DOCKETED	
Docket Number:	87-AFC-01C
Project Title:	COMPLIANCE-Luz Solar Electric Generating System Cogeneration AFC (150 MW) Units III-VII.
TN #:	236534
Document Title:	SEGS III - VII Second Semi-annual Bioremediation Monitoring Report
Description:	N/A
Filer:	Glen T King
Organization:	NextEra Energy
Submitter Role:	Applicant
Submission Date:	2/1/2021 9:00:15 AM
Docketed Date:	2/1/2021

Date: January 28, 2021

California Regional Water Quality Control Board
Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

Facility Name: **SEGS III - VII**

Address: **41100 Highway 395**
Boron, CA 93516

Contact Person: **Glen King**
Job Title: **Environmental Specialist**
Phone: **760-762-1505**
Email: **glen.king@fpl.com**
WDR/NPDES Order Number: **6-95-102**
WDID Number: **6B368909005**
Type of Report (circle one)**:** **Monthly Quarterly Semi-Annual (Annual) Other**
Month(s) (circle applicable month(s)*)**:** **(JAN) FEB MAR APR MAY JUN**
JUL AUG SEP OCT NOV DEC
***annual Reports** (circle the first month of the reporting period)
Year: **2020**
Violation(s)? (Please check one): **X NO** **YES***

***If YES is marked complete a-g (Attach Additional information as necessary)**

a) Brief Description of Violation:

b) Section(s) of WDRs/NPDES Permit Violated:

c) Reported Value(s) or Volume:

d) WDRs/NPDES Limit/Condition:

e) Date(s) and Duration of Violation(s):

f) Explanation of Cause(s):

g) Corrective Action(s)
(Specify actions taken and a schedule for actions to be taken)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision following a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my knowledge of the person(s) who manage the system, or those directly responsible for data gathering, 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.

If you have any questions or require additional information, please contact me at the number provided above.

Sincerely,

Signature:_____

Name: Glen T. King

Title: Environmental Specialist

2020 SECOND SEMIANNUAL BIOREMEDIATION MONITORING REPORT SEGS III – VII KRAMER JUNCTION Board Order No. 6-95-102

January 13, 2021

Prepared for:
Luz Solar Partners III - VII Ltd. c/o
NextEra Energy Operating Services, LLC
41100 Highway 395
Boron, California 93516

Prepared By:
Northstar Environmental Remediation
26225 Enterprise Court
Lake Forest, California 92630

SIGNATURE PAGE

2020 SECOND SEMIANNUAL BIOREMEDIATION MONITORING

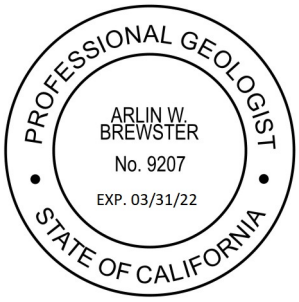
REPORT SEGS III - VII KRAMER JUNCTION

BORON, CALIFORNIA

PROFESSIONAL STATEMENT

I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for knowing violations.

I further certify that this report has been reviewed by the appropriate authority at NextEra Energy Resources and is being submitted with their written consent.



Arlin W. Brewster

Professional Geologist 9207

January 13, 2021

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1.0 INTRODUCTION

Northstar Environmental Remediation (Northstar) of Lake Forest, California has prepared this 2020 Second Semiannual Bioremediation Monitoring Report for the Solar Electric Generating Station (SEGS) III – VII facility on behalf of NextEra Energy Operating Services, LLC (NextEra) and Luz Solar Partners III - VII Ltd. This report presents environmental data required under California Regional Water Quality Control Board - Lahontan Region (RWQCB) Order No. 6-95-102 Waste Discharge Requirements and Monitoring and Reporting Program. This report summarizes all bioremediation activity that occurred during the reporting period. Northstar currently conducts soil sampling associated with the bioremediation unit. A site vicinity map of SEGS III – VII is included in **Figure 1**.

1.1 Facility Information

Facility Name:
Solar Electric Generating Station (SEGS) III – VII

Facility Location:
41100 Highway 395
Boron, California 92347

Facility Contact:
Mr. Glen T. King
Safety/Environmental Specialist
NextEra Energy Operating Services, LLC
(760) 762-1505

Monitoring and Reporting Program:
RWQCB Order No. 6-95-102 (6-90-24 rescinded)

Waste Discharge Identification Number:
6B368909005

1.2 Soil Treatment Units

The Bioremediation Unit is designed to treat soil contaminated with the heat transfer fluid (HTF) Therminol, which is used in the processes of the solar trough technology employed at the site. Onsite treatment of contaminated soils is accomplished through two soil treatment units onsite: the Bioremediation Unit (located between SEGS VI and VII), which is used for storage and treatment of HTF-impacted soils; and, the Landfarm Unit (located between SEGS III and IV), which is used for treatment by natural attenuation and for storage of remediated soils, staged for future use at the facility. The location of both Units are shown on **Figure 1**.

2.0 HEAT TRANSFER FLUID RELEASES

There were no reportable spills (more than 25 gallons) of heat transfer fluid during the reporting period.

3.0 TREATMENT AND MONITORING

The Bioremediation Unit is divided into a north and south half by a concrete divider (see **Figure 2**). The North half is designated for soil treatment, and the south half for HTF-impacted soil storage. The impacted soils are treated in smaller cells by mixing with a urea fertilizer (containing nitrogen, phosphorous, and potassium), adding moisture, and by aerating the soils on a weekly to bi-weekly basis. This activity enhances biodegradation of the HTF.

Monitoring is performed by visually inspecting the condition of the concrete divider and leakage detection sumps (performed by NextEra) and by collecting periodic, representative samples of the treated soil media (performed by Northstar). When HTF compounds are demonstrated to be below 1,000 parts per million (ppm) by an analytical laboratory, the treated soils are then staged in the Landfarm Unit where natural attenuation occurs. Once the HTF compounds are below 100 parts per million, they are staged for future use within the facility.

The following notes apply to the treatment and monitoring performed during this reporting period:

- No new HTF-impacted soil was transferred into the Bioremediation Unit.
- No soil was transferred to the Landfarm Unit.
- No soil was released for use within the SEGS facility.
- Two samples were collected from the Bioremediation Unit in November 2020.
- Four samples were collected from the Landfarm Unit in November 2020.
- The annual Landfarm Unit sampling was conducted in December 2020.
- No defects were discovered during inspections of the concrete divider and leakage detection sumps.
- No water accumulated in the leakage detection sumps.
- Soil aeration was performed as regularly scheduled.

4.0 SAMPLING AND ANALYTICAL SUMMARY

When required, soil samples are collected from four random, discrete locations within the soil stockpiles and transferred to a clean 5-gallon bucket with a clean stainless-steel trowel. All sampling apparatus are cleaned with non-phosphate detergent (typically Alconox, Liquinox, or equivalent) and triple-rinsed with deionized water prior to collecting all soil samples. The composited soil is then homogenized and transferred to laboratory-supplied, certified clean sample containers. The samples are labelled, sealed, and placed on ice to preserve the volatile compounds.

