DOCKETED	
Docket Number:	87-AFC-01C
Project Title:	COMPLIANCE-Luz Solar Electric Generating System Cogeneration AFC (150 MW) Units III-VII.
TN #:	231623-2
Document Title:	SEGS III - VII 2019 2nd Semiannual Pond Monitoring Report
Description:	N/A
Filer:	Glen T King
Organization:	NextEra Energy
Submitter Role:	Applicant
Submission Date:	1/22/2020 9:34:08 AM
Docketed Date:	1/22/2020

Date: January 13, 2020

California Regional Water Quality Control Board
Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe, California 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: **6-97-58**
WDID Number: **6B364550002**
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: **2019**
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

NextEra Energy Operating Services, LLC, 41100 US Highway 395,
Boron, CA 93516
760-762-5562

January 13, 2020

Mr. John Steude, PG
Engineering Geologist
North Basin Cleanup and Site Investigation Unit Chief
California Water Quality Control Board – Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe, California 96150

Dear Mr. Steude:

Re: Second Semester and Annual 2019 Monitoring Report
Board Order No. 6-97-58
SEGS III through VII Facilities, Boron, California

NextEra Energy Operating Services, LLC, on behalf of Luz Solar Partners III through VII, Ltd., is pleased to present this Monitoring Report for the Second Semester of 2019. All operational activities with the exception of groundwater and vadose zone testing are performed by site personnel. Groundwater sampling and vadose zone testing is currently performed by Northstar Environmental Remediation (Northstar) of Lake Forest, California under direct contract to Luz Solar Partners III through VII Ltd. Chemical analyses are performed by an independent State of California-certified laboratory also under direct contract to Luz Solar Partners III through VII Ltd.

During this period, Pond #3 is out of service due to a possible leak in the primary liner based on discharge from the south LCRS sump. Assessment of the primary liner is underway.

In August 2019 Pond #4 was taken out of service because of an apparent leak in the primary liner as indicated by discharges from the south LCRS. Assessment of the primary liner is underway.

The results of neutron vadose zone moisture detection monitoring, and the groundwater monitoring data appear to be consistent with previous reporting periods. Analysis of groundwater samples for constituents of concern did not reveal any concentrations above expected levels.

If you have any questions regarding this report, please feel free to call me at (760) 762-1505.

Sincerely,
NextEra Energy Operating Services, LLC, for
Luz Solar Partners III – VII Ltd.

Glen T. King
Environmental Specialist
Luz Solar Partners III – VII Ltd.

2019 SECOND SEMIANNUAL DETECTION MONITORING REPORT SEGS III – VII KRAMER JUNCTION Board Order No. 6-97-58

January 8, 2020

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

2019 SECOND SEMIANNUAL DETECTION MONITORING REPORT

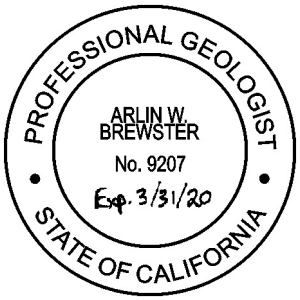
SEGS III – VII KRAMER JUNCTION

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.

The contents of this report are subject to the limitations of the available data.



Arlin W. Brewster

Professional Geologist 9207

January 8, 2020

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1.0 INTRODUCTION

Northstar Environmental Remediation (Northstar) of Lake Forest, California has prepared this 2019 Second Semiannual Detection 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. 6-97-58 Waste Discharge Requirements and Monitoring and Reporting Program. This report summarizes all monitoring activity related to the evaporation ponds that occurred during the reporting period. 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. 6-97-58 (6-88-144 rescinded)

Waste Discharge Identification Number:
6B364550002

1.2 Monitoring Summary

The following work was conducted between January 1 and December 31, 2019:

- LCRS Sump Totalizer Readings: Collected weekly by NextEra
- Evaporation Pond Discharge Totalizer Readings: Collected monthly by NextEra
- Evaporation Pond Inspections: Performed weekly by NextEra
- Groundwater Monitoring Well Sampling: Performed quarterly by Northstar
- Neutron Probe Logging: Performed quarterly by Northstar

2.0 EVAPORATION POND MONITORING

A total of three evaporation pond Class II surface impoundments exist onsite to receive wastewater discharge from SEGS operations. Evaporation Ponds 3, 4, and 5 (located from south to north, respectively) are each approximately 10 acres in size, and are located on the eastern edge of the SEGS facility.

Each pond is equipped with a leachate collection and removal system (LCRS) on the north and south ends of each pond (**Figure 2**). The volume of water pumped from each LCRS sump is recorded weekly and summarized by monthly totals (**Table 1**). The leakage action rate, as defined in the Revised Waste Discharge Requirements, is 200 gallons per day, at which point all wastewater discharge to the affected pond is ceased until repairs can be completed. Pond 3 was shut down for the entire 2019 calendar year per these requirements and assessment/repairs are pending. Pond 4 was shut down on January 9, 2019 pending repairs of an apparent leak in the primary liner, which was completed on April 23, 2019. Pond 4 then operated until August 20, 2019, when it was shut down for a primary liner leak. Pond 4 remained offline through the rest of 2019. Pond 5 was in operation during the entire 2019 calendar year. In 2019, the highest monthly totals for each pond were 21,774 gallons in Pond 3, 12,060 gallons in Pond 4, and 3,075 gallons in Pond 5.

The total designed capacity of the evaporation ponds is 0.365 million gallons per day. The total operational discharge volume of wastewater to the ponds is recorded monthly and summarized by monthly and quarterly totals (**Table 2**). During the 2019 calendar year, the highest monthly total was 4,252,596 gallons in August (approximately 0.137 million gallons per day).

Weekly visual inspections of the evaporation ponds by NextEra indicated that the pond liners were in good condition with no signs of soil discoloration, vegetation loss, or wastewater leaks or spills in the surrounding area. The pond freeboard measurements were all above the minimum required threshold of 2.0 feet, as defined in the Revised Waste Discharge Requirements.

3.0 GROUNDWATER MONITORING

A total of four groundwater monitoring wells (MW-1 through MW-4) exist at the site and are monitored and sampled quarterly for signs of release from the evaporation ponds. The locations of all wells are presented on **Figure 3**. Monitoring well MW-1 is located upgradient, near the southwest corner of the SEGS facility. Monitoring wells MW-2, MW-3, and MW-4 are positioned immediately adjacent to, and downgradient of, the evaporation ponds. The groundwater monitoring wells were monitored and sampled on March 11, May 29, September 9, December 10 (MW-1 and MW-4), and December 18 (MW-2 and MW-3).

3.1 Groundwater Elevation, Gradient, and Velocity

The groundwater elevation in MW-2 has historically been significantly lower than the other monitoring wells onsite. This may be the result of localized lithological confinement and/or drawdown from a groundwater extraction well south of the SEGS facility, which has periodically been used for construction activity on Highway 58 and dust suppression on nearby grid roads. As a result, the groundwater elevation in MW-2 has not been used to assess groundwater elevations across the rest of the SEGS facility.

Groundwater elevation contours and gradient direction are displayed on potentiometric surface maps for each quarter of the reporting period in **Figures 4 -7**. In general, measured groundwater elevations ranged between 2,282.10 and 2,303.22 feet above mean sea level (ft amsl), and the average hydraulic gradient across the site (excluding MW-2 data) is 0.003 feet per linear foot (15.5 feet per mile) to the southeast.

The following formula (based on Darcy's Law) was used to calculate the approximate groundwater flow velocity:

V = (KhI)/ne

Where:

V = average linear groundwater velocity;
Kh = aquifer horizontal hydraulic conductivity;
I = average hydraulic gradient (vertical change in groundwater elevation/corresponding horizontal distance); and,
ne = effective aquifer porosity.

During the development of monitoring well MW-1, it was determined that the hydraulic conductivity of the aquifer was approximately 14.6 feet per year. Assuming an effective porosity of 25% (0.25), and an average hydraulic gradient of 0.003 feet per linear foot, the estimated groundwater velocity is 0.175 feet per year.

3.2 Groundwater Sampling

All groundwater monitoring wells onsite are sampled according to the conditions in the Monitoring and Reporting Program. The program requires sampling of wells quarterly for analysis of sodium, sulfate, and total dissolved solids (TDS), and annually for the same constituents plus chloride, potassium, phosphate, and heat transfer fluid (Therminol). Wells are gauged for depth to water prior to purging three casing volumes. General field parameters are collecting while purging, including electrical conductivity, pH, and temperature. After three volumes have been purged, a sample set is collected, chilled, and delivered to TestAmerica, Inc., a state- and federally-certified analytical laboratory. Data for the reporting period is presented in **Table 3**, and all historical data is graphically presented in **Charts 1 – 4**. A summary of data collected during each groundwater sampling event is included in **Appendix A**. Copies of the laboratory reports are included in **Appendix B**.

Laboratory results are compared to the quarterly monitoring parameter concentration limits, as defined in the Monitoring and Reporting Program, as follows:

Sodium	403 mg/l
Sulfate	389 mg/l
TDS	1,357 mg/l

For the reporting period, sodium ranged from 210 to 340 mg/l; sulfate from 200 to 340 mg/l; and TDS from 830 to 1,300 mg/l. All laboratory analytical results were below the required thresholds.

4.0 NEUTRON PROBE MONITORING

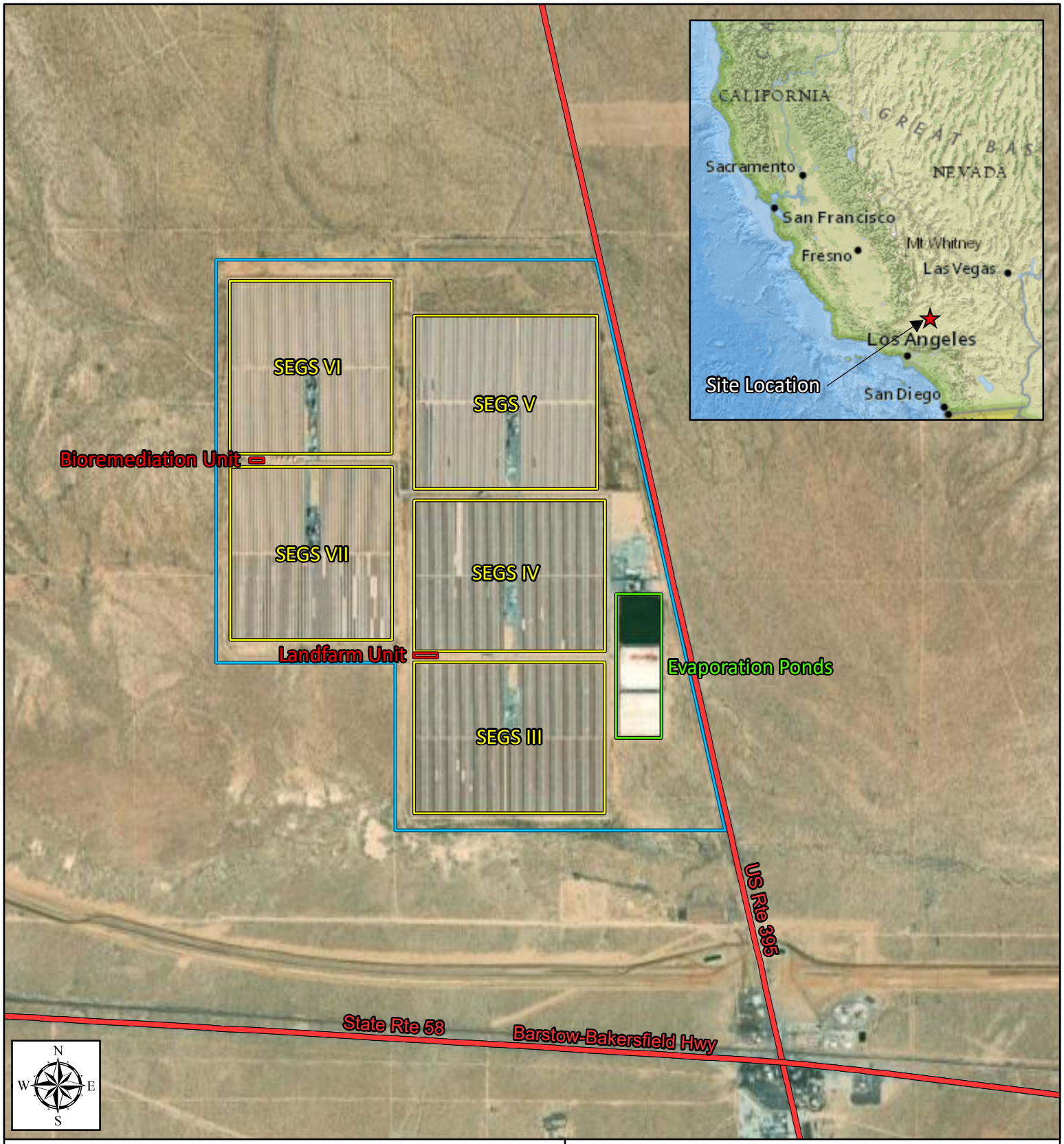
A CPN, Inc. Model 503 DR Hydro-Probe™ neutron probe is used to estimate the soil moisture below the evaporation ponds. The probe is passed through a series of horizontal wells beneath the ponds (numbered HN-1 through HN-10) and vertical wells at the cardinal points of each pond (numbered VN-2 through VN-11), as shown in **Figure 2**. The neutron probe is stopped at the same intervals during each test and the approximate percent soil moisture reading recorded. While the Monitoring and Reporting Program specifies that "Neutron probes shall be used to detect moisture in the unsaturated zone", it does not specify a moisture threshold limit. A soil moisture value of 30% is tentatively used as an action level, which is consistent with other Monitoring and Reporting Programs for similar applications.

The neutron probe surveys were performed on March 25 and 26, May 30 and 31, September 10 and 11, and December 11 and 12, 2019. Well VN-2 was damaged prior to the reporting period and is no longer used. The moisture probe readings for each quarter of 2019 are summarized in **Table 4** (horizontal wells) and **Table 5** (vertical wells). For this monitoring period, all soil moisture readings were below the tentative 30% threshold.

5.0 FINANCIAL ASSURANCE

A financial assurance deposit of $100,000 was placed in a secured, interest-accruing account in 1992. A certificate of deposit was acquired and placed on file with the RWQCB as evidence of the financial assurance. The funds were set aside as a measure to cover the cost of a reasonably foreseeable release and as a contingency for facility closure costs, plus additional funds to account for inflation over the estimated 30-year lifespan of the project. This measure was incorporated as part of a closure plan submitted to the RWQCB on October 20, 1992. It is believed the funds are currently adequate to cover mitigation costs for a release scenario.

