,3-Dichlorobenzene	ND	0.240	1.00	-	-	-
1,4-Dichlorobenzene	ND	0.340	1.00	-	-	-
3,3-Dichlorobenzidine	ND	0.00290	0.0200	-	-	-
2,4-Dichlorophenol	ND	0.00290	0.0100	-	-	-
2,6-Dichlorophenol	ND	0.00930	0.0500	-	-	-
Diethyl Phthalate	ND	0.00920	0.0500	-	-	-
2,4-Dimethylphenol	ND	0.610	1.00	-	-	-
Dimethyl Phthalate	ND	0.00480	0.0100	-	-	-
4,6-Dinitro-2-methylphenol	ND	2.30	5.00	-	-	-

(Cont.)



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 02/05/2021

Date Analyzed: 02/05/2021

Instrument: GC17

Matrix: Water

Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368

BatchID: 214606

Extraction Method: E625.1

Analytical Method: E625.1

Unit: µg/L

Sample ID: MB/LCS/LCSD-214606

QC Summary Report for E625.1

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
2,4-Dinitrophenol	ND	0.550	2.00	-	-	-
2,4-Dinitrotoluene	ND	0.0120	0.0500	-	-	-
2,6-Dinitrotoluene	ND	0.00480	0.0500	-	-	-
Di-n-octyl Phthalate	ND	0.0170	0.0500	-	-	-
1,2-Diphenylhydrazine	ND	0.130	1.00	-	-	-
Fluoranthene	ND	0.00430	0.0100	-	-	-
Fluorene	ND	0.00450	0.0100	-	-	-
Hexachlorobenzene	ND	0.000730	0.00500	-	-	-
Hexachlorobutadiene	ND	0.000910	0.0100	-	-	-
Hexachlorocyclopentadiene	ND	2.30	5.00	-	-	-
Hexachloroethane	ND	0.00720	0.0500	-	-	-
Indeno (1,2,3-cd) pyrene	ND	0.00780	0.0200	-	-	-
1-Methylnaphthalene	ND	0.00140	0.00500	-	-	-
Isophorone	ND	1.00	2.00	-	-	-
2-Methylnaphthalene	ND	0.00180	0.0100	-	-	-
2-Methylphenol (o-Cresol)	ND	0.320	1.00	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	0.420	1.00	-	-	-
Naphthalene	ND	0.00550	0.0500	-	-	-
2-Nitroaniline	ND	0.310	5.00	-	-	-
3-Nitroaniline	ND	2.00	5.00	-	-	-
4-Nitroaniline	ND	1.30	5.00	-	-	-
Nitrobenzene	ND	0.300	1.00	-	-	-
2-Nitrophenol	ND	0.550	5.00	-	-	-
4-Nitrophenol	ND	1.60	5.00	-	-	-
N-Nitrosodiphenylamine	ND	0.0900	1.00	-	-	-
N-Nitrosodi-n-propylamine	ND	0.320	1.00	-	-	-
n-Octadecane	ND	0.100	1.00	-	-	-
Pentachlorophenol	ND	0.0500	0.250	-	-	-
Phenanthrene	ND	0.00740	0.0200	-	-	-
Phenol	ND	0.0200	0.200	-	-	-
Pyrene	ND	0.00420	0.0100	-	-	-
Pyridine	ND	0.160	1.00	-	-	-
1,2,4-Trichlorobenzene	ND	0.0750	1.00	-	-	-
2,4,5-Trichlorophenol	ND	0.00200	0.0100	-	-	-
N-Nitrosodimethylamine	ND	0.740	5.00	-	-	-
2,4,6-Trichlorophenol	ND	0.00350	0.0100	-	-	-

(Cont.)