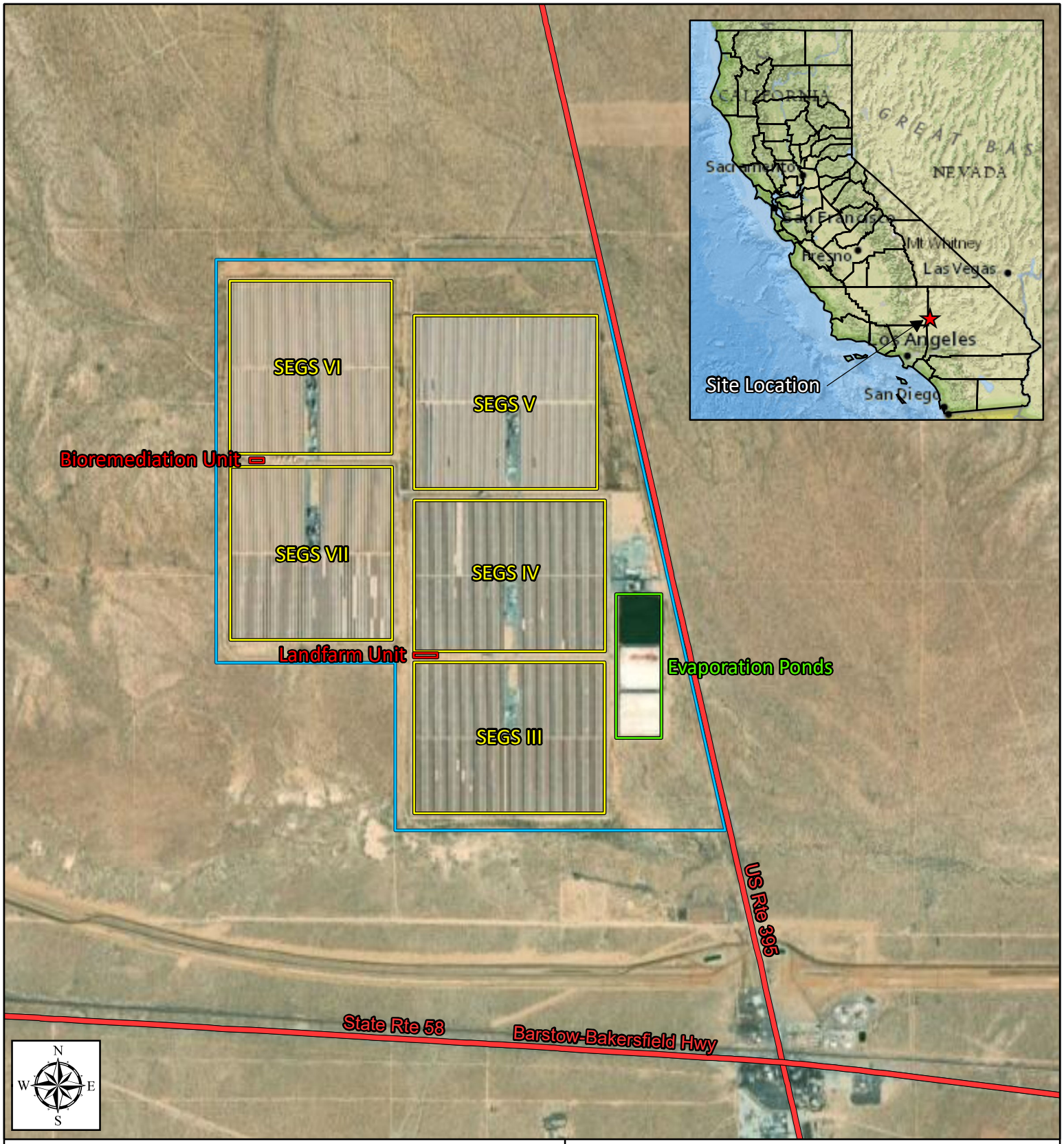
They are then transported under chain-of-custody protocols to Eurofins Calscience (formerly TestAmerica), a state- and federally-accredited laboratory located in Irvine, California. The soil samples are analyzed by Environmental Protection Agency Method 8015M for 1,1-Biphenyl and 1,1-Oxybisbenzene, which are volatile organic compounds characteristic of the HTF Therminol. The laboratory report is then submitted directly to NextEra and Northstar personnel and are presented in **Appendix A** and summarized in **Table 1**.

Composite samples were collected from the Bioremediation Unit treatment stockpile from depths of approximately 12 inches and 6 feet, respectively. The 12-inch deep sample reported 330 parts per million of 1,1'-Oxybisbenzene but was non-detect for 1,1'-Biphenyl, while the 6-foot deep sample was non-detect for both compounds.

A total of four samples were collected from the Landfarm Unit stockpile in November 2020. For this event, the stockpile was divided into four even quarters and sampled from west to east (labelled LF#1 through LF#4, respectively). LF#1, LF#2, and LF#3 were non-detect for both compounds. LF#4, collected from the eastern quarter of the stockpile, reported 120 parts per million of 1,1'-Oxybisbenzene but was non-detect for 1,1'-Biphenyl.

The annual sample collected from beneath the Landfarm Unit on December 8, 2020 was non-detect for both compounds.