FIGURES



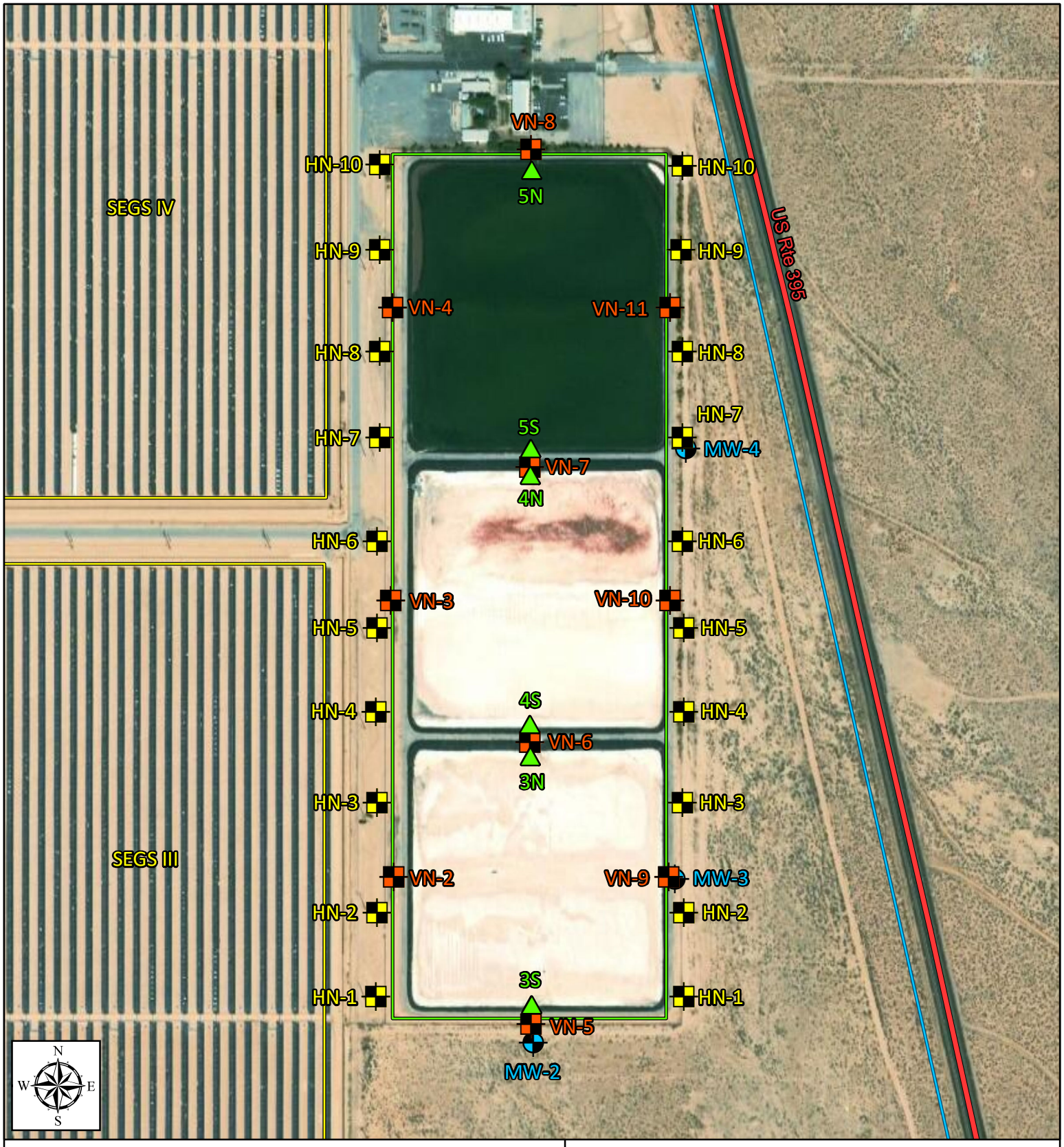
Legend

- 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: 08 Jan 2020
	Drawn By: AWB	Checked By: AWB



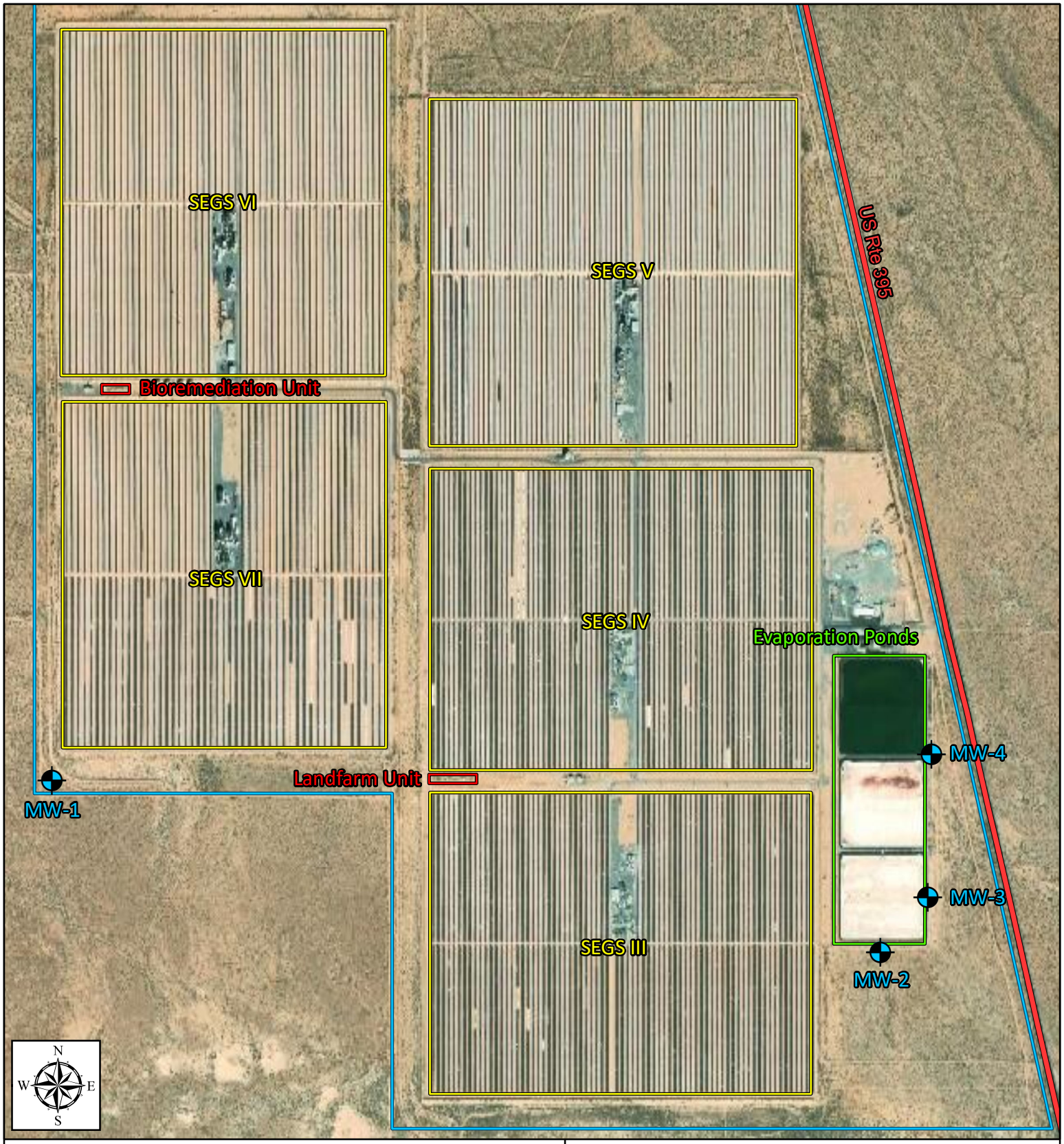
Legend

- Groundwater Monitoring Wells
- LCRS Sumps
- Horizontal Neutron Probe Wells
- Vertical Neutron Probe Wells

SEGS III - VII Kramer Junction
Boron, California

Figure 2
Evaporation Pond Monitoring Network

NORTHSTAR ENVIRONMENTAL REMEDIATION	Scale: 1:5,000	Date: 08 Jan 2020
	Drawn By: AWB	Checked By: AWB



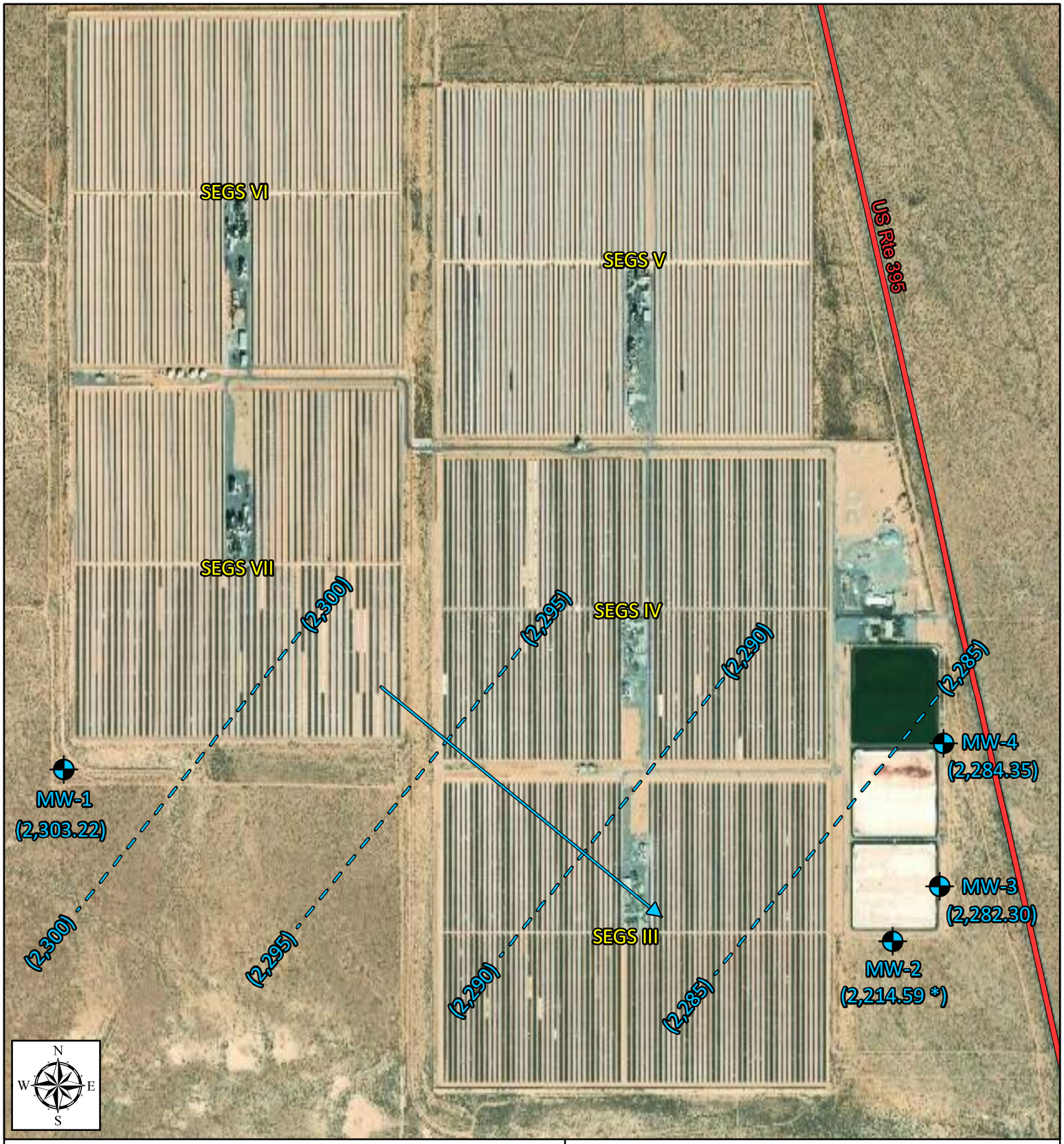
Legend

- Groundwater Monitoring Wells
- Facility Boundary
- Solar Fields
- Land Treatment Units
- Evaporation Ponds

SEGS III - VII Kramer Junction
Boron, California

Figure 3
Groundwater Monitoring Well Locations

NORTHSTAR ENVIRONMENTAL REMEDIATION	Scale: 1:15,000	Date: 08 Jan 2020
	Drawn By: AWB	Checked By: AWB



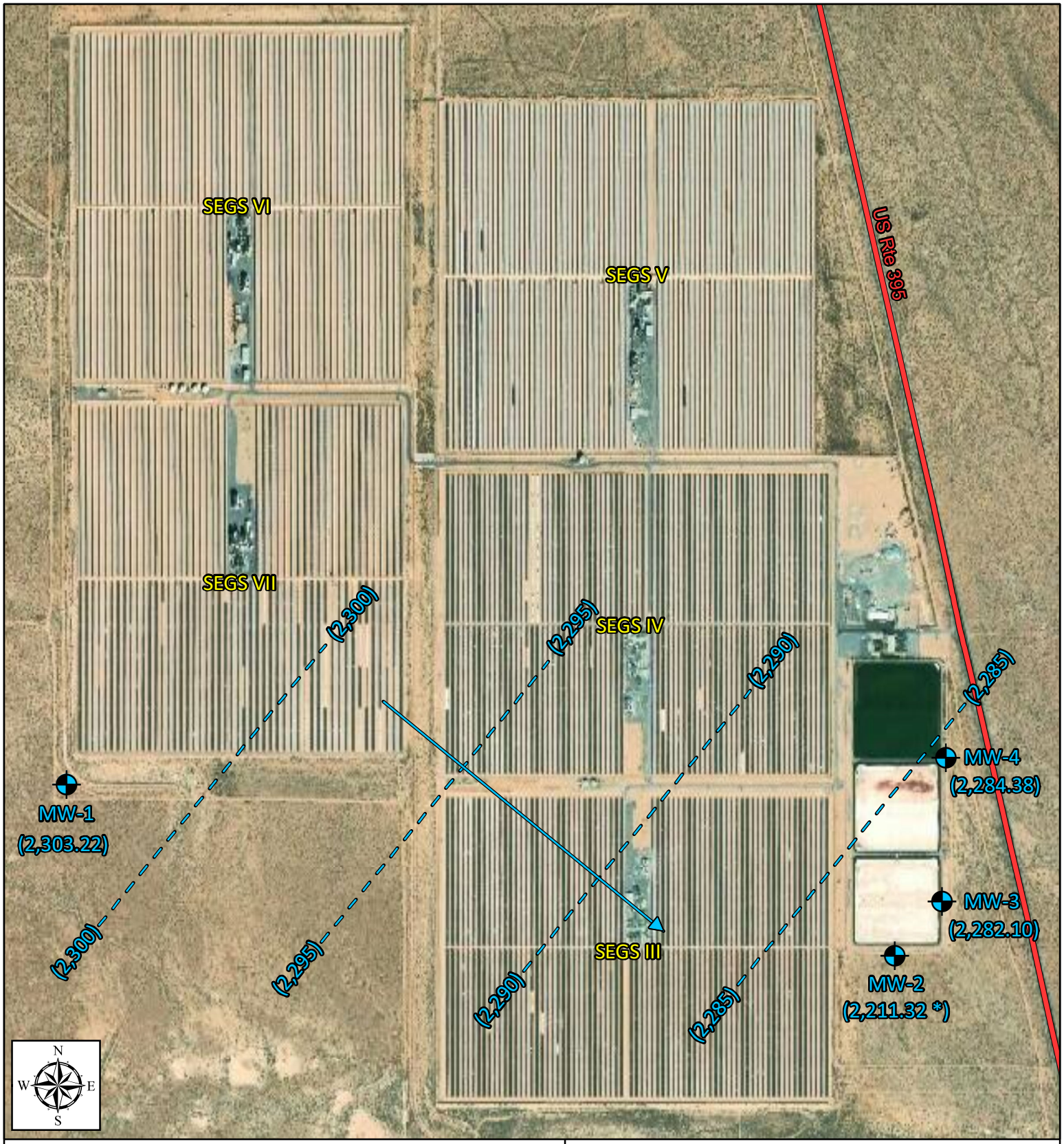
Legend

- Groundwater Monitoring Wells
- Groundwater Gradient Direction
- Groundwater Elevation Contour
- (2,300) Groundwater Elevation in feet amsl
- * Data Point Not Used for Contouring

SEGS III - VII Kramer Junction
Boron, California

Figure 4
Potentiometric Surface Map
First Quarter 2019

NORTHSTAR ENVIRONMENTAL REMEDIATION	Scale: 1:15,000	Date: 03 Jul 2019
	Drawn By: AWB	Checked By: AWB