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 02/05/2021

Date Analyzed: 02/05/2021

Instrument: GC17

Matrix: Water

Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368

BatchID: 214606

Extraction Method: E625.1

Analytical Method: E625.1

Unit: µg/L

Sample ID: MB/LCS/LCSD-214606

QC Summary Report for E625.1

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Surrogate Recovery						
2-Fluorophenol	5.13			5	103	50-130
Phenol-d5	5.71			5	114	60-130
Nitrobenzene-d5	5.48			5	110	60-130
2-Fluorobiphenyl	4.21			5	84	60-130
2,4,6-Tribromophenol	6.35			5	127	60-130
Terphenyl-d14	4.24			5	85	60-130



Quality Control Report

Client: NRG Energy, LLC
Date Prepared: 02/05/2021
Date Analyzed: 02/05/2021
Instrument: GC17
Matrix: Water
Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368
BatchID: 214606
Extraction Method: E625.1
Analytical Method: E625.1
Unit: µg/L
Sample ID: MB/LCS/LCSD-214606

QC Summary Report for E625.1

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acenaphthene	0.197	0.186	0.25	79	74	70-130	5.94	25
Acenaphthylene	0.304	0.289	0.25	122	116	60-130	4.91	25
Anthracene	0.194	0.185	0.25	78	74	70-130	4.67	25
Benzidine	18.9	18.3	25	76	73	50-130	3.30	25
Benzo (a) anthracene	0.222	0.210	0.25	89	84	60-130	5.59	25
Benzo (a) pyrene	0.227	0.212	0.25	91	85	70-130	6.90	25
Benzo (b) fluoranthene	0.278	0.263	0.25	111	105	60-130	5.62	25
Benzo (g,h,i) perylene	0.239	0.226	0.25	96	90	70-130	5.95	25
Benzo (k) fluoranthene	0.258	0.240	0.25	103	96	70-130	7.36	25
Benzyl Alcohol	23.3	22.1	25	93	89	70-130	5.16	25
Bis (2-chloroethoxy) Methane	4.52	4.19	5	90	84	70-130	7.68	25
Bis (2-chloroethyl) Ether	0.309	0.280	0.25	124	112	60-130	9.99	25
Bis (2-chloroisopropyl) Ether	0.411	0.369	0.25	164,F2	148,F2	60-130	10.9	25
Bis (2-ethylhexyl) Adipate	5.06	4.59	5	101	92	60-130	9.57	25
Bis (2-ethylhexyl) Phthalate	0.317	0.289	0.25	127	116	60-130	9.16	25
4-Bromophenyl Phenyl Ether	4.42	4.12	5	88	82	70-130	7.17	25
Butylbenzyl Phthalate	0.335	0.290	0.25	134,F2	116	60-130	14.5	25
4-Chloroaniline	0.312	0.300	0.25	125	120	70-130	4.23	25
4-Chloro-3-methylphenol	4.70	4.44	5	94	89	70-130	5.77	25
2-Chloronaphthalene	4.68	4.38	5	94	88	70-130	6.75	25
2-Chlorophenol	0.275	0.249	0.25	110	100	60-130	9.63	25
4-Chlorophenyl Phenyl Ether	4.20	3.94	5	84	79	70-130	6.18	25
Carbazole	5.26	5.01	5	105	100	70-130	4.86	25
Chrysene	0.230	0.221	0.25	92	88	70-130	4.09	25
Dibenzo (a,h) anthracene	0.214	0.200	0.25	86	80	70-130	6.89	25
n-Decane	5.14	4.41	5	103	88	50-130	15.2	25
Dibenzofuran	4.55	4.33	5	91	87	70-130	4.85	25
Di-n-butyl Phthalate	0.271	0.262	0.25	108	105	70-130	3.59	25
1,2-Dichlorobenzene	4.25	3.84	5	85	77	60-130	10.1	25
1,3-Dichlorobenzene	4.20	3.80	5	84	76	60-130	10.0	25
1,4-Dichlorobenzene	4.15	3.79	5	83	76	60-130	9.19	25
3,3-Dichlorobenzidine	0.317	0.303	0.25	127	121	70-130	4.35	25
2,4-Dichlorophenol	0.220	0.210	0.25	88	84	70-130	4.86	25
2,6-Dichlorophenol	0.213	0.197	0.25	85	79	70-130	7.77	25
Diethyl Phthalate	0.266	0.254	0.25	107	102	70-130	4.67	25
2,4-Dimethylphenol	4.41	4.12	5	88	82	70-130	6.76	25
Dimethyl Phthalate	0.246	0.237	0.25	98	95	70-130	3.99	25
4,6-Dinitro-2-methylphenol	21.5	21.1	25	86	84	70-130	1.96	25

(Cont.)