FIGURES



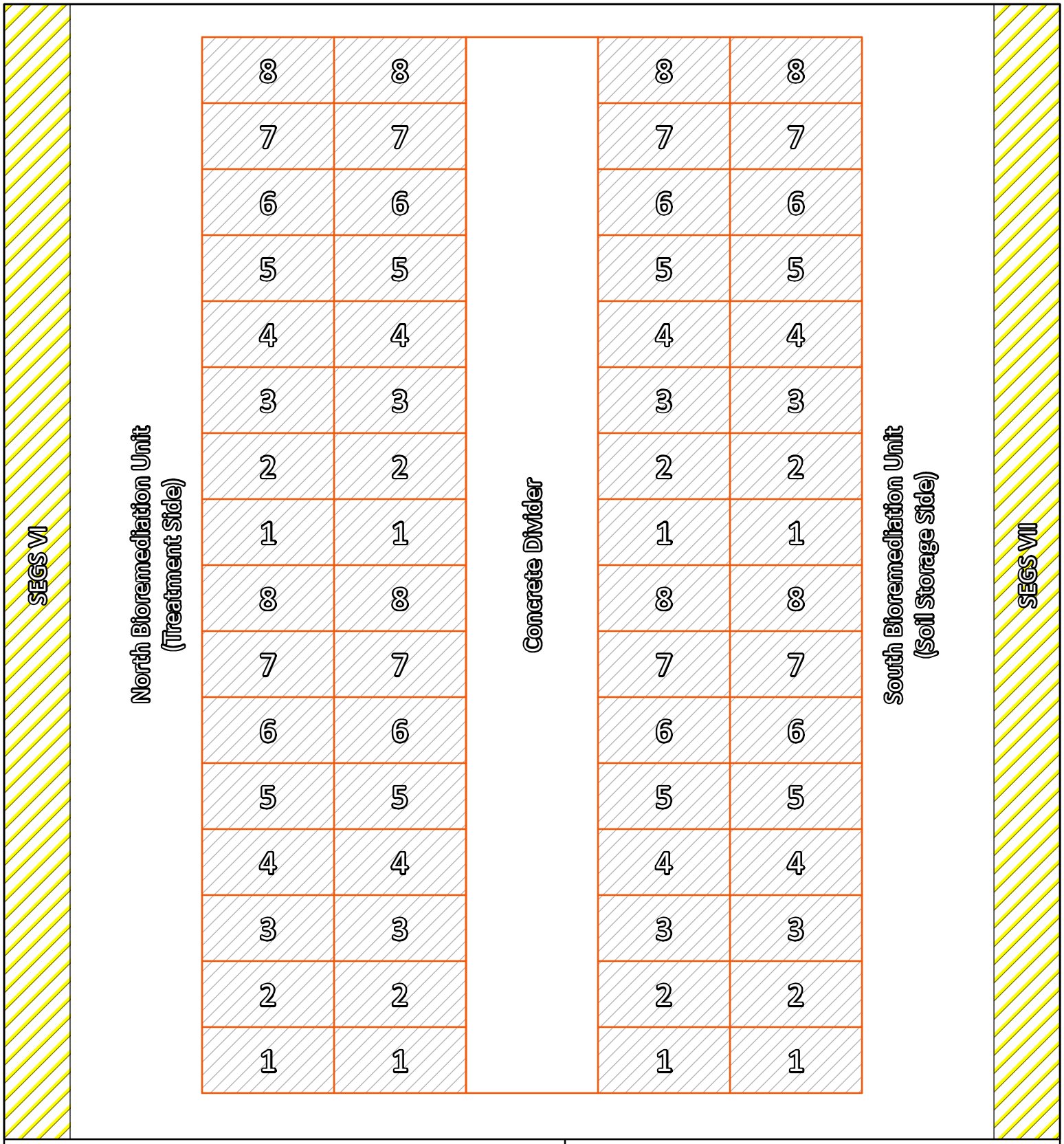
Legend

- Facility Boundary
- Solar Fields
- Land Treatment Units
- Evaporation Ponds

SEGS III - VII Kramer Junction
Boron, California

Figure 1
Site Location
and Vicinity Map

NORTHSTAR ENVIRONMENTAL REMEDIATION	Scale: 1:30,000	Date: 07 Jul 2020
	Drawn By: AWB	Checked By: AWB



Legend

Bioremediation Unit

Solar Field

SEGS III - VII Kramer Junction
Boron, California

Figure 2
Bioremediation Unit
Layout Schematic

NORTHSTAR ENVIRONMENTAL REMEDIATION	Scale: NTS	Date: 07 Jul 2020
	Drawn By: AWB	Checked By: AWB

TABLE

Table 1
Summary of Analytical Results

			Analytical Results	
Sample ID	Sample Type	Sample Date	1,1'-Biphenyl (mg/kg)	1,1'-Oxybisbenzene (mg/kg)
BR @ 12"	Bioremediation Soil	19-Nov-20	ND < 250	330
BR @ 6'	Bioremediation Soil	19-Nov-20	ND < 5.0	ND < 5.0
LF#1	Landfarm Soil	19-Nov-20	ND < 5.0	ND < 5.0
LF#2	Landfarm Soil	19-Nov-20	ND < 5.0	ND < 5.0
LF#3	Landfarm Soil	19-Nov-20	ND < 5.0	ND < 5.0
LF#4	Landfarm Soil	19-Nov-20	ND < 100	120
LF @ 6'-12-8-20	Landfarm Soil	8-Dec-20	ND < 5.0	ND < 5.0

Notes:
Samples analyzed by EPA Method 8015B Modified for Therminol
mg/kg = milligrams per kilogram (parts per million)
ND = analyte not detected at or above the displayed laboratory reporting limit

APPENDIX A

LABORATORY REPORTS

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-275183-1
Laboratory Sample Delivery Group: California
Client Project/Site: Nextera Kramer Junction

For:
FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, California 93516

Attn: Glen King

Authorized for release by:
11/25/2020 4:43:17 PM

Sheri Fama, Project Manager I
(949)260-3274
Sheri.Fama@Eurofinset.com

Table of Contents

Sample Summary

Client: FPL Energy Solar Partners III-VII, LLC
Project/Site: Nextera Kramer Junction

Job ID: 440-275183-1
SDG: California

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-275183-1	BR @12'	Solid	11/19/20 10:05	11/19/20 17:25	
440-275183-2	BR @ 6'	Solid	11/19/20 10:15	11/19/20 17:25	
440-275183-3	LF#1	Solid	11/19/20 11:10	11/19/20 17:25	
440-275183-4	LF#2	Solid	11/19/20 11:15	11/19/20 17:25	
440-275183-5	LF#3	Solid	11/19/20 11:20	11/19/20 17:25	
440-275183-6	LF#4	Solid	11/19/20 11:25	11/19/20 17:25	

Job ID: 440-275183-1

Laboratory: Eurofins Calscience Irvine

Narrative

Job Narrative
440-275183-1

Comments
No additional comments.

Receipt
The samples were received on 11/19/2020 5:25 PM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.2º C.

GC Semi VOA
Method 8015B: Due to matrix interference and the presence of high concentrations of target analytes in the source sample, the MS/D for preparation batch 440-631710 and analytical batch 440-631903 could not be accurately quantified and were not reported in this batch. The LCS was extracted in duplicate to provide batch accuracy and precision data. LCS and LCSD met % recovery and % RPD acceptance criteria and validate the batch.

Method 8015B: The following sample required a dilution due to the nature of the sample matrix: BR @12' (440-275183-1). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample ID: BR @12'

Lab Sample ID: 440-275183-1
Date Collected: 11/19/20 10:05
Matrix: Solid
Date Received: 11/19/20 17:25

Method: 8015B - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	**330**		250		mg/Kg		11/23/20 09:12	11/24/20 13:17	50
1,1'-Biphenyl	ND		250		mg/Kg		11/23/20 09:12	11/24/20 13:17	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*177*	*X*	*40 - 140*	*11/23/20 09:12*	*11/24/20 13:17*	*50*

Client Sample ID: BR @ 6'

Lab Sample ID: 440-275183-2
Date Collected: 11/19/20 10:15
Matrix: Solid
Date Received: 11/19/20 17:25

Method: 8015B - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		5.0		mg/Kg		11/23/20 09:12	11/24/20 12:06	1
1,1'-Biphenyl	ND		5.0		mg/Kg		11/23/20 09:12	11/24/20 12:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*95*		*40 - 140*	*11/23/20 09:12*	*11/24/20 12:06*	*1*

Client Sample ID: LF#1

Lab Sample ID: 440-275183-3
Date Collected: 11/19/20 11:10
Matrix: Solid
Date Received: 11/19/20 17:25

Method: 8015B - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		5.0		mg/Kg		11/23/20 09:12	11/24/20 12:30	1
1,1'-Biphenyl	ND		5.0		mg/Kg		11/23/20 09:12	11/24/20 12:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*96*		*40 - 140*	*11/23/20 09:12*	*11/24/20 12:30*	*1*

Client Sample ID: LF#2

Lab Sample ID: 440-275183-4
Date Collected: 11/19/20 11:15
Matrix: Solid
Date Received: 11/19/20 17:25

Method: 8015B - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		5.0		mg/Kg		11/23/20 09:12	11/24/20 12:53	1
1,1'-Biphenyl	ND		5.0		mg/Kg		11/23/20 09:12	11/24/20 12:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*91*		*40 - 140*	*11/23/20 09:12*	*11/24/20 12:53*	*1*

Client Sample ID: LF#3

Lab Sample ID: 440-275183-5
Date Collected: 11/19/20 11:20
Matrix: Solid
Date Received: 11/19/20 17:25

Method: 8015B - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		5.0		mg/Kg		11/23/20 09:12	11/24/20 13:41	1
1,1'-Biphenyl	ND		5.0		mg/Kg		11/23/20 09:12	11/24/20 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*88*		*40 - 140*	*11/23/20 09:12*	*11/24/20 13:41*	*1*

Client: FPL Energy Solar Partners III-VII, LLC
Project/Site: Nextera Kramer Junction

Job ID: 440-275183-1
SDG: California

Client Sample ID: LF#4
Date Collected: 11/19/20 11:25
Date Received: 11/19/20 17:25