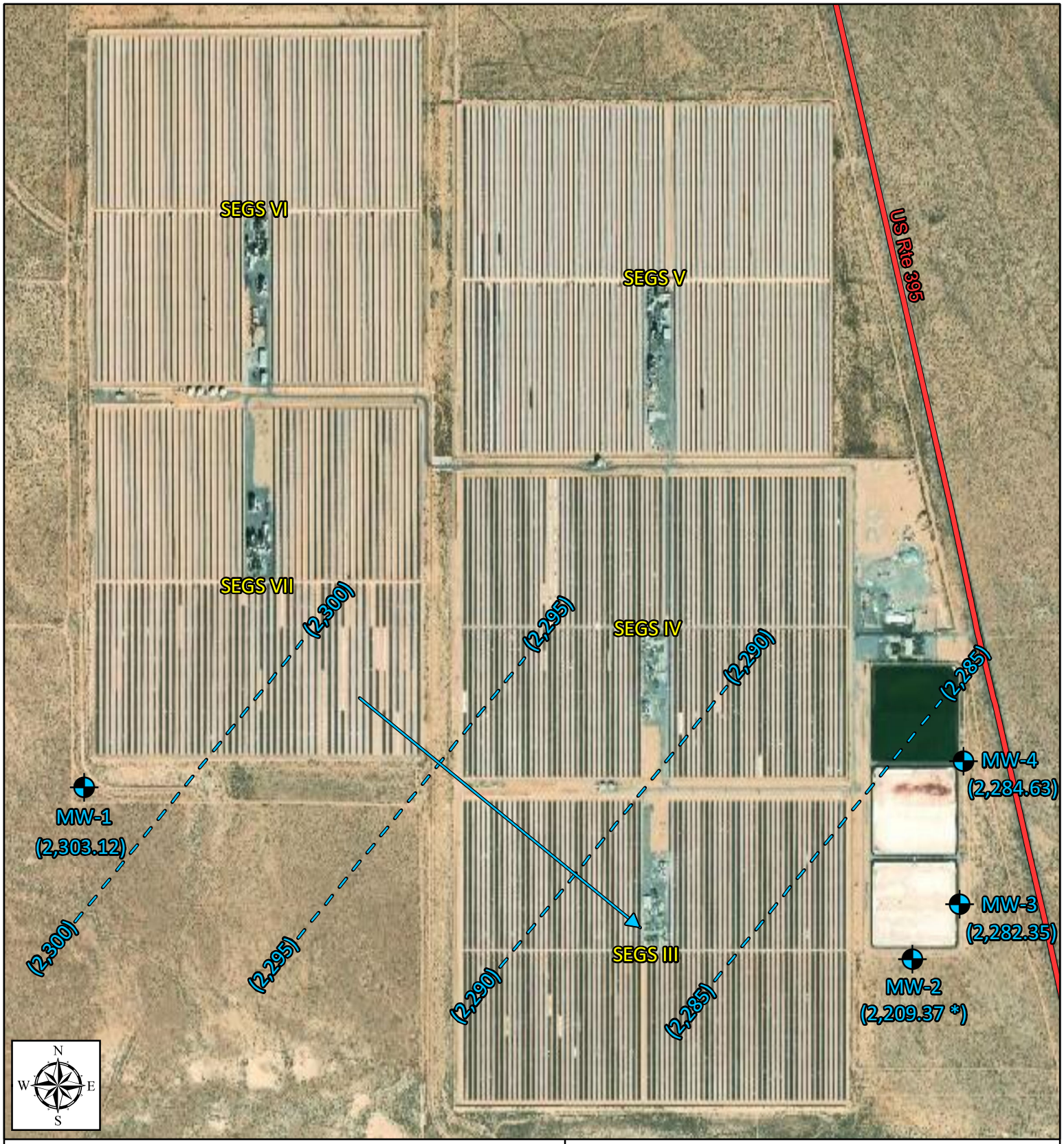
Legend

- Groundwater Monitoring Wells
- Groundwater Gradient Direction
- Groundwater Elevation Contour
- (2,300) Groundwater Elevation in feet amsl
- Data Point Not Used for Contouring

SEGS III - VII Kramer Junction
Boron, California

Figure 5
Potentiometric Surface Map
Second Quarter 2019

NORTHSTAR ENVIRONMENTAL REMEDIATION	Scale: 1:15,000	Date: 03 Jul 2019
	Drawn By: AWB	Checked By: AWB



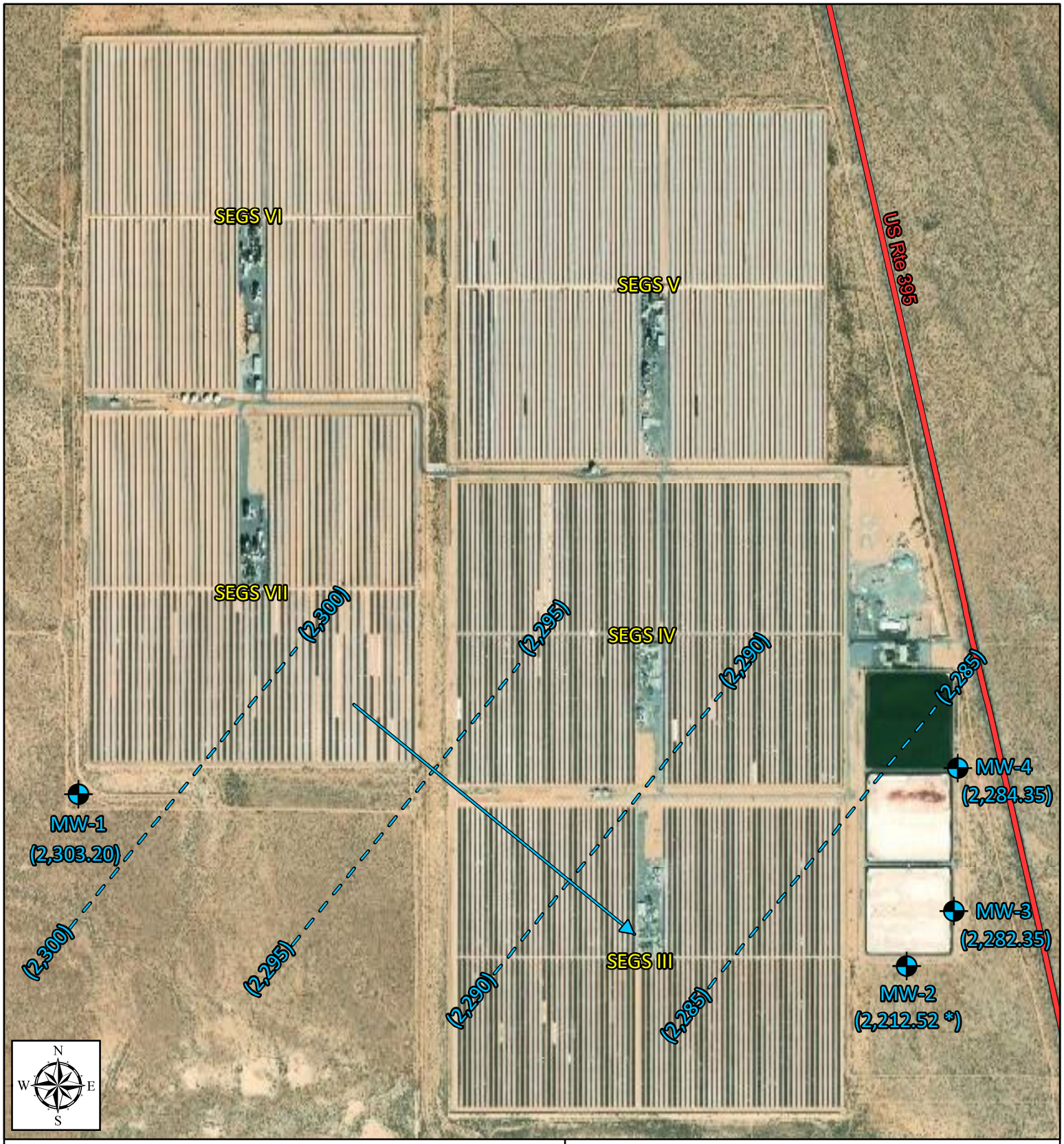
Legend

- Groundwater Monitoring Wells
- Groundwater Gradient Direction
- Groundwater Elevation Contour
- (2,300) Groundwater Elevation in feet amsl
- Data Point Not Used for Contouring

SEGS III - VII Kramer Junction
Boron, California

Figure 6
Potentiometric Surface Map
Third Quarter 2019

NORTHSTAR ENVIRONMENTAL REMEDIATION	Scale: 1:15,000	Date: 08 Jan 2020
	Drawn By: AWB	Checked By: AWB



Legend

- Groundwater Monitoring Wells
- Groundwater Gradient Direction
- Groundwater Elevation Contour
- (2,300) Groundwater Elevation in feet amsl
- * Data Point Not Used for Contouring

SEGS III - VII Kramer Junction
Boron, California

Figure 7
Potentiometric Surface Map
Fourth Quarter 2019

NORTHSTAR ENVIRONMENTAL REMEDIATION	Scale: 1:15,000	Date: 08 Jan 2020
	Drawn By: AWB	Checked By: AWB

TABLES

Table 1
LCRS Sump Pumping Log - Monthly Gallons Removed

Month	Sump ID						Total (All Sumps) (gallons)
	3-S (gallons)	3-N (gallons)	4-S (gallons)	4-N (gallons)	5-S (gallons)	5-N (gallons)	
Jan-06	0	180	0	440	0	5,290	5,910
Feb-06	0	240	0	680	0	3,460	4,380
Mar-06	0	1,280	0	290	0	8,910	10,480
Apr-06	0	150	0	220	0	980	1,350
May-06	0	340	0	230	0	460	1,030
Jun-06	0	1,940	0	220	0	340	2,500
Jul-06	0	250	0	260	0	390	900
Aug-06	0	220	0	220	0	310	750
Sep-06	0	130	0	110	0	270	510
Oct-06	0	90	0	0	0	180	270
Nov-06	0	50	0	0	0	90	140
Dec-06	0	20	0	0	0	80	100
Jan-07	0	2,930	0	0	0	30	2,960
Feb-07	0	1,520	0	0	0	0	1,520
Mar-07	0	1,210	0	0	0	0	1,210
Apr-07	0	1,190	0	0	0	0	1,190
May-07	0	4,000	0	0	0	0	4,000
Jun-07	0	1,120	0	0	0	120	1,240
Jul-07	0	650	0	0	0	120	770
Aug-07	0	420	0	0	0	110	530
Sep-07	0	490	0	0	0	110	600
Oct-07	0	100	0	0	0	80	180
Nov-07	0	30	0	0	0	60	90
Dec-07	0	0	0	0	0	50	50
Jan-08	0	0	0	0	0	50	50
Feb-08	0	0	0	0	0	40	40
Mar-08	0	0	0	0	0	40	40
Apr-08	0	0	0	0	0	10	10
May-08	0	0	0	0	0	30	30
Jun-08	0	0	0	0	0	40	40
Jul-08	0	0	0	0	0	70	70
Aug-08	0	0	0	0	0	40	40
Sep-08	0	0	0	0	0	5,670	5,670
Oct-08	0	0	0	0	0	820	820
Nov-08	0	0	0	0	0	220	220
Dec-08	0	0	0	0	0	0	0
Jan-09	0	0	0	0	0	0	0
Feb-09	0	0	0	0	0	0	0
Mar-09	0	0	0	0	0	0	0
Apr-09	0	0	0	0	0	0	0

Table 1
LCRS Sump Pumping Log - Monthly Gallons Removed

	Sump ID						Total
	3-S	3-N	4-S	4-N	5-S	5-N	(All Sumps)
May-09	0	0	0	0	0	0	0
Jun-09	0	0	0	0	0	0	0
Jul-09	0	0	0	0	0	0	0
Aug-09	0	0	0	0	0	0	0
Sep-09	0	0	0	0	0	0	0
Oct-09	0	0	0	0	0	0	0
Nov-09	0	0	0	0	0	0	0
Dec-09	0	0	0	0	0	0	0
Jan-10	0	0	0	0	0	0	0
Feb-10	0	0	0	0	0	0	0
Mar-10	0	0	0	0	0	0	0
Apr-10	0	0	0	0	0	0	0
May-10	0	0	0	0	0	0	0
Jun-10	0	0	0	0	0	0	0
Jul-10	0	0	0	0	0	0	0
Aug-10	0	0	0	0	0	0	0
Sep-10	0	0	0	0	0	0	0
Oct-10	0	0	0	0	0	0	0
Nov-10	0	0	0	0	0	0	0
Dec-10	0	0	0	0	0	0	0
Jan-11	0	0	0	0	0	0	0
Feb-11	320	0	0	2,850	0	820	3,990
Mar-11	2,430	660	0	1,300	0	1,220	5,610
Apr-11	0	0	0	0	340	290	630
May-11	9,520	16,780	3,870	14,130	4,270	4,220	52,790
Jun-11	15,050	12,030	90	1,050	3,660	1,100	32,980
Jul-11	6,160	1,570	6,470	3,690	2,660	5,610	26,160
Aug-11	10	0	9,130	16,030	750	0	25,920
Sep-11	0	0	0	10,360	2,480	0	12,840
Oct-11	0	0	2,950	1,480	0	0	4,430
Nov-11	0	0	400	0	0	0	400
Dec-11	0	0	0	0	0	0	0
Jan-12	0	0	0	0	0	0	0
Feb-12	0	0	0	0	0	0	0
Mar-12	0	0	0	1,420	2,780	0	4,200
Apr-12	1,800	1,630	8,040	9,490	17,280	14,770	53,010
May-12	21,550	18,100	870	1,290	580	11,890	54,280
Jun-12	20,735	19,695	910	975	775	940	44,030
Jul-12	20,885	20,095	520	695	165	530	42,890
Aug-12	19,340	18,680	20	520	0	410	38,970
Sep-12	20,110	19,690	390	570	40	290	41,090

Table 1
LCRS Sump Pumping Log - Monthly Gallons Removed

	Sump ID						Total
	3-S	3-N	4-S	4-N	5-S	5-N	(All Sumps)
Oct-12	20,860	19,770	20	430	290	210	41,580
Nov-12	6,350	16,730	0	890	170	120	24,260
Dec-12	0	14,290	0	200	130	90	14,710
Jan-13	0	13,840	0	1,420	120	90	15,470
Feb-13	0	15,940	0	380	10	80	16,410
Mar-13	0	18,420	0	870	0	100	19,390
Apr-13	0	20,020	0	360	0	100	20,480
May-13	0	20,260	0	400	0	120	20,780
Jun-13	0	19,540	0	190	0	110	19,840
Jul-13	0	17,440	0	360	0	130	17,930
Aug-13	0	18,380	0	300	0	110	18,790
Sep-13	0	9,170	0	330	0	130	9,630
Oct-13	0	2,600	0	360	0	70	3,030
Nov-13	0	0	0	660	0	60	720
Dec-13	0	0	0	360	0	40	400
Jan-14	0	0	0	110	0	100	210
Feb-14	0	0	0	90	0	50	140
Mar-14	0	0	0	660	0	60	720
Apr-14	0	0	0	140	0	70	210
May-14	0	0	0	450	0	70	520
Jun-14	0	0	0	110	0	60	170
Jul-14	0	0	0	340	0	80	420
Aug-14	0	0	0	190	0	80	270
Sep-14	0	0	0	2,040	0	60	2,100
Oct-14	0	0	2,230	160	0	40	2,430
Nov-14	0	0	690	1,090	0	10	1,790
Dec-14	0	0	10	12,380	0	10	12,400
Jan-15	0	0	0	13,265	0	30	13,295
Feb-15	0	0	1,320	1,565	0	30	2,915
Mar-15	0	0	17,550	620	0	20	18,190
Apr-15	0	0	18,460	440	0	20	18,920
May-15	0	0	18,380	340	0	20	18,740
Jun-15	9,880	120	7,430	340	0	40	17,810
Jul-15	12,620	10,100	1,540	4,040	0	50	28,350
Aug-15	12,250	16,980	430	2,720	0	0	32,380
Sep-15	1,460	12,470	15,730	3,860	0	0	33,520
Oct-15	0	0	2,120	15,580	0	0	17,700
Nov-15	0	0	0	16,297	0	0	16,297
Dec-15	0	0	30	8,993	0	0	9,023
Jan-16	1,700	5,820	330	2,520	8,270	0	18,640
Feb-16	12,310	7,550	190	9,370	8,360	0	37,780