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 02/05/2021

Date Analyzed: 02/05/2021

Instrument: GC17

Matrix: Water

Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368

BatchID: 214606

Extraction Method: E625.1

Analytical Method: E625.1

Unit: µg/L

Sample ID: MB/LCS/LCSD-214606

QC Summary Report for E625.1

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
2,4-Dinitrophenol	5.06	5.13	5	101	103	60-130	1.44	25
2,4-Dinitrotoluene	0.296	0.322	0.25	118	129	70-130	8.35	25
2,6-Dinitrotoluene	0.314	0.309	0.25	126	124	70-130	1.60	25
Di-n-octyl Phthalate	0.361	0.326	0.25	144,F2	130	70-130	10.3	25
1,2-Diphenylhydrazine	5.78	5.47	5	116	109	70-130	5.49	25
Fluoranthene	0.246	0.234	0.25	98	94	70-130	4.79	25
Fluorene	0.231	0.221	0.25	92	88	70-130	4.34	25
Hexachlorobenzene	0.247	0.231	0.25	99	93	60-130	6.71	25
Hexachlorobutadiene	0.250	0.223	0.25	100	89	60-130	11.5	25
Hexachlorocyclopentadiene	17.8	16.0	25	71	64	60-130	11.1	25
Hexachloroethane	0.262	0.232	0.25	105	93	60-130	12.3	25
Indeno (1,2,3-cd) pyrene	0.265	0.245	0.25	106	98	70-130	7.84	25
1-Methylnaphthalene	0.213	0.199	0.25	85	80	70-130	6.75	25
Isophorone	5.32	5.10	5	106	102	70-130	4.09	25
2-Methylnaphthalene	0.309	0.290	0.25	124	116	60-130	6.48	25
2-Methylphenol (o-Cresol)	5.13	4.75	5	103	95	70-130	7.74	25
3 & 4-Methylphenol (m,p-Cresol)	5.14	5.03	5	103	101	70-130	2.17	25
Naphthalene	0.244	0.224	0.25	97	90	50-130	8.41	25
2-Nitroaniline	28.7	28.0	25	115	112	70-130	2.45	25
3-Nitroaniline	24.0	23.5	25	96	94	70-130	2.31	25
4-Nitroaniline	23.0	22.4	25	92	89	70-130	2.64	25
Nitrobenzene	5.73	5.36	5	115	107	70-130	6.74	25
2-Nitrophenol	23.7	22.1	25	95	88	70-130	7.18	25
4-Nitrophenol	27.9	27.4	25	112	110	50-130	1.76	25
N-Nitrosodiphenylamine	5.03	4.74	5	101	95	70-130	5.99	25
N-Nitrosodi-n-propylamine	7.38	6.95	5	148,F2	139,F2	60-130	6.07	25
n-Octadecane	6.92	6.51	5	138,F2	130	70-130	6.03	25
Pentachlorophenol	1.40	1.36	1.25	112	109	60-130	3.06	25
Phenanthrene	0.234	0.220	0.25	93	88	70-130	6.07	25
Phenol	1.11	1.02	1	111	102	60-130	7.79	25
Pyrene	0.253	0.239	0.25	101	95	70-130	5.99	25
Pyridine	4.71	4.64	5	94	93	50-130	1.48	25
1,2,4-Trichlorobenzene	4.02	3.58	5	80	72	70-130	11.5	25
2,4,5-Trichlorophenol	0.261	0.248	0.25	104	99	70-130	5.18	25
N-Nitrosodimethylamine	26.6	23.6	25	106	94	60-130	11.9	25
2,4,6-Trichlorophenol	0.248	0.239	0.25	99	96	70-130	3.85	25

(Cont.)