Lab Sample ID: 440-275183-6
Matrix: Solid

Method: 8015B - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	**120**		100		mg/Kg		11/23/20 09:12	11/24/20 14:52	20
1,1'-Biphenyl	ND		100		mg/Kg		11/23/20 09:12	11/24/20 14:52	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*84*		*40 - 140*	*11/23/20 09:12*	*11/24/20 14:52*	*20*

Method Summary

Client: FPL Energy Solar Partners III-VII, LLC
Project/Site: Nextera Kramer Junction

Job ID: 440-275183-1
SDG: California

Method	Method Description	Protocol	Laboratory
8015B	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL IRV
3546	Microwave Extraction	SW846	TAL IRV

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: FPL Energy Solar Partners III-VII, LLC
Project/Site: Nextera Kramer Junction

Job ID: 440-275183-1
SDG: California

Client Sample ID: BR @12'
Date Collected: 11/19/20 10:05
Date Received: 11/19/20 17:25

Lab Sample ID: 440-275183-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.09 g	1 mL	631710	11/23/20 09:12	EGC	TAL IRV
Total/NA	Analysis	8015B		50			631903	11/24/20 13:17	RMP	TAL IRV

Client Sample ID: BR @ 6'
Date Collected: 11/19/20 10:15
Date Received: 11/19/20 17:25

Lab Sample ID: 440-275183-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.07 g	1 mL	631710	11/23/20 09:12	EGC	TAL IRV
Total/NA	Analysis	8015B		1			631903	11/24/20 12:06	RMP	TAL IRV

Client Sample ID: LF#1
Date Collected: 11/19/20 11:10
Date Received: 11/19/20 17:25

Lab Sample ID: 440-275183-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.00 g	1 mL	631710	11/23/20 09:12	EGC	TAL IRV
Total/NA	Analysis	8015B		1			631903	11/24/20 12:30	RMP	TAL IRV

Client Sample ID: LF#2
Date Collected: 11/19/20 11:15
Date Received: 11/19/20 17:25

Lab Sample ID: 440-275183-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.14 g	1 mL	631710	11/23/20 09:12	EGC	TAL IRV
Total/NA	Analysis	8015B		1			631903	11/24/20 12:53	RMP	TAL IRV

Client Sample ID: LF#3
Date Collected: 11/19/20 11:20
Date Received: 11/19/20 17:25

Lab Sample ID: 440-275183-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.00 g	1 mL	631710	11/23/20 09:12	EGC	TAL IRV
Total/NA	Analysis	8015B		1			631903	11/24/20 13:41	RMP	TAL IRV

Client Sample ID: LF#4
Date Collected: 11/19/20 11:25
Date Received: 11/19/20 17:25

Lab Sample ID: 440-275183-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.01 g	1 mL	631710	11/23/20 09:12	EGC	TAL IRV
Total/NA	Analysis	8015B		20			631903	11/24/20 14:52	RMP	TAL IRV

Laboratory References:
TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8015B - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 440-631710/1-A
Matrix: Solid
Analysis Batch: 631903

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 631710

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		5.0		mg/Kg		11/23/20 09:12	11/24/20 10:31	1
1,1'-Biphenyl	ND		5.0		mg/Kg		11/23/20 09:12	11/24/20 10:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*90*		*40 - 140*	*11/23/20 09:12*	*11/24/20 10:31*	*1*

Lab Sample ID: LCS 440-631710/2-A
Matrix: Solid
Analysis Batch: 631903

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 631710

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene, 1,1'-oxybis-			6.67	6.30		mg/Kg		94	45 - 115		
1,1'-Biphenyl			6.67	6.40		mg/Kg		96	45 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*93*		*40 - 140*

Lab Sample ID: LCSD 440-631710/3-A
Matrix: Solid
Analysis Batch: 631903

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 631710

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene, 1,1'-oxybis-			6.67	6.30		mg/Kg		95	45 - 115	0	30
1,1'-Biphenyl			6.67	6.36		mg/Kg		95	45 - 115	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane	*91*		*40 - 140*

QC Association Summary

Client: FPL Energy Solar Partners III-VII, LLC
Project/Site: Nextera Kramer Junction

Job ID: 440-275183-1
SDG: California

GC Semi VOA

Prep Batch: 631710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-275183-1	BR @12'	Total/NA	Solid	3546	
440-275183-2	BR @ 6'	Total/NA	Solid	3546	
440-275183-3	LF#1	Total/NA	Solid	3546	
440-275183-4	LF#2	Total/NA	Solid	3546	
440-275183-5	LF#3	Total/NA	Solid	3546	
440-275183-6	LF#4	Total/NA	Solid	3546	
MB 440-631710/1-A	Method Blank	Total/NA	Solid	3546	
LCS 440-631710/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 440-631710/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 631903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-275183-1	BR @12'	Total/NA	Solid	8015B	631710
440-275183-2	BR @ 6'	Total/NA	Solid	8015B	631710
440-275183-3	LF#1	Total/NA	Solid	8015B	631710
440-275183-4	LF#2	Total/NA	Solid	8015B	631710
440-275183-5	LF#3	Total/NA	Solid	8015B	631710
440-275183-6	LF#4	Total/NA	Solid	8015B	631710
MB 440-631710/1-A	Method Blank	Total/NA	Solid	8015B	631710
LCS 440-631710/2-A	Lab Control Sample	Total/NA	Solid	8015B	631710
LCSD 440-631710/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B	631710

Definitions/Glossary

Client: FPL Energy Solar Partners III-VII, LLC
Project/Site: Nextera Kramer Junction

Job ID: 440-275183-1
SDG: California

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate recovery exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: FPL Energy Solar Partners III-VII, LLC
Project/Site: Nextera Kramer Junction

Job ID: 440-275183-1
SDG: California

Laboratory: Eurofins Calscience Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2706	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B	3546	Solid	1,1'-Biphenyl
8015B	3546	Solid	Benzene, 1,1'-oxybis-

Eurofins Calscience Irvine
17461 Derian Ave Suite 100
Irvine, CA 92614-5817
Phone (949) 261-1022 Fax (949) 260-3297

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Phil DeLaRosa	Lab PM: Fama, Sheri M	Carrier Tracking No(s):	COC No: 440-190105-34788.1
Client Contact: Glen King	Phone	E-Mail: Sheri.Fama@Eurofinset.com	State of Origin	Page: Page 1 of 1
Company: FPL Energy Solar Partners III-VII LLC	PWSID:			Job #:
Address: 41100 Hwy 395	Due Date Requested:			
City: Boron	TAT Requested (days):			
State, Zip: CA, 93516	Compliance Project: Δ Yes Δ No			
Phone: 760-762-3100(Tel)	PO #: Glen King			
Email: glen_king@fpl.com	WO #:			
Project Name: Nextera Kramer Junction	Project #: 44005151			
Site: California	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO - ThermInol	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
BR @12'	11-19-20	1005	G	Solid	N	N	x		
BR @ 6'		1015		Solid			x		
LF#1		1110		Solid			x		
LF#2		1115		Solid			x		
LF#3		1120		Solid			x		
LF#4		1125		Solid			x		
				Solid			x		
				Solid			x		
				Solid			x		
				Solid			x		

440-275183 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time:	Company	Received by	Date/Time:	Company
Phil DeLaRosa	11-19-20 @ 1725	NorthStar		11/19/20 1725	EC-IRV
Relinquished by	Date/Time.	Company	Received by	Date/Time.	Company
Relinquished by	Date/Time.	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.2/0.2 IR-8