Table 1
LCRS Sump Pumping Log - Monthly Gallons Removed

	Sump ID						Total
	3-S	3-N	4-S	4-N	5-S	5-N	(All Sumps)
Mar-16	340	2,760	750	4,940	0	0	8,790
Apr-16	11,120	16,270	2,750	10,270	410	0	40,820
May-16	17,680	17,330	12,340	8,340	260	0	55,950
Jun-16	17,380	17,380	1,110	3,970	190	0	40,030
Jul-16	18,050	21,140	2,070	0	60	0	41,320
Aug-16	18,710	21,960	0	0	0	0	40,670
Sep-16	18,020	21,800	9,460	0	0	0	49,280
Oct-16	11,980	19,280	18,690	4,830	0	0	54,780
Nov-16	8,240	13,900	11,000	16,670	0	0	49,810
Dec-16	2,040	1,190	830	14,670	2,190	710	21,630
Jan-17	2,620	1,320	2,780	10,760	12,280	170	29,930
Feb-17	4,900	14,480	10,620	11,740	13,360	890	55,990
Mar-17	9,360	20,050	5,480	5,460	11,260	2,340	53,950
Apr-17	11,860	20,740	11,020	3,240	12,630	370	59,860
May-17	11,550	18,800	5,100	3,990	2,600	220	42,260
Jun-17	11,120	19,710	760	2,630	2,430	210	36,860
Jul-17	11,080	20,030	2,520	4,930	430	170	39,160
Aug-17	13,160	20,060	1,240	1,250	330	90	36,130
Sep-17	13,910	20,620	1,420	4,810	80	0	40,840
Oct-17	13,380	20,710	6,140	270	0	0	40,500
Nov-17	12,810	17,870	0	260	0	0	30,940
Dec-17	4,740	16,380	0	150	160	0	21,430
Jan-18	5,850	15,020	290	620	190	230	22,200
Feb-18	2,050	13,420	0	2,280	100	90	17,940
Mar-18	1,040	17,260	0	6,120	120	70	24,610
Apr-18	1,800	19,000	2,040	5,810	120	0	28,770
May-18	1,190	20,600	3,900	5,700	30	140	31,560
Jun-18	470	20,090	0	5,760	0	80	26,400
Jul-18	260	19,960	0	11,150	0	80	31,450
Aug-18	136,090	20,790	0	3,670	100	70	160,720
Sep-18	20,690	20,530	4,740	490	90	40	46,580
Oct-18	20,860	20,330	610	480	1,260	40	43,580
Nov-18	18,950	17,470	0	200	3,260	10	39,890
Dec-18	14,470	10,990	870	3,620	10	0	29,960
Jan-19	14,640	10,194	1,219	7,140	0	40	33,233
Feb-19	14,930	10,833	1,030	12,060	170	760	39,783
Mar-19	19,060	19,083	5,049	7,405	10	2,885	53,492
Apr-19	19,210	19,712	502	1,755	890	3,075	45,144
May-19	17,470	18,509	287	640	250	220	37,376
Jun-19	18,120	18,873	348	430	130	230	38,131
Jul-19	19,100	19,817	1,515	950	10	180	41,572

Table 1
LCRS Sump Pumping Log - Monthly Gallons Removed

	Sump ID						Total
	3-S	3-N	4-S	4-N	5-S	5-N	(All Sumps)
Aug-19	20,060	20,862	7,524	0	130	160	48,736
Sep-19	19,460	20,272	3,599	0	130	100	43,561
Oct-19	20,780	21,774	815	2,760	90	70	46,289
Nov-19	13,243	15,982	224	0	60	50	29,559
Dec-19	6,727	7,132	10,718	0	30	130	24,738

Table 2
Evaporation Pond Discharge Volume

Month	Monthly Total (gallons)	12 Month Cumulative (gallons)	12 Month Average (gallons)	Quarterly Total (gallons)
Jan-96	2,263,058			
Feb-96	2,105,752			
Mar-96	2,862,792			7,231,602
Apr-96	2,308,868			
May-96	3,207,411			
Jun-96	4,325,367			9,841,646
Jul-96	3,919,897			
Aug-96	4,486,353			
Sep-96	3,387,041			11,793,291
Oct-96	1,902,024			
Nov-96	786,743			
Dec-96	1,873,601	33,428,907	2,785,742	4,562,368
Jan-97	2,318,716	33,484,565	2,790,380	
Feb-97	1,134,627	32,513,440	2,709,453	
Mar-97	528,174	30,178,822	2,514,902	3,981,517
Apr-97	1,828,015	29,697,969	2,474,831	
May-97	2,726,594	29,217,152	2,434,763	
Jun-97	3,301,716	28,193,501	2,349,458	7,856,325
Jul-97	3,641,880	27,915,484	2,326,290	
Aug-97	3,017,871	26,447,002	2,203,917	
Sep-97	2,602,685	25,662,646	2,138,554	9,262,436
Oct-97	1,924,350	25,684,972	2,140,414	
Nov-97	1,493,903	26,392,132	2,199,344	
Dec-97	1,805,651	26,324,182	2,193,682	5,223,904
Jan-98	3,537,002	27,542,468	2,295,206	
Feb-98	2,265,327	28,673,168	2,389,431	
Mar-98	2,364,981	30,509,975	2,542,498	8,167,310
Apr-98	2,043,750	30,725,710	2,560,476	
May-98	1,813,393	29,812,509	2,484,376	
Jun-98	1,850,855	28,361,648	2,363,471	5,707,998
Jul-98	2,400,786	27,120,554	2,260,046	
Aug-98	2,803,502	26,906,185	2,242,182	
Sep-98	3,014,928	27,318,428	2,276,536	8,219,216
Oct-98	2,757,923	28,152,001	2,346,000	
Nov-98	1,517,904	28,176,002	2,348,000	
Dec-98	1,834,399	28,204,750	2,350,396	6,110,226
Jan-99	4,076,110	28,743,858	2,395,322	
Feb-99	3,387,710	29,866,241	2,488,853	
Mar-99	1,139,281	28,640,541	2,386,712	8,603,101
Apr-99	1,909,531	28,506,322	2,375,527	
May-99	2,598,508	29,291,437	2,440,953	
Jun-99	3,610,729	31,051,311	2,587,609	8,118,768
Jul-99	3,584,009	32,234,534	2,686,211	
Aug-99	3,199,737	32,630,769	2,719,231	
Sep-99	3,094,732	32,710,573	2,725,881	9,878,478
Oct-99	3,215,390	33,168,040	2,764,003	
Nov-99	1,459,301	33,109,437	2,759,120	
Dec-99	2,562,290	33,837,328	2,819,777	7,236,981
Jan-00	3,646,722	33,407,940	2,783,995	
Feb-00	2,394,445	32,414,675	2,701,223	
Mar-00	2,279,976	33,555,370	2,796,281	8,321,143
Apr-00	3,040,666	34,686,505	2,890,542	
May-00	3,913,917	36,001,914	3,000,160	
Jun-00	4,239,841	36,631,026	3,052,586	11,194,424
Jul-00	3,920,539	36,967,556	3,080,630	
Aug-00	3,651,998	37,419,817	3,118,318	
Sep-00	3,691,883	38,016,968	3,168,081	11,264,420
Oct-00	3,174,352	37,975,930	3,164,661	
Nov-00	2,746,446	39,263,075	3,271,923	

Table 2
Evaporation Pond Discharge Volume

	Monthly Total	12 Month Cumulative	12 Month Average	Quarterly Total
Dec-00	2,469,791	39,170,576	3,264,215	8,390,589
Jan-01	2,269,629	37,793,483	3,149,457	
Feb-01	1,536,945	36,935,983	3,077,999	
Mar-01	2,705,629	37,361,636	3,113,470	6,512,203
Apr-01	2,547,247	36,868,217	3,072,351	
May-01	3,549,275	36,503,575	3,041,965	
Jun-01	4,123,676	36,387,410	3,032,284	10,220,198
Jul-01	4,624,988	37,091,859	3,090,988	
Aug-01	4,899,518	38,339,379	3,194,948	
Sep-01	6,032,912	40,680,408	3,390,034	15,557,418
Oct-01	4,424,702	41,930,758	3,494,230	
Nov-01	4,081,470	43,265,782	3,605,482	
Dec-01	3,038,386	43,834,377	3,652,865	11,544,558
Jan-02	3,131,447	44,696,195	3,724,683	
Feb-02	3,282,944	46,442,194	3,870,183	
Mar-02	3,078,644	46,815,209	3,901,267	9,493,035
Apr-02	2,148,342	46,416,304	3,868,025	
May-02	3,937,106	46,804,135	3,900,345	
Jun-02	4,950,271	47,630,730	3,969,228	11,035,719
Jul-02	4,643,888	47,649,630	3,970,803	
Aug-02	4,750,358	47,500,470	3,958,373	
Sep-02	5,102,600	46,570,158	3,880,847	14,496,846
Oct-02	3,974,889	46,120,345	3,843,362	
Nov-02	2,048,483	44,087,358	3,673,947	
Dec-02	2,141,065	43,190,037	3,599,170	8,164,437
Jan-03	3,578,775	43,637,365	3,636,447	
Feb-03	1,540,963	41,895,384	3,491,282	
Mar-03	2,375,478	41,192,218	3,432,685	7,495,216
Apr-03	2,130,629	41,174,505	3,431,209	
May-03	3,111,650	40,349,049	3,362,421	
Jun-03	4,407,610	39,806,388	3,317,199	9,649,889
Jul-03	4,203,745	39,366,245	3,280,520	
Aug-03	4,150,612	38,766,499	3,230,542	
Sep-03	3,530,010	37,193,909	3,099,492	11,884,367
Oct-03	3,027,060	36,246,080	3,020,507	
Nov-03	3,591,714	37,789,311	3,149,109	
Dec-03	2,617,252	38,265,498	3,188,792	9,236,026
Jan-04	3,239,012	37,925,735	3,160,478	
Feb-04	3,763,084	40,147,856	3,345,655	
Mar-04	2,266,950	40,039,328	3,336,611	9,269,046
Apr-04	2,598,214	40,506,913	3,375,576	
May-04	3,524,160	40,919,423	3,409,952	
Jun-04	4,745,555	41,257,368	3,438,114	10,867,929
Jul-04	4,558,213	41,611,836	3,467,653	
Aug-04	4,053,239	41,514,463	3,459,539	
Sep-04	3,981,622	41,966,075	3,497,173	12,593,074
Oct-04	3,175,522	42,114,537	3,509,545	
Nov-04	3,039,619	41,562,442	3,463,537	
Dec-04	2,538,254	41,483,444	3,456,954	8,753,395
Jan-05	2,995,970	41,240,402	3,436,700	
Feb-05	954,621	38,431,939	3,202,662	
Mar-05	2,351,164	38,516,153	3,209,679	6,301,755
Apr-05	3,326,730	39,244,669	3,270,389	
May-05	3,420,816	39,141,325	3,261,777	
Jun-05	2,965,836	37,361,606	3,113,467	9,713,382
Jul-05	2,688,930	35,492,323	2,957,694	
Aug-05	2,745,802	34,184,886	2,848,741	
Sep-05	2,332,465	32,535,729	2,711,311	7,767,197
Oct-05	1,781,061	31,141,268	2,595,106	
Nov-05	1,038,195	29,139,844	2,428,320	

Table 2
Evaporation Pond Discharge Volume

	Monthly Total	12 Month Cumulative	12 Month Average	Quarterly Total
Dec-05	4,078,065	30,679,655	2,556,638	6,897,321
Jan-06	1,786,295	29,469,980	2,455,832	
Feb-06	1,576,092	30,091,451	2,507,621	
Mar-06	1,302,170	29,042,457	2,420,205	4,664,557
Apr-06	2,181,583	27,897,310	2,324,776	
May-06	2,314,738	26,791,232	2,232,603	
Jun-06	2,160,030	25,985,426	2,165,452	6,656,351
Jul-06	2,477,832	25,774,328	2,147,861	
Aug-06	2,560,102	25,588,628	2,132,386	
Sep-06	2,404,240	25,660,403	2,138,367	7,442,174
Oct-06	1,164,134	25,043,476	2,086,956	
Nov-06	1,469,601	25,474,882	2,122,907	
Dec-06	3,687,787	25,084,604	2,090,384	6,321,522
Jan-07	2,829,728	26,128,037	2,177,336	
Feb-07	1,587,313	26,139,258	2,178,272	
Mar-07	2,677,341	27,514,429	2,292,869	7,094,382
Apr-07	2,459,645	27,792,491	2,316,041	
May-07	3,749,697	29,227,450	2,435,621	
Jun-07	3,832,867	30,900,287	2,575,024	10,042,209
Jul-07	3,250,085	31,672,540	2,639,378	
Aug-07	2,964,290	32,076,728	2,673,061	
Sep-07	4,233,344	33,905,832	2,825,486	10,447,719
Oct-07	2,640,854	35,382,552	2,948,546	
Nov-07	2,083,591	35,996,542	2,999,712	
Dec-07	3,169,881	35,478,636	2,956,553	7,894,326
Jan-08	1,308,257	33,957,165	2,829,764	
Feb-08	1,195,332	33,565,184	2,797,099	
Mar-08	2,397,091	33,284,934	2,773,745	4,900,680
Apr-08	2,724,097	33,549,386	2,795,782	
May-08	3,305,489	33,105,178	2,758,765	
Jun-08	4,703,559	33,975,870	2,831,323	10,733,145
Jul-08	4,053,708	34,779,493	2,898,291	
Aug-08	4,160,110	35,975,313	2,997,943	
Sep-08	4,623,231	36,365,200	3,030,433	12,837,049
Oct-08	2,175,441	35,899,787	2,991,649	
Nov-08	1,723,207	35,539,403	2,961,617	
Dec-08	2,189,926	34,559,448	2,879,954	6,088,574
Jan-09	4,243,568	37,494,759	3,124,563	
Feb-09	1,332,332	37,631,759	3,135,980	
Mar-09	3,074,134	38,308,802	3,192,400	8,650,034
Apr-09	3,743,004	39,327,709	3,277,309	
May-09	3,450,814	39,473,034	3,289,420	
Jun-09	5,103,194	39,872,669	3,322,722	12,297,012
Jul-09	5,810,764	41,629,725	3,469,144	
Aug-09	4,216,156	41,685,771	3,473,814	
Sep-09	4,624,172	41,686,712	3,473,893	14,651,092
Oct-09	2,617,044	42,128,315	3,510,693	
Nov-09	2,814,632	43,219,740	3,601,645	
Dec-09	3,211,378	44,241,192	3,686,766	8,643,054
Jan-10	591,104	40,588,728	3,382,394	
Feb-10	1,340,592	40,596,988	3,383,082	
Mar-10	1,493,816	39,016,670	3,251,389	3,425,512
Apr-10	2,694,588	37,968,254	3,164,021	
May-10	3,273,896	37,791,336	3,149,278	
Jun-10	5,009,944	37,698,086	3,141,507	10,978,428
Jul-10	4,627,952	36,515,274	3,042,940	
Aug-10	4,264,960	36,564,078	3,047,007	
Sep-10	4,334,792	36,274,698	3,022,892	13,227,704
Oct-10	2,654,848	36,312,502	3,026,042	
Nov-10	2,065,016	35,562,886	2,963,574	