Quality Control Report

Client:	NRG Energy, LLC	WorkOrder:	2102368
Date Prepared:	02/05/2021	BatchID:	214606
Date Analyzed:	02/05/2021	Extraction Method:	E625.1
Instrument:	GC17	Analytical Method:	E625.1
Matrix:	Water	Unit:	µg/L
Project:	Marsh Landing DDSD Semi-Annual	Sample ID:	MB/LCS/LCSD-214606

QC Summary Report for E625.1

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Surrogate Recovery								
2-Fluorophenol	4.40	3.96	5	88	79	50-130	10.6	25
Phenol-d5	5.11	4.69	5	102	94	60-130	8.63	25
Nitrobenzene-d5	5.40	5.32	5	108	106	60-130	1.58	25
2-Fluorobiphenyl	4.31	4.14	5	86	83	60-130	3.93	25
2,4,6-Tribromophenol	6.66	6.58	5	133,F3	132,F3	60-130	1.23	25
Terphenyl-d14	3.96	3.71	5	79	74	60-130	6.50	25



Quality Control Report

Client:	NRG Energy, LLC	WorkOrder:	2102368
Date Prepared:	02/06/2021	BatchID:	214691
Date Analyzed:	02/06/2021	Extraction Method:	E350.1
Instrument:	WC_SKALAR	Analytical Method:	E350.1
Matrix:	Water	Unit:	mg/L
Project:	Marsh Landing DDSD Semi-Annual	Sample ID:	MB/LCS/LCSD-214691

QC Summary Report for E350.1

Analyte	MB Result	MDL	RL			
Ammonia, total as N	ND	0.0920	0.100	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Ammonia, total as N	4.10	4.21	4	102	105	88-113	2.73	20



Quality Control Report

Client:	NRG Energy, LLC	WorkOrder:	2102368
Date Prepared:	02/11/2021	BatchID:	215064
Date Analyzed:	02/11/2021	Extraction Method:	Kelada-01
Instrument:	WC_SKALAR	Analytical Method:	Kelada-01
Matrix:	Water	Unit:	µg/L
Project:	Marsh Landing DDSD Semi-Annual	Sample ID:	MB/LCS/LCSD-215064

QC Summary Report for Kelada-01

Analyte	MB Result	MDL	RL			
Total Cyanide	ND	0.770	1.00	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Total Cyanide	41.4	39.4	40	104	98	80-120	5.08	20



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 02/08/2021

Date Analyzed: 02/08/2021

Instrument: WC_SKALAR

Matrix: Water

Project: Marsh Landing DDSD Semi-Annual

WorkOrder: 2102368

BatchID: 214707

Extraction Method: E420.4

Analytical Method: E420.4

Unit: µg/L

Sample ID: MB/LCS/LCSD-214707

QC Summary Report for E420.4

Analyte	MB Result	MDL	RL			
Phenolics	ND	1.30	2.00	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Phenolics	40.5	41.1	40	101	103	80-120	1.46	20



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

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 2102368

ClientCode: GOA

QuoteID: 192976

☐ WaterTrax☐ WriteOn☐ 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 Semi-Annual

Bill to:

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

Requested TAT: 5 days;

Date Received: 02/05/2021

Date Logged: 02/05/2021

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
2102368-001	FAC Combined Wastewater	Water	2/5/2021 14:00	☐	B	A	E	F	G	H	D	C	D	A		

Test Legend:

1	1664A_SG_W	2	1664A_W	3	608_W [J]	4	624_W
5	624ACR+2CEVE_W	6	625_SCSM_W	7	AMMONIA_W	8	CN_W
9	PHENOLICS_W	10	PRDisposal Fee	11		12	

Project Manager: Susan Thompson

Prepared by: Valerie Alfaro

Comments: Use QUOTE 192976 for any Marsh Landing projects to get correct analyte list. Always report in mg/L.. Please give to Susan to Review. For Marsh Landing, report in mg/L.

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



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mcccampbell.com / E-mail: main@mcccampbell.com

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: 2102368

QC Level: LEVEL 2

Date Logged: 2/5/2021

Comments: Use QUOTE 192976 for any Marsh Landing projects to get correct analyte list. Always report in mg/L.. Please give to Susan
as Review For Marsh Landings report to use it