Ver 01/16/2019

Login Sample Receipt Checklist

Client: FPL Energy Solar Partners III-VII, LLC

Job Number: 440-275183-1
SDG Number: California

Login Number: 275183
List Number: 1
Creator: Skinner, Alma D

List Source: Eurofins Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins Calscience Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

Laboratory Job ID: 440-275936-1
Client Project/Site: Nextera-Kramer Junction

For:
FPL Energy Solar Partners III-VII, LLC
41100 Highway 395
Boron, California 93516

Attn: Glen King

Authorized for release by:
12/23/2020 1:40:33 PM

Sheri Fama, Project Manager I
(949)260-3274
Sheri.Fama@Eurofinset.com

Table of Contents

Sample Summary

Client: FPL Energy Solar Partners III-VII, LLC
Project/Site: Nextera-Kramer Junction

Job ID: 440-275936-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-275936-1	MW-1-12-8-20	Water	12/08/20 11:50	12/10/20 14:56	
440-275936-2	MW-2-12-8-20	Water	12/08/20 13:40	12/10/20 14:56	
440-275936-3	MW-3-12-8-20	Water	12/08/20 16:00	12/10/20 14:56	
440-275936-4	MW-4-12-8-20	Water	12/08/20 16:50	12/10/20 14:56	
440-275936-6	Dup-12-8-20	Water	12/08/20 00:01	12/10/20 14:56	
440-275936-9	LF@6'-12-8-20	Solid	12/08/20 10:45	12/10/20 14:56	

Client: FPL Energy Solar Partners III-VII, LLC
Project/Site: Nextera-Kramer Junction

Job ID: 440-275936-1

Job ID: 440-275936-1

Laboratory: Eurofins Calscience Irvine

Narrative

Job Narrative
440-275936-1

Comments
No additional comments.

Receipt
The samples were received on 12/10/2020 2:56 PM; the samples arrived in good condition and on ice. The temperature of the cooler at receipt was 4.0º C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

HPLC/IC
Method 300.0: The following samples were received outside of holding time: MW-1-12-8-20 (440-275936-1), MW-2-12-8-20 (440-275936-2), and Dup-12-8-20 (440-275936-6) for Orthophosphate as PO4.

Method 300.0: The following samples were analyzed outside of analytical holding time: MW-3-12-8-20 (440-275936-3) and MW-4-12-8-20 (440-275936-4), due to insufficient time remaining in the analytical holding time, for Orthophosphate as PO4.

Method 300.0: The continuing calibration verification (CCV) associated with batch 440-633211 recovered above the upper control limit for Orthophosphate as PO4. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
The following samples for metals were received unpreserved and were preserved upon receipt to the laboratory: MW-1-12-8-20 (440-275936-1), MW-2-12-8-20 (440-275936-2), MW-3-12-8-20 (440-275936-3), MW-4-12-8-20 (440-275936-4) and Dup-12-8-20 (440-275936-6). Regulatory documents require a 24-hour waiting period from the time of the addition of the acid preservative to the time of digestion.

2.0 mL of 1:1 HNO3 was added to each container A-1, A-2, A-3, A-4, and A-6 on 12/16/20 @ 1310 hours
1:1 HNO3 Reagent # 6415103

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 440-633475. Method 8015B

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample ID: MW-1-12-8-20

Date Collected: 12/08/20 11:50
Date Received: 12/10/20 14:56

Lab Sample ID: 440-275936-1

Matrix: Water

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.097		mg/L		12/12/20 05:51	12/15/20 13:41	1
1,1'-Biphenyl	ND		0.097		mg/L		12/12/20 05:51	12/15/20 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*68*		*45 - 120*	*12/12/20 05:51*	*12/15/20 13:41*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**310**		25		mg/L			12/10/20 21:24	50
Orthophosphate as PO4	ND	H H3	0.50		mg/L			12/10/20 21:35	1
Sulfate	**340**		25		mg/L			12/10/20 21:24	50

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**11**		0.50		mg/L		12/18/20 08:25	12/18/20 17:03	1
Sodium	**350**		0.50		mg/L		12/18/20 08:25	12/18/20 17:03	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1300**		10		mg/L			12/15/20 10:30	1

Client Sample ID: MW-2-12-8-20

Date Collected: 12/08/20 13:40
Date Received: 12/10/20 14:56

Lab Sample ID: 440-275936-2

Matrix: Water

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.095		mg/L		12/12/20 05:51	12/15/20 14:05	1
1,1'-Biphenyl	ND		0.095		mg/L		12/12/20 05:51	12/15/20 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*81*		*45 - 120*	*12/12/20 05:51*	*12/15/20 14:05*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**310**		25		mg/L			12/10/20 21:42	50
Orthophosphate as PO4	ND	H H3	0.50		mg/L			12/10/20 21:53	1
Sulfate	**240**		25		mg/L			12/10/20 21:42	50

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**5.5**		0.50		mg/L		12/18/20 08:25	12/18/20 17:13	1
Sodium	**320**		0.50		mg/L		12/18/20 08:25	12/18/20 17:13	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1100**		10		mg/L			12/15/20 10:30	1

Client Sample ID: MW-3-12-8-20

Date Collected: 12/08/20 16:00
Date Received: 12/10/20 14:56

Lab Sample ID: 440-275936-3

Matrix: Water

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.097		mg/L		12/12/20 05:51	12/15/20 14:29	1
1,1'-Biphenyl	ND		0.097		mg/L		12/12/20 05:51	12/15/20 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*71*		*45 - 120*	*12/12/20 05:51*	*12/15/20 14:29*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**230**		25		mg/L			12/10/20 22:38	50
Orthophosphate as PO4	ND	H	0.50		mg/L			12/10/20 22:11	1
Sulfate	**220**		25		mg/L			12/10/20 22:38	50

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**5.2**		0.50		mg/L		12/18/20 08:25	12/18/20 17:16	1
Sodium	**270**		0.50		mg/L		12/18/20 08:25	12/18/20 17:16	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**960**		10		mg/L			12/15/20 10:30	1

Client Sample ID: MW-4-12-8-20

Date Collected: 12/08/20 16:50
Date Received: 12/10/20 14:56

Lab Sample ID: 440-275936-4

Matrix: Water

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.096		mg/L		12/12/20 05:51	12/15/20 14:53	1
1,1'-Biphenyl	ND		0.096		mg/L		12/12/20 05:51	12/15/20 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*66*		*45 - 120*	*12/12/20 05:51*	*12/15/20 14:53*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**200**		25		mg/L			12/10/20 22:55	50
Orthophosphate as PO4	ND	H	0.50		mg/L			12/11/20 00:30	1
Sulfate	**200**		25		mg/L			12/10/20 22:55	50

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**5.0**		0.50		mg/L		12/18/20 08:25	12/18/20 17:18	1
Sodium	**230**		0.50		mg/L		12/18/20 08:25	12/18/20 17:18	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**850**		10		mg/L			12/15/20 10:30	1

Client Sample ID: Dup-12-8-20

Date Collected: 12/08/20 00:01
Date Received: 12/10/20 14:56

Lab Sample ID: 440-275936-6
Matrix: Water

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.096		mg/L		12/12/20 05:51	12/15/20 15:17	1
1,1'-Biphenyl	ND		0.096		mg/L		12/12/20 05:51	12/15/20 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*67*		*45 - 120*	*12/12/20 05:51*	*12/15/20 15:17*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**300**		25		mg/L			12/11/20 20:37	50
Orthophosphate as PO4	ND	H H3	0.50		mg/L			12/11/20 20:19	1
Sulfate	**340**		25		mg/L			12/11/20 20:37	50