Table 2
Evaporation Pond Discharge Volume

	Monthly Total	12 Month Cumulative	12 Month Average	Quarterly Total
Dec-10	2,935,224	35,286,732	2,940,561	7,655,088
Jan-11	1,501,352	36,196,980	3,016,415	
Feb-11	930,464	35,786,852	2,982,238	
Mar-11	1,362,752	35,655,788	2,971,316	3,794,568
Apr-11	2,122,712	35,083,912	2,923,659	
May-11	2,344,240	34,154,256	2,846,188	
Jun-11	3,604,248	32,748,560	2,729,047	8,071,200
Jul-11	3,331,562	31,452,170	2,621,014	
Aug-11	3,570,989	30,758,199	2,563,183	
Sep-11	3,157,800	29,581,207	2,465,101	10,060,351
Oct-11	2,554,782	29,481,141	2,456,762	
Nov-11	1,657,194	29,073,319	2,422,777	
Dec-11	1,852,132	27,990,227	2,332,519	6,064,108
Jan-12	1,747,803	28,236,678	2,353,057	
Feb-12	1,539,536	28,845,750	2,403,813	
Mar-12	3,427,598	30,910,596	2,575,883	6,714,937
Apr-12	3,992,856	32,780,740	2,731,728	
May-12	3,749,440	34,185,940	2,848,828	
Jun-12	4,935,144	35,516,836	2,959,736	12,677,440
Jul-12	4,928,942	37,114,216	3,092,851	
Aug-12	3,830,440	37,373,667	3,114,472	
Sep-12	4,758,703	38,974,570	3,247,881	13,518,085
Oct-12	3,149,724	39,569,512	3,297,459	
Nov-12	2,918,303	40,830,621	3,402,552	
Dec-12	1,368,020	40,346,509	3,362,209	7,436,047
Jan-13	2,147,108	40,745,814	3,395,485	
Feb-13	283,008	39,489,286	3,290,774	
Mar-13	2,579,696	38,641,384	3,220,115	5,009,812
Apr-13	2,608,004	37,256,532	3,104,711	
May-13	3,782,928	37,290,020	3,107,502	
Jun-13	4,483,639	36,838,515	3,069,876	10,874,571
Jul-13	3,904,177	35,813,750	2,984,479	
Aug-13	4,380,264	36,363,574	3,030,298	
Sep-13	4,370,912	35,975,783	2,997,982	12,655,353
Oct-13	2,602,304	35,428,363	2,952,364	
Nov-13	1,597,072	34,107,132	2,842,261	
Dec-13	932,944	33,672,056	2,806,005	5,132,320
Jan-14	962,288	32,487,236	2,707,270	
Feb-14	1,100,232	33,304,460	2,775,372	
Mar-14	2,364,856	33,089,620	2,757,468	4,427,376
Apr-14	2,288,464	32,770,080	2,730,840	
May-14	3,409,337	32,396,489	2,699,707	
Jun-14	4,377,777	32,290,627	2,690,886	10,075,578
Jul-14	4,439,752	32,826,202	2,735,517	
Aug-14	4,343,364	32,789,302	2,732,442	
Sep-14	4,319,778	32,738,168	2,728,181	13,102,894
Oct-14	2,542,364	32,678,228	2,723,186	
Nov-14	1,711,566	32,792,722	2,732,727	
Dec-14	1,691,148	33,550,926	2,795,911	5,945,078
Jan-15	1,432,512	34,021,150	2,835,096	
Feb-15	1,529,045	34,449,963	2,870,830	
Mar-15	2,001,958	34,087,065	2,840,589	4,963,515
Apr-15	2,221,778	34,020,379	2,835,032	
May-15	1,218,467	31,829,509	2,652,459	
Jun-15	5,039,750	32,491,482	2,707,624	8,479,995
Jul-15	4,562,711	32,614,441	2,717,870	
Aug-15	4,725,594	32,996,671	2,749,723	
Sep-15	3,856,472	32,533,365	2,711,114	13,144,777
Oct-15	1,298,326	31,289,327	2,607,444	
Nov-15	1,111,868	30,689,629	2,557,469	

Table 2
Evaporation Pond Discharge Volume

	Monthly Total	12 Month Cumulative	12 Month Average	Quarterly Total
Dec-15	927,556	29,926,037	2,493,836	3,337,750
Jan-16	987,984	29,481,509	2,456,792	
Feb-16	1,583,594	29,536,058	2,461,338	
Mar-16	1,535,087	29,069,187	2,422,432	4,106,665
Apr-16	1,812,245	28,659,654	2,388,305	
May-16	2,714,943	30,156,130	2,513,011	
Jun-16	4,214,713	29,331,093	2,444,258	8,741,901
Jul-16	4,988,299	29,756,681	2,479,723	
Aug-16	4,902,870	29,933,957	2,494,496	
Sep-16	4,067,596	30,145,081	2,512,090	13,958,765
Oct-16	2,553,972	31,400,727	2,616,727	
Nov-16	1,182,796	31,471,655	2,622,638	
Dec-16	2,347,746	32,891,845	2,740,987	6,084,514
Jan-17	895,824	32,799,685	2,733,307	
Feb-17	882,986	32,099,077	2,674,923	
Mar-17	1,645,472	32,209,462	2,684,122	3,424,282
Apr-17	2,619,988	33,017,205	2,751,434	
May-17	3,069,552	33,371,814	2,780,985	
Jun-17	4,014,052	33,171,153	2,764,263	9,703,592
Jul-17	5,217,836	33,400,690	2,783,391	
Aug-17	4,725,594	33,223,414	2,768,618	
Sep-17	4,067,596	33,223,414	2,768,618	14,011,026
Oct-17	1,298,326	31,967,768	2,663,981	
Nov-17	1,657,194	32,442,166	2,703,514	
Dec-17	932,944	31,027,364	2,585,614	3,888,464
Jan-18	236,168	30,367,708	2,530,642	
Feb-18	1,464,848	30,949,570	2,579,131	
Mar-18	1,801,869	31,105,967	2,592,164	3,502,885
Apr-18	2,984,041	31,470,020	2,622,502	
May-18	1,742,927	30,143,395	2,511,950	
Jun-18	5,851,881	31,981,224	2,665,102	10,578,849
Jul-18	4,901,040	31,664,428	2,638,702	
Aug-18	5,075,686	32,014,520	2,667,877	
Sep-18	5,321,544	33,268,468	2,772,372	15,298,270
Oct-18	3,532,080	35,502,222	2,958,519	
Nov-18	1,731,221	35,576,249	2,964,687	
Dec-18	2,487,918	37,131,223	3,094,269	7,751,219
Jan-19	1,969,835	38,864,890	3,238,741	
Feb-19	467,422	37,867,464	3,155,622	
Mar-19	287,025	36,352,620	3,029,385	2,724,282
Apr-19	2,570,463	35,939,042	2,994,920	
May-19	2,654,643	36,850,758	3,070,897	
Jun-19	3,707,290	34,706,167	2,892,181	8,932,396
Jul-19	4,054,589	33,859,716	2,821,643	
Aug-19	4,252,596	33,036,626	2,753,052	
Sep-19	2,062,880	29,777,962	2,481,497	10,370,065
Oct-19	1,386,727	27,632,609	2,302,717	
Nov-19	2,487,918	28,389,306	2,365,776	
Dec-19	365,364	26,266,752	2,188,896	4,240,009

Table 3
Groundwater Monitoring Results - Year to Date

					Sample ID				
Quarter	Analyte	EPA Method	Reporting Limit	Units	MW-1	MW-2	MW-3	MW-4	DUP [1]
Q1 2019	Sodium	6010B	0.50	mg/L	320	NS [2]	240	210	330
Q2 2019	Sodium	6010B	0.50	mg/L	320	NS [2]	250	220	300
Q3 2019	Sodium	6010B	0.50	mg/L	320	NS [2]	250	220	320
Q4 2019	Sodium	6010B	0.50	mg/L	340	320	270	230	340
Q1 2019	Sulfate	300.0	25	mg/L	340	NS [2]	260	200	340
Q2 2019	Sulfate	300.0	25	mg/L	330	NS [2]	220	200	340
Q3 2019	Sulfate	300.0	25	mg/L	340	NS [2]	220	200	340
Q4 2019	Sulfate	300.0	25	mg/L	320	230	220	200	340
Q1 2019	Total Dissolved Solids	SM2540C	10	mg/L	1,300	NS [2]	950	830	1,300
Q2 2019	Total Dissolved Solids	SM2540C	10	mg/L	1,300	NS [2]	940	860	1,300
Q3 2019	Total Dissolved Solids	SM2540C	10	mg/L	1,300	NS [2]	950	840	1,300
Q4 2019	Total Dissolved Solids	SM2540C	10	mg/L	1,200	1,100	920	840	1,200
Q1 2019	Temperature	Field Parameter	N/A	Degrees Celsius	22.8	NS [2]	21.4	20.5	22.8
Q2 2019	Temperature	Field Parameter	N/A	Degrees Celsius	23.6	NS [2]	22.4	21.3	23.6
Q3 2019	Temperature	Field Parameter	N/A	Degrees Celsius	24.0	NS [2]	22.8	22.3	24.0
Q4 2019	Temperature	Field Parameter	N/A	Degrees Celsius	23.4	18.5	20.2	21.0	23.4
Q1 2019	pH	Field Parameter	N/A	Standard Units	7.38	NS [2]	7.26	7.05	7.38
Q2 2019	pH	Field Parameter	N/A	Standard Units	7.41	NS [2]	7.36	7.09	7.41
Q3 2019	pH	Field Parameter	N/A	Standard Units	7.74	NS [2]	7.47	7.45	7.74
Q4 2019	pH	Field Parameter	N/A	Standard Units	7.57	7.43	7.35	7.42	7.57
Q1 2019	Specific Conductivity	Field Parameter	N/A	µmhos/cm	1,810	NS [2]	1,410	1,260	1,810
Q2 2019	Specific Conductivity	Field Parameter	N/A	µmhos/cm	1,830	NS [2]	1,410	1,260	1,830
Q3 2019	Specific Conductivity	Field Parameter	N/A	µmhos/cm	2,190	NS [2]	1,710	1,540	2,190
Q4 2019	Specific Conductivity	Field Parameter	N/A	µmhos/cm	2,170	1,980	1,640	1,510	2,170
Q1 2019	Static Water Level	Field Parameter	N/A	Feet btoc	2,303.22	2,214.59	2,282.30	2,284.35	2,303.22
Q2 2019	Static Water Level	Field Parameter	N/A	Feet btoc	2,303.22	2,211.32	2,282.10	2,284.38	2,303.22
Q3 2019	Static Water Level	Field Parameter	N/A	Feet btoc	2,303.12	2,209.37	2,282.35	2,284.63	2,303.12
Q4 2019	Static Water Level	Field Parameter	N/A	Feet btoc	2,303.20	2,212.52	2,282.35	2,284.35	2,303.20
Q4 2019	1,1'-Biphenyl	8015B	0.095 - 0.098	mg/L	ND	ND	ND	ND	ND
Q4 2019	1,1'-Oxybisbenzene	8015B	0.095 - 0.098	mg/L	ND	ND	ND	ND	ND
Q4 2019	Chloride	300.0	25	mg/L	280	300	220	200	290
Q4 2019	Phosphate	300.0	0.50	mg/L	ND	ND	ND	ND	0.92
Q4 2019	Potassium	6010B	0.50	mg/L	11	44	5.6	5.7	11

Notes:
ND = Not Detected at or above the laboratory reporting limit
[1] - The duplicate sample was collected from MW-1 in all quarters of 2019.
[2] - Not sampled due to low water levels

Table 4

Neutron Probe Monitoring Results - Horizontal Wells

Distance from Point of Entry (feet)	Percent Moisture by Volume - First Quarter 2019									
	HN-1 (% H_2O)	HN-2 (% H_2O)	HN-3 (% H_2O)	HN-4 (% H_2O)	HN-5 (% H_2O)	HN-6 (% H_2O)	HN-7 (% H_2O)	HN-8 (% H_2O)	HN-9 (% H_2O)	HN-10 (% H_2O)
West Side of Ponds										
25	9.72	13.07	12.66	12.11	14.13	23.29	12.13	14.80	13.44	16.63
50	8.96	9.26	12.92	9.89	10.59	11.67	11.52	14.81	9.60	13.44
75	10.93	14.05	13.77	12.01	15.65	16.68	12.72	14.46	16.51	9.63
100	11.19	9.13	14.05	10.07	8.27	12.16	12.24	10.13	8.57	10.42
200	12.49	8.73	11.45	9.15	7.49	7.78	9.01	8.35	12.40	9.99
300	11.08	9.11	9.42	8.59	9.38	7.80	13.06	10.18	8.88	9.49
400	13.66	8.50	8.61	8.14	6.98	7.84	14.43	9.02	9.44	11.76
500	11.31	8.17	10.18	9.09	7.59	9.78	14.79	9.82	9.49	10.07
East Side of Ponds										
25	17.50	10.53	11.67	10.38	10.75	11.41	10.85	10.85	14.31	8.74
50	9.32	10.91	10.38	8.80	10.67	11.08	9.00	10.44	10.72	9.66
75	12.32	12.27	10.54	9.07	11.61	13.28	12.11	10.85	9.72	10.27
100	12.01	11.23	9.82	11.52	10.77	12.10	13.04	9.95	9.05	10.70
200	12.81	8.36	11.52	10.49	9.38	9.44	14.44	9.93	9.48	10.13
300	9.39	9.26	10.41	9.43	9.03	10.02	16.21	8.58	9.82	8.67
400	15.39	11.97	9.16	8.66	8.22	7.98	16.82	8.79	8.97	11.31
500	10.16	8.75	12.54	8.77	8.47	8.00	12.71	10.01	8.42	10.24

Note: Data collected using a CPN Model 503 DR Hydro-Probe™ Neutron Moisture Gauge

Distance from Point of Entry (feet)	Percent Moisture by Volume - Second Quarter 2019									
	HN-1 (% H_2O)	HN-2 (% H_2O)	HN-3 (% H_2O)	HN-4 (% H_2O)	HN-5 (% H_2O)	HN-6 (% H_2O)	HN-7 (% H_2O)	HN-8 (% H_2O)	HN-9 (% H_2O)	HN-10 (% H_2O)
West Side of Ponds										
25	11.75	12.95	12.79	11.58	14.09	19.62	12.92	16.87	13.76	11.48
50	8.79	9.10	11.58	9.23	10.74	14.98	13.12	15.65	9.67	10.92
75	10.84	14.67	13.66	11.96	14.01	13.29	12.17	15.10	16.69	9.38
100	11.27	9.67	14.01	10.28	8.02	12.79	10.47	9.77	8.77	10.20
200	12.03	8.87	11.72	8.62	8.75	7.94	12.55	8.34	13.08	9.65
300	10.95	8.66	9.55	8.47	8.93	8.48	14.06	9.88	9.55	9.96
400	14.49	8.61	9.54	9.04	7.17	7.92	15.01	9.00	8.63	11.66
500	10.72	8.23	9.15	8.50	8.07	8.10	9.67	10.03	9.62	9.40
East Side of Ponds										
25	12.29	10.48	12.18	10.06	10.72	11.35	11.04	10.36	9.84	9.28
50	10.56	10.30	11.63	9.20	10.22	11.12	9.45	11.11	10.00	10.12
75	11.94	11.57	10.34	9.12	11.78	13.26	12.24	9.79	10.27	9.88
100	12.37	11.51	10.17	11.29	11.10	11.95	12.97	10.14	8.64	11.00
200	12.13	8.84	10.37	10.18	9.44	9.60	14.63	9.09	9.39	10.11
300	9.47	8.39	10.63	8.57	9.04	9.98	16.21	9.07	10.01	8.98
400	14.89	10.80	9.09	9.63	7.92	8.05	16.81	9.21	8.83	11.34
500	9.78	8.69	13.55	9.10	8.10	8.39	11.84	10.43	8.58	11.25

Note: Data collected using a CPN Model 503 DR Hydro-Probe™ Neutron Moisture Gauge

Table 4

Neutron Probe Monitoring Results - Horizontal Wells

Distance from Point of Entry (feet)	Percent Moisture by Volume - Third Quarter 2019									
	HN-1 (% H_2O)	HN-2 (% H_2O)	HN-3 (% H_2O)	HN-4 (% H_2O)	HN-5 (% H_2O)	HN-6 (% H_2O)	HN-7 (% H_2O)	HN-8 (% H_2O)	HN-9 (% H_2O)	HN-10 (% H_2O)
West Side of Ponds										
25	10.81	14.13	12.57	12.46	14.30	19.38	12.35	15.59	14.14	10.23
50	9.07	9.10	12.33	9.40	11.16	11.88	12.58	15.56	9.38	10.09
75	10.56	14.32	14.69	11.55	14.04	14.64	12.15	16.36	10.13	9.68
100	11.16	9.95	14.90	10.20	8.02	12.68	12.92	10.01	9.01	9.71
200	11.58	8.40	11.91	8.72	7.93	8.08	9.17	8.62	12.79	10.30
300	11.03	8.99	9.31	8.85	9.28	7.96	12.20	10.12	9.34	9.21
400	14.17	8.77	9.01	8.65	7.43	7.90	14.29	8.23	8.85	11.00
500	9.32	8.40	9.44	8.82	8.20	9.45	15.24	9.66	9.54	9.65
East Side of Ponds										
25	10.94	10.85	11.98	9.89	10.16	10.75	10.03	10.77	9.40	9.50
50	9.05	10.95	10.98	8.96	11.00	10.84	9.36	11.10	9.77	9.16
75	12.12	11.87	10.68	9.61	10.47	13.31	12.10	10.14	9.69	9.35
100	11.91	11.06	9.70	11.72	11.35	11.75	13.19	9.70	8.63	10.36
200	11.59	8.15	9.08	10.26	9.39	9.69	14.36	9.82	9.21	10.57
300	9.01	8.90	10.61	9.24	8.14	9.33	16.15	8.82	10.14	9.09
400	15.11	12.21	8.84	8.95	8.31	8.39	16.49	8.72	8.69	11.14
500	10.70	8.75	13.53	8.84	8.22	8.28	11.87	10.33	8.11	9.57