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

LabID	ClientSampID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Head Space	Dry- Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	SubOut
001A	FAC Combined Wastewater	Water	E1664A (HEM; Oil & Grease w/o S.G. Clean-Up)	1	1LA w/ HCl	☐	☐	2/5/2021 14:00	5 days	2/12/2021	None	☐	
001B	FAC Combined Wastewater	Water	E1664A (SGT- HEM; Non-polar Material)	1	1LA w/ HCl	☐	☐	2/5/2021 14:00	5 days	2/12/2021	None	☐	
001C	FAC Combined Wastewater	Water	Kelada-01 (Cyanide, Total)	1	250mL aHDPE w/ NaOH	☐	☐	2/5/2021 14:00	5 days	2/12/2021	None	☐	
001D	FAC Combined Wastewater	Water	E420.4 (Phenolics)	1	250mL aG w/ H2SO4	☐	☐	2/5/2021 14:00	5 days	2/12/2021	None	☐	
			E350.1 (Ammonia)			☐	☐		5 days	2/12/2021	None	☐	
001E	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	☐	☐	2/5/2021 14:00	5 days	2/12/2021	None	☐	

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.



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

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: 2102368

QC Level: LEVEL 2

Date Logged: 2/5/2021

Comments: Use QUOTE 192976 for any Marsh Landing projects to get correct analyte list. Always report in mg/L.. Please give to Susan
as Review For Marsh Landing project in mg/L

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

LabID	ClientSampID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Head Space	Dry- Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	SubOut
001F	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	☐	☐	2/5/2021 14:00	5 days	2/12/2021	None	☐	
001G	FAC Combined Wastewater	Water	E624.1 (ACRO, ACRY, & 2-CEVE)	2	VOA, Unpres	☐	☐	2/5/2021 14:00	5 days	2/12/2021	None	☐	

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.



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mcccampbell.com / E-mail: main@mcccampbell.com

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: 2102368
QC Level: LEVEL 2
Date Logged: 2/5/2021

Comments: Use QUOTE 192976 for any Marsh Landing projects to get correct analyte list. Always report in mg/L.. Please give to Susan
as Review For Marsh Landing project in mg/L

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

LabID	ClientSampID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Head Space	Dry- Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	SubOut
001H	FAC Combined Wastewater	Water	E625.1 (SVOCs) <1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,2-Diphenylhydrazine, 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) anthracene, Diethyl Phthalate, Dimethyl Phthalate, Di-n-butyl Phthalate, Di-n-octyl Phthalate, Fluoranthene, Fluorene,	1	1LA Narrow Mouth, Unpres	☐	☐	2/5/2021 14:00	5 days	2/12/2021	None	☐	

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.



McC Campbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

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: 2102368

QC Level: LEVEL 2

Date Logged: 2/5/2021

Comments: Use QUOTE 192976 for any Marsh Landing projects to get correct analyte list. Always report in mg/L.. Please give to Susan
as Review For Marsh Landing project in mg/L

☐ WaterTrax

☐ WriteOn

☐ EDF

☐ Excel

☒ EQUIS

☒ Email

☐ HardCopy

☐ ThirdParty

☒ J-flag

LabID	ClientSampID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	Head Space	Dry- Weight	Collection Date & Time	TAT	Test Due Date	Sediment Content	Hold	SubOut
			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).

- 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.

2102368

Chain of Custody

Page 1 of 3-Semi-Annual

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

SAMPLES SUBMITTED TO							SEND INVOICE TO		PROJECT				ANALYSIS REQUEST			
Laboratory: McCampbell Analytical, Inc. Attention: 1534 Willow Pass Road, Pittsburg, CA 94565-1701 Address: 925.252.9262/ 925.252.9269 Phone/Fax:							Company: Marsh Landing LLC Attention: Accounts Payable Address: invoices@clearwayenergy.com P.O. No.: 4501905749		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.	HOLDING TIME:	28 days	28 days		
ML-21-022	5-Feb-21	1400	DDSD	Semi-Annual	Wastewater	Grab	FAC Combined Wastewater	1	Amber Glass Jar	1	Hydrochloric Acid (pH<2, 4°C)	X				
ML-21-023	5-Feb-21	1400	DDSD	Semi-Annual	Wastewater	Grab	FAC Combined Wastewater	1	Amber Glass Jar	1	Hydrochloric Acid (pH<2, 4°C)		X			
												28 days	28 days			
REPORTING 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			LABORATORY NOTES RE: SAMPLE RECEIPT/CONDITION					DIRECTIONS FOR LABORATORY 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 RESULTS AND PRICING PER QUOTE ID: 203270. *Include sample description with client sample ID.								
PRINTED NAME			SIGNATURE			COMPANY			DATE			TIME				
Sampled by: James E Robinson			<i>James E. Robinson</i>			Marsh Landing LLC			5-Feb-21			1400				
Relinquished by: James E Robinson			<i>James E. Robinson</i>			Marsh Landing LLC			5-Feb-21			1702				
Received by: <i>Lilly Ortiz</i>			<i>Lilly Ortiz</i>			McCampbell Analytical, Inc			5-Feb-21							
Relinquished by:																
Received by:																
Relinquished by:																
Received by:																