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**11**		0.50		mg/L		12/18/20 08:25	12/18/20 17:21	1
Sodium	**340**		0.50		mg/L		12/18/20 08:25	12/18/20 17:21	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1300**		10		mg/L			12/15/20 10:30	1

Client Sample ID: LF@6'-12-8-20

Date Collected: 12/08/20 10:45
Date Received: 12/10/20 14:56

Lab Sample ID: 440-275936-9
Matrix: Solid

Method: 8015B - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		5.0		mg/Kg		12/16/20 12:15	12/18/20 15:04	1
1,1'-Biphenyl	ND		5.0		mg/Kg		12/16/20 12:15	12/18/20 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*67*		*40 - 140*	*12/16/20 12:15*	*12/18/20 15:04*	*1*

Method Summary

Client: FPL Energy Solar Partners III-VII, LLC
Project/Site: Nextera-Kramer Junction

Job ID: 440-275936-1

Method	Method Description	Protocol	Laboratory
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL IRV
8015B	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL IRV
300.0	Anions, Ion Chromatography	MCAWW	TAL IRV
6010B	Metals (ICP)	SW846	TAL IRV
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL IRV
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	TAL IRV
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL IRV
3546	Microwave Extraction	SW846	TAL IRV

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: FPL Energy Solar Partners III-VII, LLC
Project/Site: Nextera-Kramer Junction

Job ID: 440-275936-1

Client Sample ID: MW-1-12-8-20

Lab Sample ID: 440-275936-1

Date Collected: 12/08/20 11:50

Matrix: Water

Date Received: 12/10/20 14:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1030 mL	1 mL	633475	12/12/20 05:51	H1SH	TAL IRV
Total/NA	Analysis	8015B		1			633671	12/15/20 13:41	RMP	TAL IRV
Total/NA	Analysis	300.0		50			633205	12/10/20 21:24	NTN	TAL IRV
Total/NA	Analysis	300.0		1			633211	12/10/20 21:35	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	633996	12/18/20 08:25	M1G	TAL IRV
Total Recoverable	Analysis	6010B		1			634134	12/18/20 17:03	P1R	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	633667	12/15/20 10:30	XL	TAL IRV

Client Sample ID: MW-2-12-8-20

Lab Sample ID: 440-275936-2

Date Collected: 12/08/20 13:40

Matrix: Water

Date Received: 12/10/20 14:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1054 mL	1 mL	633475	12/12/20 05:51	H1SH	TAL IRV
Total/NA	Analysis	8015B		1			633671	12/15/20 14:05	RMP	TAL IRV
Total/NA	Analysis	300.0		50			633205	12/10/20 21:42	NTN	TAL IRV
Total/NA	Analysis	300.0		1			633211	12/10/20 21:53	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	633996	12/18/20 08:25	M1G	TAL IRV
Total Recoverable	Analysis	6010B		1			634134	12/18/20 17:13	P1R	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	633667	12/15/20 10:30	XL	TAL IRV

Client Sample ID: MW-3-12-8-20

Lab Sample ID: 440-275936-3

Date Collected: 12/08/20 16:00

Matrix: Water

Date Received: 12/10/20 14:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1030 mL	1 mL	633475	12/12/20 05:51	H1SH	TAL IRV
Total/NA	Analysis	8015B		1			633671	12/15/20 14:29	RMP	TAL IRV
Total/NA	Analysis	300.0		50			633205	12/10/20 22:38	NTN	TAL IRV
Total/NA	Analysis	300.0		1			633211	12/10/20 22:11	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	633996	12/18/20 08:25	M1G	TAL IRV
Total Recoverable	Analysis	6010B		1			634134	12/18/20 17:16	P1R	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	633667	12/15/20 10:30	XL	TAL IRV

Client Sample ID: MW-4-12-8-20

Lab Sample ID: 440-275936-4

Date Collected: 12/08/20 16:50

Matrix: Water

Date Received: 12/10/20 14:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1040 mL	1 mL	633475	12/12/20 05:51	H1SH	TAL IRV
Total/NA	Analysis	8015B		1			633671	12/15/20 14:53	RMP	TAL IRV
Total/NA	Analysis	300.0		50			633205	12/10/20 22:55	NTN	TAL IRV
Total/NA	Analysis	300.0		1			633211	12/11/20 00:30	NTN	TAL IRV

Lab Chronicle

Client: FPL Energy Solar Partners III-VII, LLC
Project/Site: Nextera-Kramer Junction

Job ID: 440-275936-1

Client Sample ID: MW-4-12-8-20

Lab Sample ID: 440-275936-4

Date Collected: 12/08/20 16:50

Matrix: Water

Date Received: 12/10/20 14:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	25 mL	633996	12/18/20 08:25	M1G	TAL IRV
Total Recoverable	Analysis	6010B		1			634134	12/18/20 17:18	P1R	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	633667	12/15/20 10:30	XL	TAL IRV

Client Sample ID: Dup-12-8-20

Lab Sample ID: 440-275936-6

Date Collected: 12/08/20 00:01

Matrix: Water

Date Received: 12/10/20 14:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1040 mL	1 mL	633475	12/12/20 05:51	H1SH	TAL IRV
Total/NA	Analysis	8015B		1			633671	12/15/20 15:17	RMP	TAL IRV
Total/NA	Analysis	300.0		1			633354	12/11/20 20:19	NTN	TAL IRV
Total/NA	Analysis	300.0		50			633355	12/11/20 20:37	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	633996	12/18/20 08:25	M1G	TAL IRV
Total Recoverable	Analysis	6010B		1			634134	12/18/20 17:21	P1R	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	633667	12/15/20 10:30	XL	TAL IRV

Client Sample ID: LF@6'-12-8-20

Lab Sample ID: 440-275936-9

Date Collected: 12/08/20 10:45

Matrix: Solid

Date Received: 12/10/20 14:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.10 g	1 mL	633863	12/16/20 12:15	EGC	TAL IRV
Total/NA	Analysis	8015B		1			634095	12/18/20 15:04	RMP	TAL IRV

Laboratory References:

TAL IRV = Eurofins Calscience Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 440-633475/1-A
Matrix: Water
Analysis Batch: 633671

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633475

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.10		mg/L		12/12/20 05:51	12/15/20 13:17	1
1,1'-Biphenyl	ND		0.10		mg/L		12/12/20 05:51	12/15/20 13:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*76*		*45 - 120*	*12/12/20 05:51*	*12/15/20 13:17*	*1*

Lab Sample ID: LCS 440-633475/2-A
Matrix: Water
Analysis Batch: 633671

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633475

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene, 1,1'-oxybis-			0.100	0.0790	J	mg/L		79	50 - 115		
1,1'-Biphenyl			0.100	0.0786	J	mg/L		79	50 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*75*		*45 - 120*

Lab Sample ID: LCSD 440-633475/3-A
Matrix: Water
Analysis Batch: 633671

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 633475

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene, 1,1'-oxybis-			0.100	0.0818	J	mg/L		82	50 - 115	3	30
1,1'-Biphenyl			0.100	0.0815	J	mg/L		82	50 - 115	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane	*79*		*45 - 120*

Method: 8015B - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 440-633863/1-A
Matrix: Solid
Analysis Batch: 634095

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 633863

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		5.0		mg/Kg		12/16/20 12:15	12/18/20 11:54	1
1,1'-Biphenyl	ND		5.0		mg/Kg		12/16/20 12:15	12/18/20 11:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*82*		*40 - 140*	*12/16/20 12:15*	*12/18/20 11:54*	*1*