Note: Data collected using a CPN Model 503 DR Hydro-Probe™ Neutron Moisture Gauge

Distance from Point of Entry (feet)	Percent Moisture by Volume - Fourth Quarter 2019									
	HN-1 (% H_2O)	HN-2 (% H_2O)	HN-3 (% H_2O)	HN-4 (% H_2O)	HN-5 (% H_2O)	HN-6 (% H_2O)	HN-7 (% H_2O)	HN-8 (% H_2O)	HN-9 (% H_2O)	HN-10 (% H_2O)
West Side of Ponds										
25	10.55	8.97	12.91	12.82	14.49	21.17	12.53	15.08	13.58	19.48
50	8.36	13.36	14.20	9.13	11.27	11.62	12.31	14.97	9.42	10.55
75	9.88	9.34	14.20	11.41	14.42	16.62	12.23	14.99	15.94	10.09
100	10.59	14.21	14.63	10.83	8.54	12.67	13.42	9.71	9.97	10.22
200	11.87	9.81	9.94	9.46	7.44	8.04	8.90	8.61	13.41	9.55
300	11.22	9.02	9.28	8.89	9.88	8.20	12.32	10.52	9.60	10.12
400	14.09	9.40	8.99	8.82	7.61	8.60	13.97	9.09	9.58	11.53
500	8.97	7.98	9.47	9.13	7.90	9.33	15.57	10.47	9.75	9.62
East Side of Ponds										
25	11.83	10.53	12.92	10.63	9.75	11.69	11.35	11.89	9.81	9.88
50	10.97	10.55	10.90	9.36	9.72	10.82	9.39	11.32	9.68	9.77
75	12.12	12.44	10.66	10.24	11.12	13.02	12.29	11.44	9.85	9.61
100	11.69	11.27	10.00	11.15	10.80	12.46	12.98	10.79	8.31	10.32
200	11.95	8.78	10.26	10.71	9.13	9.69	14.95	9.97	9.83	10.06
300	9.93	8.29	10.03	8.81	8.68	9.72	16.67	8.91	9.87	8.23
400	15.04	10.28	8.51	9.01	8.02	8.57	16.84	8.52	8.65	11.07
500	9.85	8.80	11.20	9.10	8.45	8.48	11.74	9.29	8.52	9.67

Note: Data collected using a CPN Model 503 DR Hydro-Probe™ Neutron Moisture Gauge

Table 5
Neutron Probe Monitoring Results - Vertical Wells

Distance from Point of Entry (feet)	Percent Moisture by Volume - First Quarter 2019										
	VN-1 (% H_2O)	VN-2 (% H_2O)	VN-3 (% H_2O)	VN-4 (% H_2O)	VN-5 (% H_2O)	VN-6 (% H_2O)	VN-7 (% H_2O)	VN-8 (% H_2O)	VN-9 (% H_2O)	VN-10 (% H_2O)	VN-11 (% H_2O)
5	1.07		1.72	1.98	1.50	1.41	1.75	1.30	1.70	1.66	1.15
10	1.74		1.84	2.14	1.30	2.13	2.46	1.59	1.40	2.09	1.10
15	1.57		1.11	1.75	0.80	2.20	1.75	1.74	1.10	1.67	1.64
20	1.18		1.69	2.00	1.55	1.37	2.19	1.95	1.67	1.78	1.93
25	1.95		1.57	1.48	1.78	2.28	2.04	1.34	1.51	0.84	1.96
30	2.04		1.43	1.06	1.51	2.13	1.60	1.61	1.94	1.54	1.17
35	2.15		2.13	1.66	1.44	2.37	2.08	1.94	1.80	1.87	1.40
40	1.21		2.00	1.47	1.72	2.50	2.27	1.58	2.42	1.62	2.06
45	1.55		1.81	1.97	1.74	1.93	1.07	1.39	2.17	2.65	1.81
50	1.27		1.46	1.83	1.80	1.34	2.61		2.24	1.24	
55			1.98	1.79		2.75	1.79				
60						2.44	2.60				

Note: Data collected using a CPN Model 503 DR Hydro-Probe™ Neutron Moisture Gauge

Distance from Point of Entry (feet)	Percent Moisture by Volume - Second Quarter 2019										
	VN-1 (% H_2O)	VN-2 (% H_2O)	VN-3 (% H_2O)	VN-4 (% H_2O)	VN-5 (% H_2O)	VN-6 (% H_2O)	VN-7 (% H_2O)	VN-8 (% H_2O)	VN-9 (% H_2O)	VN-10 (% H_2O)	VN-11 (% H_2O)
5	1.05		1.77	1.97	1.56	1.38	1.77	1.30	1.58	1.72	1.10
10	1.72		1.78	2.39	1.43	1.63	2.57	1.65	1.85	2.21	1.21
15	1.55		1.11	2.07	0.79	2.26	1.77	1.72	1.29	1.72	1.91
20	1.45		1.89	1.44	1.50	1.43	2.16	1.92	1.01	1.83	1.90
25	1.74		1.53	1.03	1.76	2.03	2.10	1.27	1.58	0.86	2.00
30	2.09		1.51	1.71	1.38	2.22	1.58	1.64	1.50	1.55	1.18
35	2.06		1.94	1.44	1.76	2.55	1.88	2.23	1.89	1.82	1.36
40	1.21		2.06	2.14	1.72	1.87	2.15	1.50	1.81	1.55	1.98
45	1.43		1.84	1.73	1.72	1.26	1.06	1.41	2.47	2.71	1.74
50	1.22		1.38	1.86	1.76	2.80	2.64		2.21	1.24	
55			2.00	2.05		2.31	1.61				
60						2.24	2.77				

Note: Data collected using a CPN Model 503 DR Hydro-Probe™ Neutron Moisture Gauge

Table 5
Neutron Probe Monitoring Results - Vertical Wells

Distance from Point of Entry (feet)	Percent Moisture by Volume - Third Quarter 2019										
	VN-1 (% H_2O)	VN-2 (% H_2O)	VN-3 (% H_2O)	VN-4 (% H_2O)	VN-5 (% H_2O)	VN-6 (% H_2O)	VN-7 (% H_2O)	VN-8 (% H_2O)	VN-9 (% H_2O)	VN-10 (% H_2O)	VN-11 (% H_2O)
5	1.10		1.86	2.01	1.55	1.38	1.79	1.28	1.55	1.71	1.15
10	1.79		1.86	2.39	1.53	2.09	2.58	1.62	1.73	2.05	1.11
15	1.60		1.26	2.08	1.40	2.21	2.05	1.71	1.33	1.64	1.74
20	1.19		1.71	1.47	0.79	1.40	2.18	1.86	1.07	1.68	1.87
25	1.77		1.52	1.08	1.55	2.22	2.01	1.35	1.78	0.86	2.00
30	2.11		1.47	1.70	1.79	2.31	1.67	1.37	1.50	1.37	1.21
35	2.18		2.22	1.45	1.42	1.92	2.04	1.72	1.91	1.90	1.50
40	1.26		2.02	2.05	1.40	1.93	2.25	1.51	1.82	1.62	2.02
45	1.49		1.88	1.78	1.78	1.29	1.09	1.48	2.51	2.72	1.81
50	1.21		1.55	1.85	1.67	2.70	2.63		2.11	1.31	
55			2.11	2.08		2.46	1.77				
60						2.17	2.53				

Note: Data collected using a CPN Model 503 DR Hydro-Probe™ Neutron Moisture Gauge

Distance from Point of Entry (feet)	Percent Moisture by Volume - Fourth Quarter 2019										
	VN-1 (% H_2O)	VN-2 (% H_2O)	VN-3 (% H_2O)	VN-4 (% H_2O)	VN-5 (% H_2O)	VN-6 (% H_2O)	VN-7 (% H_2O)	VN-8 (% H_2O)	VN-9 (% H_2O)	VN-10 (% H_2O)	VN-11 (% H_2O)
5	1.04		1.78	2.04	1.54	1.40	1.76	1.29	1.73	1.69	1.19
10	1.79		1.85	2.55	1.36	1.93	2.39	1.63	1.87	2.15	1.18
15	1.57		1.12	1.88	0.80	2.31	1.69	1.95	1.37	1.62	1.71
20	1.23		1.77	1.55	1.55	1.49	2.31	1.84	1.20	1.83	1.98
25	2.06		1.53	1.07	1.78	2.28	2.07	1.37	1.67	0.86	2.00
30	2.21		1.49	1.64	1.48	2.26	1.69	1.56	1.55	1.30	1.24
35	2.10		2.25	2.01	1.53	2.63	1.84	2.01	1.81	1.83	1.54
40	1.21		2.09	1.51	1.72	1.94	2.26	1.52	1.81	1.70	2.01
45	1.34		1.77	2.45	1.77	1.22	1.13	1.54	2.55	2.67	1.88
50	1.24		1.56	2.10	1.83	2.72	2.66		2.10	1.32	
55			1.92	1.35		2.48	1.56				
60						2.13	2.52				

Note: Data collected using a CPN Model 503 DR Hydro-Probe™ Neutron Moisture Gauge

CHARTS

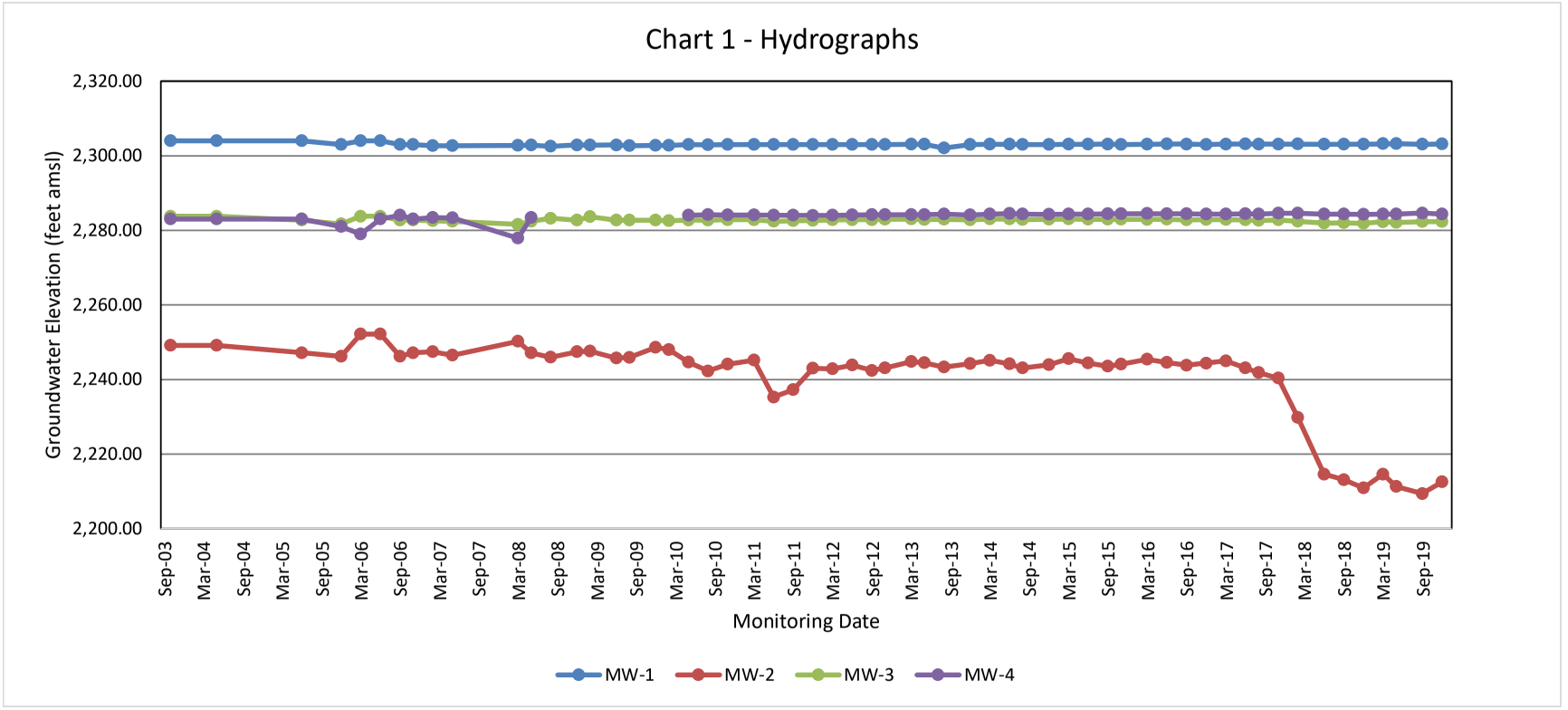


Chart 1 - Hydrographs
Groundwater Elevation (feet amsl)
2,320.00
2,300.00
2,280.00
2,260.00
2,240.00
2,220.00
2,200.00
Sep-03
Mar-04
Sep-04
Mar-05
Sep-05
Mar-06
Sep-06
Mar-07
Sep-07
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
Mar-15
Sep-15
Mar-16
Sep-16
Mar-17
Sep-17
Mar-18
Sep-18
Mar-19
Sep-19
Monitoring Date
MW-1
MW-2
MW-3
MW-4