3.6°C wet

Chain of Custody

Page 2 of 3-Semi-Annual

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

SAMPLES SUBMITTED TO				SEND INVOICE TO		PROJECT				ANALYSIS REQUEST			
Laboratory: McCampbell Analytical, Inc. Attention: 1534 Willow Pass Road, Pittsburg, CA 94565-1701 Address: 925.252.9262/ 925 252 9269 Phone/Fax:				Company: Marsh Landing LLC Attention: Accounts Payable Address: invoices@marshlanding.com P.O. No.: 4501905749		Plant: Marsh Landing Title: DDSD Phase: Semi-Annual Manager: David Frandsen				Cyanide (Kelada-01) Phenols (EPA Method 420.4) Ammonia (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-21-024	5-Feb-21	1400	DDSD	Semi-Annual	Wastewater	Grab	FAC Combined Wastewater	1	HDPE Bottle	250	HNO3 (pH<2)	X	
ML-21-025	5-Feb-21	1400	DDSD	Semi-Annual	Wastewater	Grab C-24 JER	FAC Combined Wastewater	1	Amber Glass Jar	250	H2SO4 (pH<2, 4°C)		X
#HOLDING TIME												14 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 E-mail CC: 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. RESULTS AND PRICING PER QUOTE ID: 203270. *Include sample description with client sample ID.					
PRINTED NAME		SIGNATURE		COMPANY		DATE		TIME					
Sampled by	James E Robinson	<i>James E. Robinson</i>	Marsh Landing LLC	5-Feb-21	1400								
Relinquished by	James E Robinson	<i>James E. Robinson</i>	Marsh Landing LLC	5-Feb-21	1702								
Received by	<i>Lilly Oute</i>	<i>Lilly Oute</i>	McCampbell Analytical, Inc	5-Feb-21									
Relinquished by													
Received by													
Relinquished by													
Received by													

Chain of Custody

Page 3 of 3-Semi-Annual

Marsh Landing Generating Station

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

Phone: (925) 779-6500 Fax: (925) 779-6509

SAMPLES SUBMITTED TO							SEND INVOICE TO		PROJECT				ANALYSIS REQUEST			
Laboratory: McCampbell Analytical, Inc. Attention: 1534 Willow Pass Road, Pittsburg, CA 94565-1701 Address: 925.252.9262/ 925.252.9269 Phone/Fax:							Company: Marsh Landing LLC Attention: Accounts Payable Address: invoices@cleaveenergy.com P.O. No.: 4501905749		Plant: Marsh Landing Title: DDSD Phase: Semi-Annual Manager: David Frandsen				Pesticides & PCBs (EPA Method 608) Volatile Organics (EPA Method 624) Volatile Organics (EPA Method 624) Semi-Volatile Organics (EPA Method 625)			
SAMPLE INFORMATION							CONTAINER INFORMATION									
Sample Number	Sample Date	Sample Collection Time	Regulatory Driver	Regulatory Frequency	Sample Medium	Sample Type	Sample Description	Number	Type	Volume (each, mL)	Preserv.	Pesticides & PCBs (EPA Method 608)	Volatile Organics (EPA Method 624)	Volatile Organics (EPA Method 624)	Semi-Volatile Organics (EPA Method 625)	
ML-21-026	5-Feb-21	1400	DDSD	Semi-Annual	Water	Grab	FAC Combined Wastewater	1	Amber Glass	1,000	None (4°C)	X				
ML-21-027	5-Feb-21	1400	DDSD	Semi-Annual	Water	Grab	FAC Combined Wastewater	2	Clear VOA	43	HCL (ZHS, pH<2, 4°C)		X			
ML-21-028	5-Feb-21	1400	DDSD	Semi-Annual	Water	Grab	FAC Combined Wastewater	2	Clear VOA	43	None (4°C)			X		
ML-21-029	5-Feb-21	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.robinson@nrg.com E-mail CC: joe.moura@nrg.com								Standard TAT (5-DAYS). Establish calibration standards so Minimum Level (ML) value is the lowest calibration standard, the lowest quantifiable concentration or Reporting Limit (RL). Report "Detected, but Not Quantified" (DNQ) with estimated J-flagged concentrations below the RL and include method detection limits (MDLs) in report. 1. VOCs- Acrolein, acrylonitrile, and 2cleave RESULTS AND PRICING PER QUOTE ID: 203270. *Include sample description with client sample ID.								
PRINTED NAME			SIGNATURE					COMPANY		DATE		TIME				
Sampled by: James E Robinson			<i>James E. Robinson</i>					Marsh Landing LLC		5-Feb-21		1400				
Relinquished by: James E Robinson			<i>James E. Robinson</i>					Marsh Landing LLC		5-Feb-21		1702				
Received by: <i>Lilly Ortiz</i>			<i>Lilly Ortiz</i>					McCampbell Analytical, Inc		5-Feb-21		1402				
Relinquished by:																
Received by:																
Relinquished by:																
Received by:																