Lab Sample ID: LCS 440-633863/6-A
Matrix: Solid
Analysis Batch: 634095

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 633863

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene, 1,1'-oxybis-			6.67	6.08		mg/Kg		91	45 - 115		
1,1'-Biphenyl			6.67	6.12		mg/Kg		92	45 - 115		

Method: 8015B - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Surrogate	LCS %Recovery	LCS Qualifier	Limits
n-Octacosane	94		40 - 140

Lab Sample ID: 440-275936-9 MS
Matrix: Solid
Analysis Batch: 634095

Client Sample ID: LF@6'-12-8-20
Prep Type: Total/NA
Prep Batch: 633863

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene, 1,1'-oxybis-	ND		6.64	ND		mg/Kg		71	40 - 120
1,1'-Biphenyl	ND		6.64	ND		mg/Kg		72	40 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
n-Octacosane	69		40 - 140

Lab Sample ID: 440-275936-9 MSD
Matrix: Solid
Analysis Batch: 634095

Client Sample ID: LF@6'-12-8-20
Prep Type: Total/NA
Prep Batch: 633863

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene, 1,1'-oxybis-	ND		6.67	5.08		mg/Kg		76	40 - 120	7	30
1,1'-Biphenyl	ND		6.67	5.17		mg/Kg		77	40 - 120	7	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
n-Octacosane	75		40 - 140

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-633205/6
Matrix: Water
Analysis Batch: 633205

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			12/10/20 10:57	1
Sulfate	ND		0.50		mg/L			12/10/20 10:57	1

Lab Sample ID: LCS 440-633205/5
Matrix: Water
Analysis Batch: 633205

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride			5.00	4.68		mg/L		94	90 - 110
Sulfate			5.00	4.84		mg/L		97	90 - 110

Lab Sample ID: 440-275890-I-1 MS
Matrix: Water
Analysis Batch: 633205

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	19		5.00	24.1	E	mg/L		107	80 - 120
Sulfate	170	E	5.00	175	E 4	mg/L		21	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 440-275890-I-1 MSD
Matrix: Water
Analysis Batch: 633205

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	19		5.00	24.4	E	mg/L		113	80 - 120	1	20
Sulfate	170	E	5.00	176	E 4	mg/L		41	80 - 120	1	20

Lab Sample ID: MB 440-633211/7
Matrix: Water
Analysis Batch: 633211

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate as PO4	ND		0.50		mg/L			12/10/20 11:20	1

Lab Sample ID: LCS 440-633211/6
Matrix: Water
Analysis Batch: 633211

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Orthophosphate as PO4			5.00	4.74		mg/L		95	90 - 110		

Lab Sample ID: 440-275890-I-1 MS
Matrix: Water
Analysis Batch: 633211

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Orthophosphate as PO4	ND	F1	5.00	6.73	F1	mg/L		135	80 - 120		

Lab Sample ID: 440-275890-I-1 MSD
Matrix: Water
Analysis Batch: 633211

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Orthophosphate as PO4	ND	F1	5.00	7.78	F1	mg/L		156	80 - 120	14	20

Lab Sample ID: MB 440-633354/6
Matrix: Water
Analysis Batch: 633354

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate as PO4	ND		0.50		mg/L			12/11/20 10:12	1

Lab Sample ID: LCS 440-633354/5
Matrix: Water
Analysis Batch: 633354

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Orthophosphate as PO4			5.00	4.79		mg/L		96	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 440-275978-A-1 MS
Matrix: Water
Analysis Batch: 633354

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Orthophosphate as PO4	ND		5.00	5.06		mg/L		101	80 - 120

Lab Sample ID: 440-275978-A-1 MSD
Matrix: Water
Analysis Batch: 633354

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Orthophosphate as PO4	ND		5.00	5.07		mg/L		101	80 - 120	0	20

Lab Sample ID: MB 440-633355/6
Matrix: Water
Analysis Batch: 633355

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50		mg/L			12/11/20 10:12	1
Sulfate	ND		0.50		mg/L			12/11/20 10:12	1

Lab Sample ID: LCS 440-633355/5
Matrix: Water
Analysis Batch: 633355

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.00	4.67		mg/L		93	90 - 110
Sulfate	5.00	4.88		mg/L		98	90 - 110

Lab Sample ID: 440-275978-A-1 MS
Matrix: Water
Analysis Batch: 633355

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	38	E	5.00	44.0	E 4	mg/L		124	80 - 120
Sulfate	25		5.00	30.3	4	mg/L		105	80 - 120

Lab Sample ID: 440-275978-A-1 MSD
Matrix: Water
Analysis Batch: 633355

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	38	E	5.00	43.9	E 4	mg/L		122	80 - 120	0	20
Sulfate	25		5.00	30.2	4	mg/L		104	80 - 120	0	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-633996/1-A
Matrix: Water
Analysis Batch: 634134

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 633996

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Potassium	ND		0.50		mg/L		12/18/20 08:25	12/18/20 16:51	1
Sodium	ND		0.50		mg/L		12/18/20 08:25	12/18/20 16:51	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 440-633996/2-A
Matrix: Water
Analysis Batch: 634134

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 633996

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Potassium			10.0	10.2		mg/L		102	80 - 120		
Sodium			10.0	10.2		mg/L		102	80 - 120		

Lab Sample ID: 440-275936-1 MS
Matrix: Water
Analysis Batch: 634134

Client Sample ID: MW-1-12-8-20
Prep Type: Total Recoverable
Prep Batch: 633996

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Potassium	11		10.0	20.8		mg/L		98	75 - 125		
Sodium	350		10.0	356	4	mg/L		52	75 - 125		

Lab Sample ID: 440-275936-1 MSD
Matrix: Water
Analysis Batch: 634134

Client Sample ID: MW-1-12-8-20
Prep Type: Total Recoverable
Prep Batch: 633996

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Potassium	11		10.0	20.8		mg/L		98	75 - 125	0	20
Sodium	350		10.0	359	4	mg/L		81	75 - 125	1	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 440-633667/1
Matrix: Water
Analysis Batch: 633667

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			12/15/20 10:29	1

Lab Sample ID: LCS 440-633667/2
Matrix: Water
Analysis Batch: 633667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			1000	968		mg/L		97	90 - 110		

Lab Sample ID: 440-275936-6 DU
Matrix: Water
Analysis Batch: 633667

Client Sample ID: Dup-12-8-20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1300			1290		mg/L				0.2	5

QC Association Summary

Client: FPL Energy Solar Partners III-VII, LLC
Project/Site: Nextera-Kramer Junction

Job ID: 440-275936-1

GC Semi VOA

Prep Batch: 633475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-275936-1	MW-1-12-8-20	Total/NA	Water	3510C	
440-275936-2	MW-2-12-8-20	Total/NA	Water	3510C	
440-275936-3	MW-3-12-8-20	Total/NA	Water	3510C	
440-275936-4	MW-4-12-8-20	Total/NA	Water	3510C	
440-275936-6	Dup-12-8-20	Total/NA	Water	3510C	
MB 440-633475/1-A	Method Blank	Total/NA	Water	3510C	
LCS 440-633475/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-633475/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 633671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-275936-1	MW-1-12-8-20	Total/NA	Water	8015B	633475
440-275936-2	MW-2-12-8-20	Total/NA	Water	8015B	633475
440-275936-3	MW-3-12-8-20	Total/NA	Water	8015B	633475
440-275936-4	MW-4-12-8-20	Total/NA	Water	8015B	633475
440-275936-6	Dup-12-8-20	Total/NA	Water	8015B	633475
MB 440-633475/1-A	Method Blank	Total/NA	Water	8015B	633475
LCS 440-633475/2-A	Lab Control Sample	Total/NA	Water	8015B	633475
LCSD 440-633475/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	633475