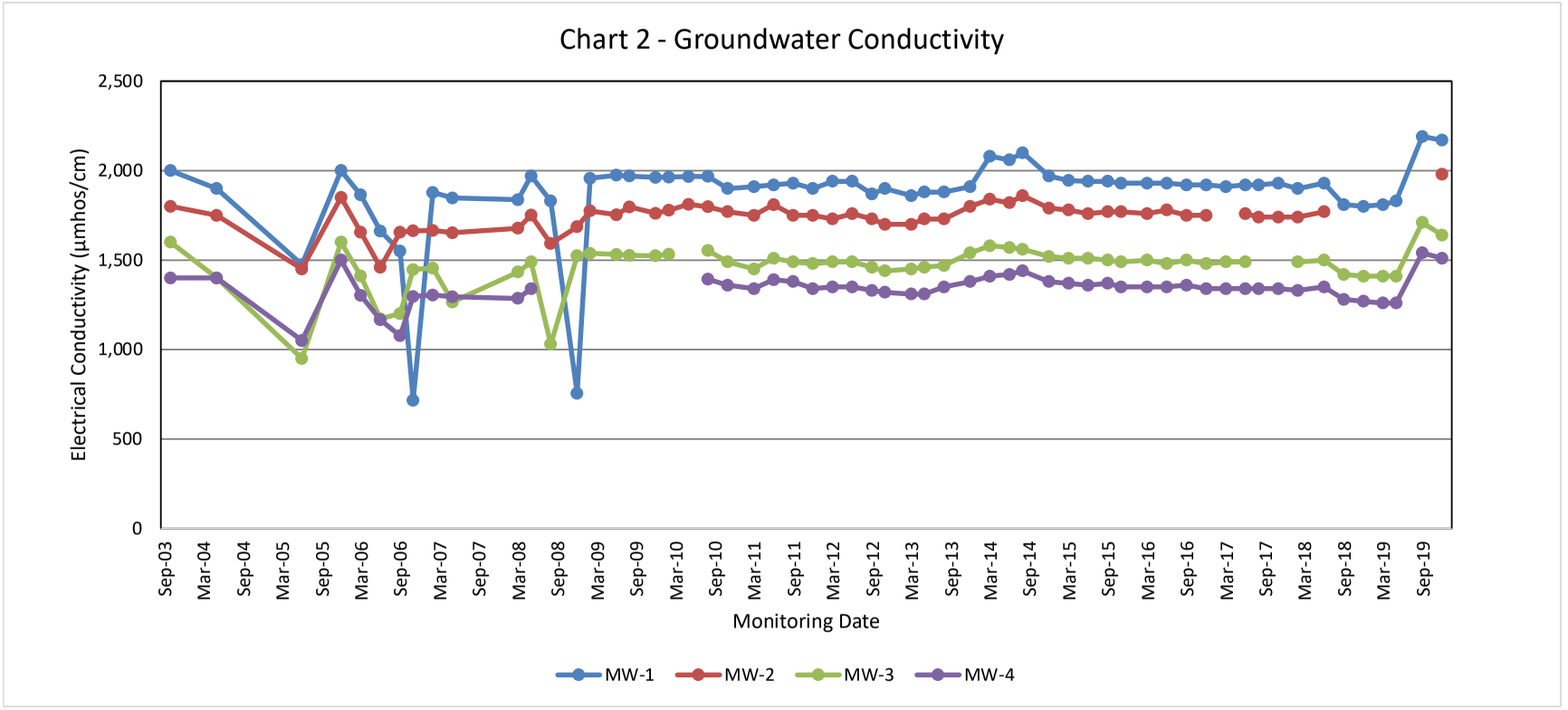
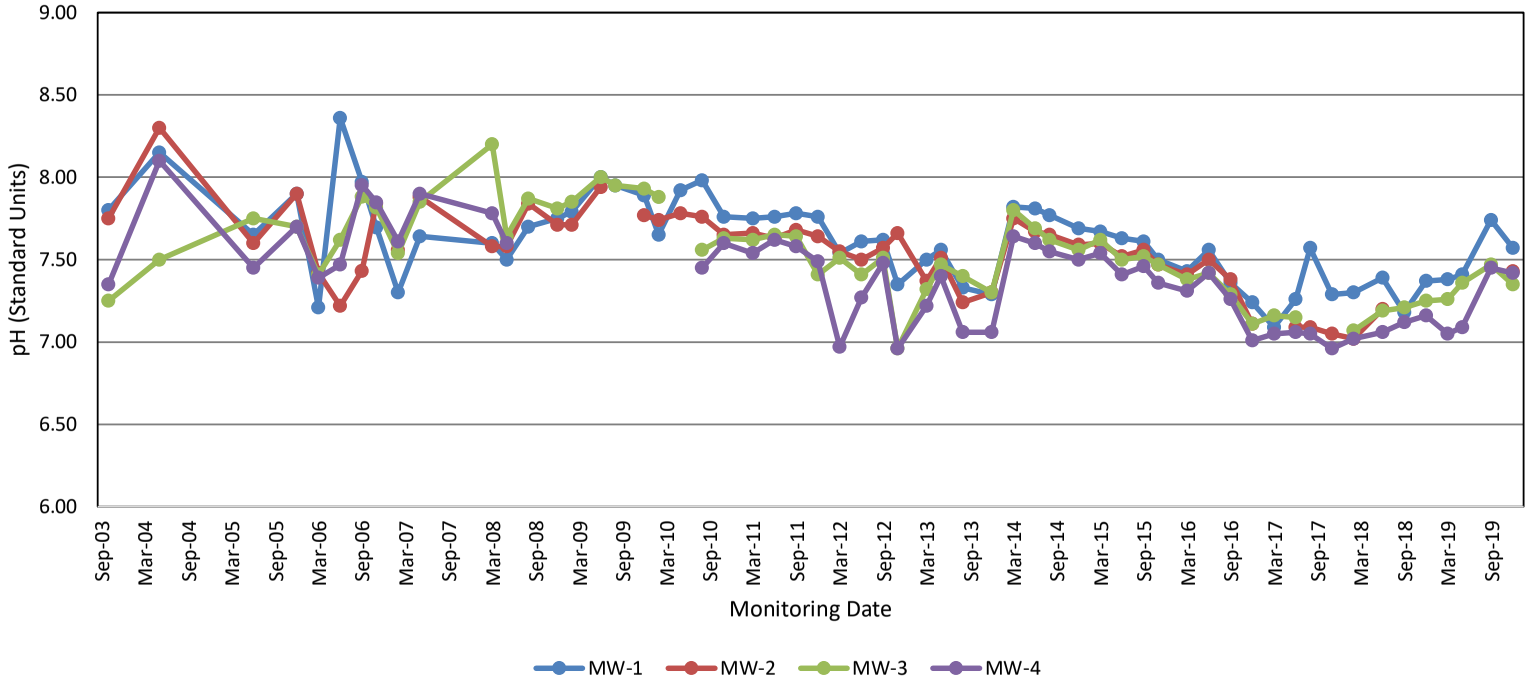


Chart 2 - Groundwater Conductivity
Electrical Conductivity (µmhos/cm)
2,500
2,000
1,500
1,000
500
0
Sep-03
Mar-04
Sep-04
Mar-05
Sep-05
Mar-06
Sep-06
Mar-07
Sep-07
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
Mar-15
Sep-15
Mar-16
Sep-16
Mar-17
Sep-17
Mar-18
Sep-18
Mar-19
Sep-19
Monitoring Date
MW-1
MW-2
MW-3
MW-4

Chart 3 - Groundwater pH



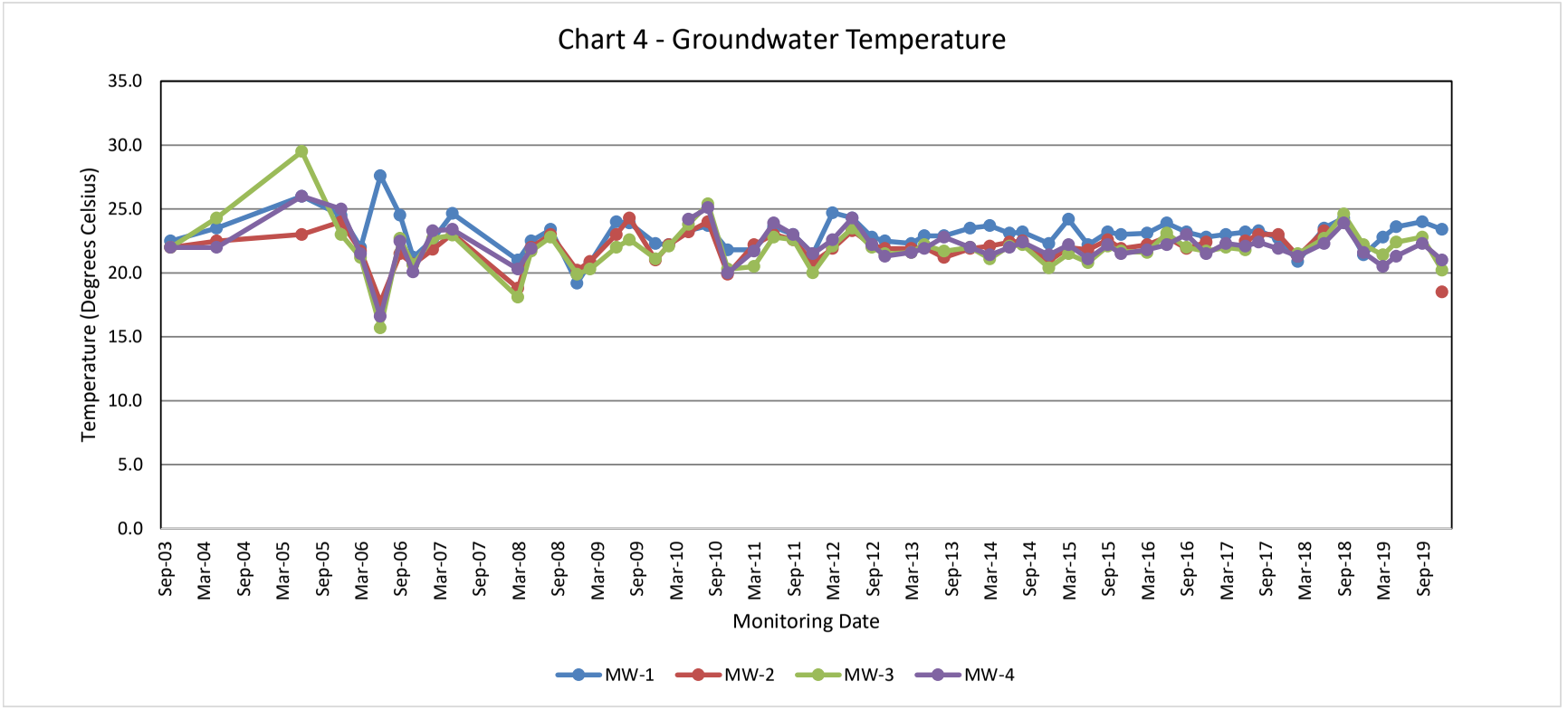


Chart 4 - Groundwater Temperature
Temperature (Degrees Celsius)
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
Sep-03
Mar-04
Sep-04
Mar-05
Sep-05
Mar-06
Sep-06
Mar-07
Sep-07
Mar-08
Sep-08
Mar-09
Sep-09
Mar-10
Sep-10
Mar-11
Sep-11
Mar-12
Sep-12
Mar-13
Sep-13
Mar-14
Sep-14
Mar-15
Sep-15
Mar-16
Sep-16
Mar-17
Sep-17
Mar-18
Sep-18
Mar-19
Sep-19
Monitoring Date
MW-1
MW-2
MW-3
MW-4

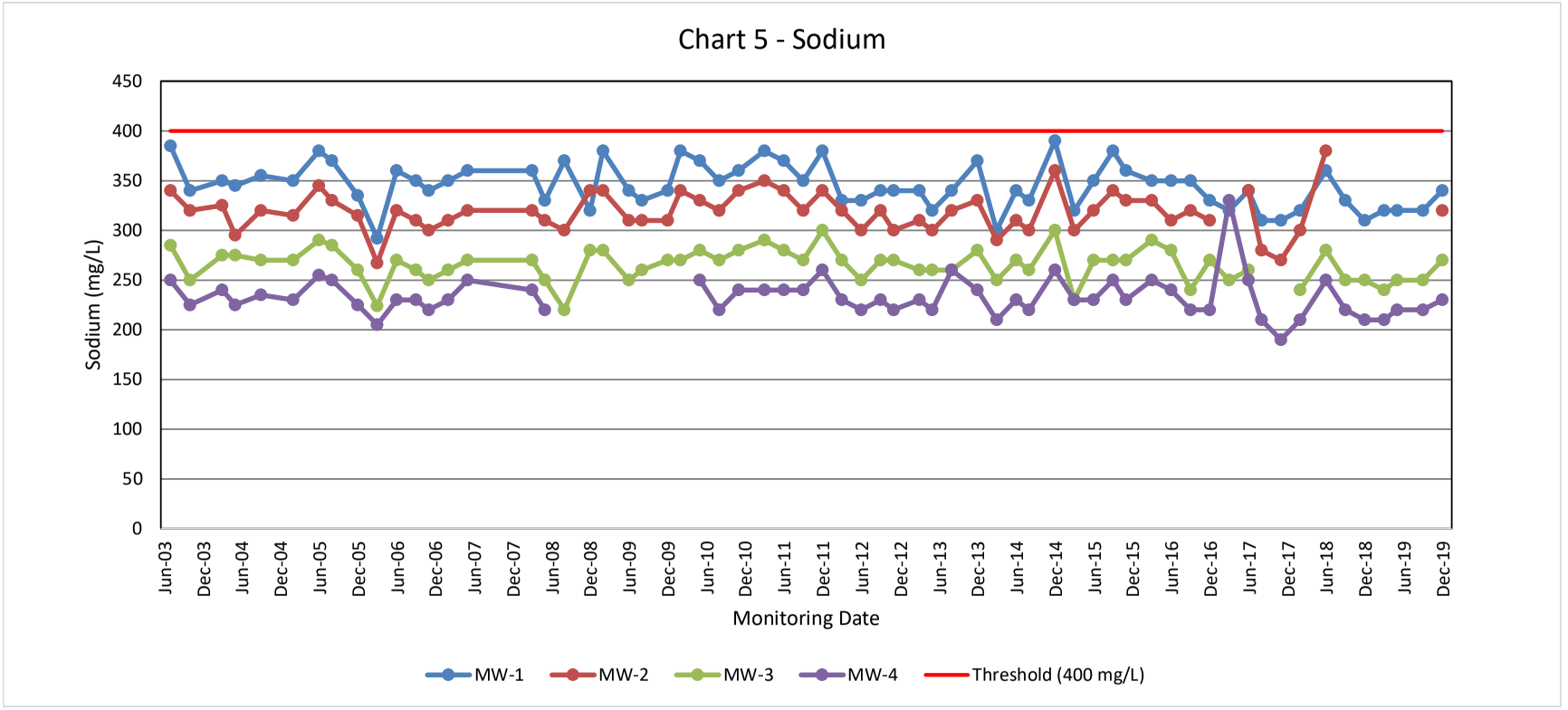


Chart 5 - Sodium
Sodium (mg/L)
450
400
350
300
250
200
150
100
50
0
Jun-03
Dec-03
Jun-04
Dec-04
Jun-05
Dec-05
Jun-06
Dec-06
Jun-07
Dec-07
Jun-08
Dec-08
Jun-09
Dec-09
Jun-10
Dec-10
Jun-11
Dec-11
Jun-12
Dec-12
Jun-13
Dec-13
Jun-14
Dec-14
Jun-15
Dec-15
Jun-16
Dec-16
Jun-17
Dec-17
Jun-18
Dec-18
Jun-19
Dec-19
Monitoring Date
MW-1
MW-2
MW-3
MW-4
Threshold (400 mg/L)

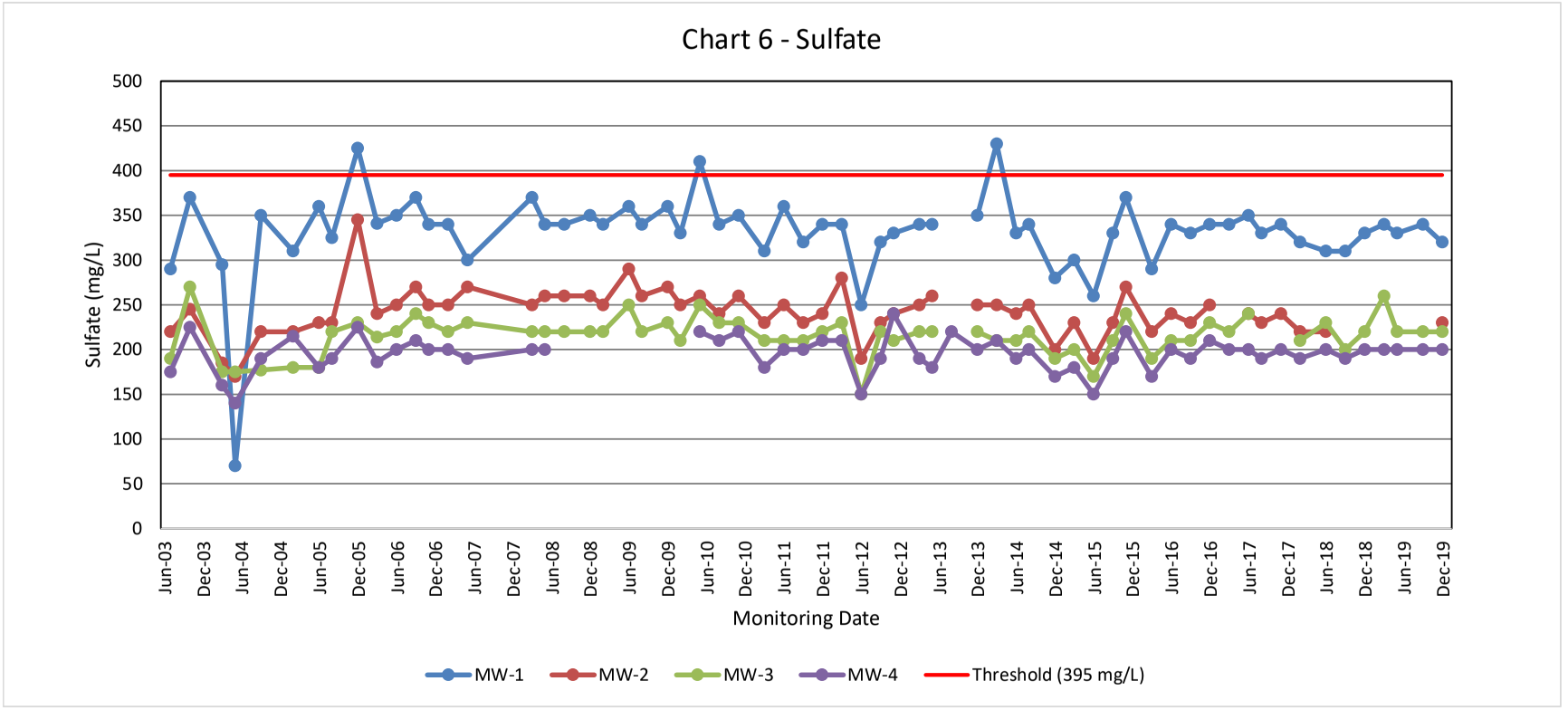


Chart 6 - Sulfate
Sulfate (mg/L)
500
450
400
350
300
250
200
150
100
50
0
Jun-03
Dec-03
Jun-04
Dec-04
Jun-05
Dec-05
Jun-06
Dec-06
Jun-07
Dec-07
Jun-08
Dec-08
Jun-09
Dec-09
Jun-10
Dec-10
Jun-11
Dec-11
Jun-12
Dec-12
Jun-13
Dec-13
Jun-14
Dec-14
Jun-15
Dec-15
Jun-16
Dec-16
Jun-17
Dec-17
Jun-18
Dec-18
Jun-19
Dec-19
Monitoring Date
MW-1
MW-2
MW-3
MW-4
Threshold (395 mg/L)