3.6°C wet



Sample Receipt Checklist

Client Name: **NRG Energy, LLC**
Project: **Marsh Landing DDSD Semi-Annual**
WorkOrder No: **2102368** Matrix: Water
Carrier: Client Drop-In

Date and Time Received: **2/5/2021 17:02**
Date Logged: **2/5/2021**
Received by: **Lilly Ortiz**
Logged by: **Valerie Alfaro**

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 ☒
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: 3.6°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 (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes ☐	No ☐	NA ☒
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes ☐	No ☐	NA ☒

Comments:

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

Page 2 of 3-Semi-Annual

SAMPLES SUBMITTED TO McCampbell Analytical, Inc.						SEND INVOICE TO		PROJECT		ANALYSIS REQUEST		
Laboratory: Attention: Address: Phone/Fax:	1534 Willow Pass Road, Pittsburg, CA 94565-1701 925.252.9262/ 925.252.9289					Company: Attention: Address: P.O. No.:	Marsh Landing LLC Accounts Payable invoices@marshlanding.com 4501905749	Plant: Title: Phase: Manager:	Marsh Landing DDSD Semi-Annual David Frandsen	Cyanide ⁽¹⁾	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-21-024	5-Feb-21	1400	DDSD	Semi-Annual	Wastewater	Grab	FAC Combined Wastewater	1	HDP Bottle	250	HNO ₃ (pH<2)	X
ML-21-025	5-Feb-21	1400	DDSD	Semi-Annual	Wastewater	C-24 Grab JER	FAC Combined Wastewater	1	Amber Glass Jar	250	H ₂ SO ₄ (pH<2, 4°C)	X
REPORTING						DIRECTIONS FOR LABORATORY						
Original to: David Frandsen Environmental Specialist/Engineer P.O. Box 1687 Antioch, CA 94509 Phone/Fax: 925.324-3533/6509 E-mail: david.frandsen@nra.com James.robinson@nra.com joe.moura@nra.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. Cyanide sample was pretreated with sodium thiosulfate prior to preservation with sodium hydroxide.						
RESULTS AND PRICING PER QUOTE ID: 203270. *Include sample description with client sample ID.												
PRINTED NAME			SIGNATURE			COMPANY			DATE			
Sampled by	James E Robinson					Marsh Landing LLC			5-Feb-21			
Relinquished by	James E Robinson					Marsh Landing LLC			5-Feb-21			
Received by						McC Campbell Analytical, Inc			5-Feb-21			
Relinquished by												
Received by												
Relinquished by												
Received by												



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 2102378

Report Created for: NRG Energy, LLC

3201 Wilbur Avenue
Antioch, CA 94509

Project Contact: David Frandsen

Project P.O.: 4501905749

Project: Marsh Landing; DDSD; Annual

Project Received: 02/05/2021

Analytical Report reviewed & approved for release on 02/12/2021 by:

Angela Rydelius
Laboratory Manager

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





Glossary of Terms & Qualifier Definitions

Client: NRG Energy, LLC
Project: Marsh Landing; DDSD; Annual
WorkOrder: 2102378

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
N/A	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
PDSB	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
Project: Marsh Landing; DDSD; Annual
WorkOrder: 2102378

Analytical Qualifiers

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



Analytical Report

Client: NRG Energy, LLC
Date Received: 02/05/2021 17:02
Date Prepared: 02/12/2021
Project: Marsh Landing; DDSD; Annual

WorkOrder: 2102378
Extraction Method: E300.1
Analytical Method: E300.1
Unit: mg/L

Inorganic Anions by IC

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2102378-001B	Water	02/05/2021 14:00	IC4 02122179.D	214757

<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Sulfate	40	0.44	1.0	10	02/12/2021 14:37

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	
Malonate	105	90-115	02/12/2021 14:37

Analyst(s): AO



Analytical Report

Client: NRG Energy, LLC

Date Received: 02/05/2021 17:02

Date Prepared: 02/11/2021

Project: Marsh Landing; DDSD; Annual

WorkOrder: 2102378

Extraction Method: SM4500-S⁻² D-2000

Analytical Method: SM4500 S⁻² D

Unit: mg/L

Total Sulfide - S

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
FAC Combined Wastewater	2102378-001A	Water	02/05/2021 14:00	SPECTROPHOTOMETER	215041

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
Total Sulfide	0.045	J	0.0095	0.050	1	02/11/2021 09:25

Analyst(s): PHU



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 02/08/2021 - 02/09/2021

Date Analyzed: 02/08/2021 - 02/09/2021

Instrument: IC4

Matrix: Water

Project: Marsh Landing; DDSD; Annual

WorkOrder: 2102378

BatchID: 214757

Extraction Method: E300.1

Analytical Method: E300.1

Unit: mg/L

Sample ID: MB/LCS/LCSD-214757

QC Summary Report for E300.1

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Sulfate	ND	0.0440	0.100	-	-	-

Surrogate Recovery

Malonate	0.101			0.1	101	90-115
----------	-------	--	--	-----	-----	--------

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Sulfate	0.970	0.964	1	97	96	85-115	0.583	20

Surrogate Recovery

Malonate	0.0956	0.0949	0.10	96	95	90-115	0.712	20
----------	--------	--------	------	----	----	--------	-------	----



Quality Control Report

Client: NRG Energy, LLC

Date Prepared: 02/11/2021

Date Analyzed: 02/11/2021

Instrument: SPECTROPHOTOMETER

Matrix: Water

Project: Marsh Landing; DDSD; Annual

WorkOrder: 2102378

BatchID: 215041

Extraction Method: SM4500-S⁻² D-2000

Analytical Method: SM4500 S⁻² D

Unit: mg/L

Sample ID: MB/LCS/LCSD-215041
2102378-001AMS/MSD

QC Summary Report For SM4500 S-2D

Analyte	MB Result	MDL	RL			
Total Sulfide	ND	0.00950	0.0500	-	-	-

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Total Sulfide	0.471	0.472	0.50	94	94	80-120	0.0947	20

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Total Sulfide	1	0.503	0.501	0.50	ND	92	91	80-120	0.267	20



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

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 2102378

ClientCode: GOA

☐ WaterTrax☐ WriteOn☐ EDF☐ EQUIS☐ Dry-Weight☒ Email☐ HardCopy☐ ThirdParty☒ J-flag☐ Detection Summary☐ Excel

Report to:

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

Email: David.Frandsen@nrg.com
cc/3rd Party: joe.moura@nrg.com; james.robinson@nrg.
PO: 4501905749
Project: Marsh Landing; DDSD; Annual

Bill to:

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

Requested TAT: 5 days;

Date Received: 02/05/2021

Date Logged: 02/08/2021

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
2102378-001	FAC Combined Wastewater	Water	2/5/2021 14:00	☐	B	A	A									

Test Legend:

1	300_1_W
5	
9	

2	PRDisposal Fee
6	
10	

3	SULFIDE_W
7	
11	

4	
8	
12	

Project Manager: Angela Rydelius

Prepared by: Tina Perez

Comments: Use QUOTE 192976 for any Marsh Landing projects to get correct analyte list. Always report in mg/L.

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