Prep Batch: 633863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-275936-9	LF@6'-12-8-20	Total/NA	Solid	3546	
MB 440-633863/1-A	Method Blank	Total/NA	Solid	3546	
LCS 440-633863/6-A	Lab Control Sample	Total/NA	Solid	3546	
440-275936-9 MS	LF@6'-12-8-20	Total/NA	Solid	3546	
440-275936-9 MSD	LF@6'-12-8-20	Total/NA	Solid	3546	

Analysis Batch: 634095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-275936-9	LF@6'-12-8-20	Total/NA	Solid	8015B	633863
MB 440-633863/1-A	Method Blank	Total/NA	Solid	8015B	633863
LCS 440-633863/6-A	Lab Control Sample	Total/NA	Solid	8015B	633863
440-275936-9 MS	LF@6'-12-8-20	Total/NA	Solid	8015B	633863
440-275936-9 MSD	LF@6'-12-8-20	Total/NA	Solid	8015B	633863

HPLC/IC

Analysis Batch: 633205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-275936-1	MW-1-12-8-20	Total/NA	Water	300.0	
440-275936-2	MW-2-12-8-20	Total/NA	Water	300.0	
440-275936-3	MW-3-12-8-20	Total/NA	Water	300.0	
440-275936-4	MW-4-12-8-20	Total/NA	Water	300.0	
MB 440-633205/6	Method Blank	Total/NA	Water	300.0	
LCS 440-633205/5	Lab Control Sample	Total/NA	Water	300.0	
440-275890-I-1 MS	Matrix Spike	Total/NA	Water	300.0	
440-275890-I-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

HPLC/IC

Analysis Batch: 633211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-275936-1	MW-1-12-8-20	Total/NA	Water	300.0	
440-275936-2	MW-2-12-8-20	Total/NA	Water	300.0	
440-275936-3	MW-3-12-8-20	Total/NA	Water	300.0	
440-275936-4	MW-4-12-8-20	Total/NA	Water	300.0	
MB 440-633211/7	Method Blank	Total/NA	Water	300.0	
LCS 440-633211/6	Lab Control Sample	Total/NA	Water	300.0	
440-275890-I-1 MS	Matrix Spike	Total/NA	Water	300.0	
440-275890-I-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 633354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-275936-6	Dup-12-8-20	Total/NA	Water	300.0	
MB 440-633354/6	Method Blank	Total/NA	Water	300.0	
LCS 440-633354/5	Lab Control Sample	Total/NA	Water	300.0	
440-275978-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
440-275978-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 633355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-275936-6	Dup-12-8-20	Total/NA	Water	300.0	
MB 440-633355/6	Method Blank	Total/NA	Water	300.0	
LCS 440-633355/5	Lab Control Sample	Total/NA	Water	300.0	
440-275978-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
440-275978-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 633996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-275936-1	MW-1-12-8-20	Total Recoverable	Water	3005A	
440-275936-2	MW-2-12-8-20	Total Recoverable	Water	3005A	
440-275936-3	MW-3-12-8-20	Total Recoverable	Water	3005A	
440-275936-4	MW-4-12-8-20	Total Recoverable	Water	3005A	
440-275936-6	Dup-12-8-20	Total Recoverable	Water	3005A	
MB 440-633996/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 440-633996/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-275936-1 MS	MW-1-12-8-20	Total Recoverable	Water	3005A	
440-275936-1 MSD	MW-1-12-8-20	Total Recoverable	Water	3005A	

Analysis Batch: 634134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-275936-1	MW-1-12-8-20	Total Recoverable	Water	6010B	633996
440-275936-2	MW-2-12-8-20	Total Recoverable	Water	6010B	633996
440-275936-3	MW-3-12-8-20	Total Recoverable	Water	6010B	633996
440-275936-4	MW-4-12-8-20	Total Recoverable	Water	6010B	633996
440-275936-6	Dup-12-8-20	Total Recoverable	Water	6010B	633996
MB 440-633996/1-A	Method Blank	Total Recoverable	Water	6010B	633996
LCS 440-633996/2-A	Lab Control Sample	Total Recoverable	Water	6010B	633996
440-275936-1 MS	MW-1-12-8-20	Total Recoverable	Water	6010B	633996
440-275936-1 MSD	MW-1-12-8-20	Total Recoverable	Water	6010B	633996

Client: FPL Energy Solar Partners III-VII, LLC
Project/Site: Nextera-Kramer Junction

Job ID: 440-275936-1

General Chemistry

Analysis Batch: 633667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-275936-1	MW-1-12-8-20	Total/NA	Water	SM 2540C	
440-275936-2	MW-2-12-8-20	Total/NA	Water	SM 2540C	
440-275936-3	MW-3-12-8-20	Total/NA	Water	SM 2540C	
440-275936-4	MW-4-12-8-20	Total/NA	Water	SM 2540C	
440-275936-6	Dup-12-8-20	Total/NA	Water	SM 2540C	
MB 440-633667/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-633667/2	Lab Control Sample	Total/NA	Water	SM 2540C	
440-275936-6 DU	Dup-12-8-20	Total/NA	Water	SM 2540C	

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time
H3	Sample was received and analyzed past holding time.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Accreditation/Certification Summary

Client: FPL Energy Solar Partners III-VII, LLC
Job ID: 440-275936-1
Project/Site: Nextera-Kramer Junction

Laboratory: Eurofins Calscience Irvine

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State	2706	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
300.0		Water	Orthophosphate as PO4
6010B	3005A	Water	Potassium
6010B	3005A	Water	Sodium
8015B	3510C	Water	1,1'-Biphenyl
8015B	3510C	Water	Benzene, 1,1'-oxybis-
8015B	3546	Solid	1,1'-Biphenyl
8015B	3546	Solid	Benzene, 1,1'-oxybis-
SM 2540C		Water	Total Dissolved Solids

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Address: _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: Glen Kling	Site Contact:	Date:	COC No:
Company Name: Nextera-Kramer Junction	Tel/Email:	Lab Contact:	Carrier:	1 of 1 COCs
Address: 41100 Hwy 395	Analysis Turnaround Time			Sampler:
City/State/Zip: Boron, CA 93516	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: (760) 762-5562	TAT if different from Below _____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: Nextera-Kramer Junction	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Chloride 300	Sodium 6010B	Sulfate 300	TDS	Bismuth 6010B	Potassium 6010B	Phosphate 300	8015C Mod for Thermo	Sample Specific Notes:
MW-1-12-8-20	12-8-20	1150	G	GW	3	N	N	X	X	X	X	X	X	X		JLL 12/11/20
MW-2- "		1340			3			X	X	X	X	X	X	X		
MW-3- "		1600			3			X	X	X	X	X	X	X		
MW-4- "		1650			3			X	X	X	X	X	X	X		
LFG6'- "		1045		Soil	1										X	
Dup - "		—		GW	3			X	X	X	X	X	X	X		

440-275936 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: 4.1 Corr'd: 4.0	Therm ID No.: IR-23
Relinquished by:	Company:	Date/Time: 12-10-20	Received by:	Company:	Date/Time: 1458
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 12/10/20 1456

Login Sample Receipt Checklist

Client: FPL Energy Solar Partners III-VII, LLC

Job Number: 440-275936-1

Login Number: 275936
List Number: 1
Creator: Lagunas, Jorge L

List Source: Eurofins Irvine

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Refer to Job Narrative for details.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	False	Refer to Job Narrative for details.
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	