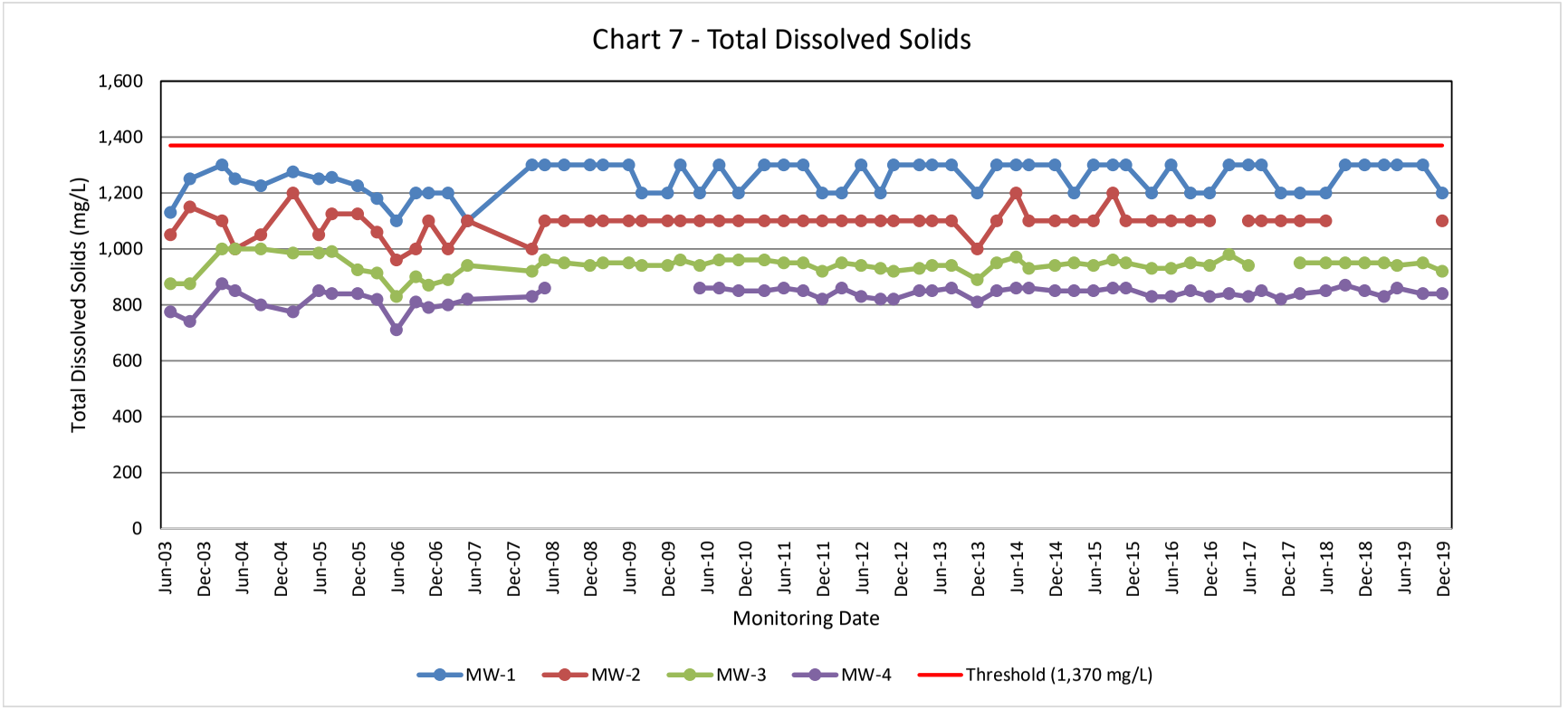


Chart 7 - Total Dissolved Solids
Total Dissolved Solids (mg/L)
1,600
1,400
1,200
1,000
800
600
400
200
0
Jun-03
Dec-03
Jun-04
Dec-04
Jun-05
Dec-05
Jun-06
Dec-06
Jun-07
Dec-07
Jun-08
Dec-08
Jun-09
Dec-09
Jun-10
Dec-10
Jun-11
Dec-11
Jun-12
Dec-12
Jun-13
Dec-13
Jun-14
Dec-14
Jun-15
Dec-15
Jun-16
Dec-16
Jun-17
Dec-17
Jun-18
Dec-18
Jun-19
Dec-19
Monitoring Date
MW-1
MW-2
MW-3
MW-4
Threshold (1,370 mg/L)

APPENDIX A

GROUNDWATER MONITORING WELL SAMPLING RECORDS

MONITORING WELL SAMPLING RECORD

Project:	SEGS III - VII Kramer Junction	Technician:	Ralph De La Parra
Date:	March 11, 2019	Weather:	Clear, cool

Purge Volume Calculations

Monitoring Well ID:	**MW-1**		Depth to Water:	170.78	ft btoc	(b)
Elevation of Top of Casing:	2474.00 ft amsl	(a)	Water Elevation (a - b):	2303.22	ft amsl	(c)
Well Depth:	335.50 ft btoc		Water Thickness (c - d):	164.72	feet	(e)
Elevation of Bottom of Well:	2138.50 ft amsl	(d)	One Casing Volume (e * 1.47):	242.14	gallons	(f)
Casing Inside Diameter:	6.0 inches		Three Casing Volumes (f * 3):	726.42	gallons	

Monitoring Well Purge Data

Purging Apparatus: Dedicated Pump

Sampling Apparatus: Pump Discharge

Decon Methods: Alconox and potable water wash; double-rinse with distilled water

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes
1231	20	20	20.9	7.46	1,790	Clear, odorless
1235	20	100	21.9	7.32	1,800	Clear, odorless
1240	20	200	22.2	7.38	1,810	Clear, odorless
1245	20	300	22.6	7.38	1,810	Clear, odorless
1300	20	600	22.7	7.38	1,810	Clear, odorless
1310	20	800	22.8	7.38	1,810	Clear, odorless

Total Purged: 800 gallons Casing Volumes Purged: 3.30 volumes

Additional Notes or Comments:

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
MW-1-3-11-19	1310	2	Quarterly	No	Dup Collected

MONITORING WELL SAMPLING RECORD

Project:	SEGS III - VII Kramer Junction	Technician:	Ralph De La Parra
Date:	March 11, 2019	Weather:	Clear, cool

Purge Volume Calculations

Monitoring Well ID:	**MW-2**		Depth to Water:	239.58	ft btoc	(b)
Elevation of Top of Casing:	2454.17 ft amsl	(a)	Water Elevation (a - b):	2214.59	ft amsl	(c)
Well Depth:	257.80 ft btoc		Water Thickness (c - d):	18.22	feet	(e)
Elevation of Bottom of Well:	2196.37 ft amsl	(d)	One Casing Volume (e * 1.47):	26.78	gallons	(f)
Casing Inside Diameter:	6.0 inches		Three Casing Volumes (f * 3):	80.35	gallons	

Monitoring Well Purge Data

Purging Apparatus: Dedicated Pump

Sampling Apparatus: Pump Discharge

Decon Methods: Alconox and potable water wash; double-rinse with distilled water

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes

Total Purged: 0 gallons Casing Volumes Purged: 0.00 volumes

Additional Notes or Comments: Pump will not run so could not sample (Possible low water level)

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
			Quarterly	No	

MONITORING WELL SAMPLING RECORD

Project:	SEGS III - VII Kramer Junction	Technician:	Ralph De La Parra
Date:	March 11, 2019	Weather:	Clear, cool

Purge Volume Calculations

Monitoring Well ID:	**MW-3**		Depth to Water:	172.45	ft btoc	(b)
Elevation of Top of Casing:	2454.75 ft amsl	(a)	Water Elevation (a - b):	2282.30	ft amsl	(c)
Well Depth:	259.00 ft btoc		Water Thickness (c - d):	86.55	feet	(e)
Elevation of Bottom of Well:	2195.75 ft amsl	(d)	One Casing Volume (e * 1.47):	127.23	gallons	(f)
Casing Inside Diameter:	6.0 inches		Three Casing Volumes (f * 3):	381.69	gallons	

Monitoring Well Purge Data

Purging Apparatus: Dedicated Pump

Sampling Apparatus: Pump Discharge

Decon Methods: Alconox and potable water wash; double-rinse with distilled water

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes
1401	10	10	19.5	7.06	1,410	Clear, odorless
1405	10	50	20.2	7.28	1,410	Clear, odorless
1410	10	100	20.8	7.26	1,410	Clear, odorless
1420	10	200	21.2	7.26	1,410	Clear, odorless
1450	10	300	21.3	7.26	1,410	Clear, odorless
1500	10	400	21.4	7.26	1,410	Clear, odorless

Total Purged: 400 gallons Casing Volumes Purged: 3.14 volumes

Additional Notes or Comments: Pump stopped at 250 gallons (1425), Restarted at (1445)

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
MW-3-3-11-19	1500	1	Quarterly	No	

MONITORING WELL SAMPLING RECORD

Project:	SEGS III - VII Kramer Junction	Technician:	Ralph De La Parra
Date:	March 11, 2019	Weather:	Clear, cool

Purge Volume Calculations

Monitoring Well ID:	**MW-4**		Depth to Water:	174.68	ft btoc	(b)
Elevation of Top of Casing:	2459.03 ft amsl	(a)	Water Elevation (a - b):	2284.35	ft amsl	(c)
Well Depth:	258.50 ft btoc		Water Thickness (c - d):	83.82	feet	(e)
Elevation of Bottom of Well:	2200.53 ft amsl	(d)	One Casing Volume (e * 1.47):	123.22	gallons	(f)
Casing Inside Diameter:	6.0 inches		Three Casing Volumes (f * 3):	369.66	gallons	

Monitoring Well Purge Data

Purging Apparatus: Dedicated Pump

Sampling Apparatus: Pump Discharge

Decon Methods: Alconox and potable water wash; double-rinse with distilled water

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes
1521	10	10	19.5	7.34	1,270	Clear, odorless
1525	10	50	20.2	7.06	1,260	Clear, odorless
1530	10	100	20.3	7.05	1,260	Clear, odorless
1540	10	200	20.4	7.05	1,260	Clear, odorless
1550	10	300	20.4	7.05	1,260	Clear, odorless
1600	10	400	20.5	7.05	1,260	Clear, odorless

Total Purged: 400 gallons Casing Volumes Purged: 3.25 volumes

Additional Notes or Comments:

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
MW-4-3-11-19	1600	1	Quarterly	No	

MONITORING WELL SAMPLING RECORD

Project:	SEGS III - VII Kramer Junction	Technician:	Ralph De La Parra
Date:	May 29, 2019	Weather:	Clear, Warm

Purge Volume Calculations

Monitoring Well ID:	**MW-1**		Depth to Water:	170.78	ft btoc	(b)
Elevation of Top of Casing:	2474.00 ft amsl	(a)	Water Elevation (a - b):	2303.22	ft amsl	(c)
Well Depth:	335.50 ft btoc		Water Thickness (c - d):	164.72	feet	(e)
Elevation of Bottom of Well:	2138.50 ft amsl	(d)	One Casing Volume (e * 1.47):	242.14	gallons	(f)
Casing Inside Diameter:	6.0 inches		Three Casing Volumes (f * 3):	726.42	gallons	

Monitoring Well Purge Data

Purging Apparatus: Dedicated Pump

Sampling Apparatus: Pump Discharge

Decon Methods:

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes
1413	20	60	22.4	7.71	1,870	Clear, odorless
1415	20	100	23.1	7.43	1,840	Clear, odorless
1420	20	200	23.2	7.41	1,840	Clear, odorless
1425	20	300	23.3	7.41	1,830	Clear, odorless
1440	20	600	23.5	7.41	1,830	Clear, odorless
1450	20	800	23.6	7.41	1,830	Clear, odorless

Total Purged: 800 gallons Casing Volumes Purged: 3.30 volumes

Additional Notes or Comments:

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
MW-1-5-29-19	1310	1	Quarterly	No	
Dup-5-29-19		1	Quarterly	No	Dup Collected

MONITORING WELL SAMPLING RECORD

Project:	SEGS III - VII Kramer Junction	Technician:	Ralph De La Parra
Date:	May 29, 2019	Weather:	Clear, warm

Purge Volume Calculations

Monitoring Well ID:	**MW-2**		Depth to Water:	242.85	ft btoc	(b)
Elevation of Top of Casing:	2454.17 ft amsl	(a)	Water Elevation (a - b):	2211.32	ft amsl	(c)
Well Depth:	257.80 ft btoc		Water Thickness (c - d):	14.95	feet	(e)
Elevation of Bottom of Well:	2196.37 ft amsl	(d)	One Casing Volume (e * 1.47):	21.98	gallons	(f)
Casing Inside Diameter:	6.0 inches		Three Casing Volumes (f * 3):	65.93	gallons	

Monitoring Well Purge Data

Purging Apparatus: Dedicated Pump

Sampling Apparatus: Pump Discharge

Decon Methods:

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes

Total Purged: 0 gallons Casing Volumes Purged: 0.00 volumes

Additional Notes or Comments: Pump will not run so could not sample (Possible low water level)

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
			Quarterly	No	

MONITORING WELL SAMPLING RECORD

Project:	SEGS III - VII Kramer Junction	Technician:	Ralph De La Parra
Date:	May 29, 2019	Weather:	Clear, warm

Purge Volume Calculations

Monitoring Well ID:	**MW-3**		Depth to Water:	172.65	ft btoc	(b)
Elevation of Top of Casing:	2454.75 ft amsl	(a)	Water Elevation (a - b):	2282.10	ft amsl	(c)
Well Depth:	259.00 ft btoc		Water Thickness (c - d):	86.35	feet	(e)
Elevation of Bottom of Well:	2195.75 ft amsl	(d)	One Casing Volume (e * 1.47):	126.93	gallons	(f)
Casing Inside Diameter:	6.0 inches		Three Casing Volumes (f * 3):	380.79	gallons	

Monitoring Well Purge Data

Purging Apparatus: Dedicated Pump

Sampling Apparatus: Pump Discharge

Decon Methods:

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes
1515	10	50	22.5	7.34	1,410	Clear, odorless
1520	10	100	22.2	7.35	1,410	Clear, odorless
1530	10	200	22.3	7.38	1,410	Clear, odorless
1600	10	300	22.5	7.37	1,410	Clear, odorless
1610	10	400	22.4	7.36	1,410	Clear, odorless

Total Purged: 400 gallons Casing Volumes Purged: 3.15 volumes

Additional Notes or Comments: Pump stopped at 250 gallons (1535), Restarted at (1555)

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
MW-3-5-29-19	1610	1	Quarterly	No	

MONITORING WELL SAMPLING RECORD

Project:	SEGS III - VII Kramer Junction	Technician:	Ralph De La Parra
Date:	May 29, 2019	Weather:	Clear, warm

Purge Volume Calculations

Monitoring Well ID:	**MW-4**		Depth to Water:	174.65	ft btoc	(b)
Elevation of Top of Casing:	2459.03 ft amsl	(a)	Water Elevation (a - b):	2284.38	ft amsl	(c)
Well Depth:	258.50 ft btoc		Water Thickness (c - d):	83.85	feet	(e)
Elevation of Bottom of Well:	2200.53 ft amsl	(d)	One Casing Volume (e * 1.47):	123.25	gallons	(f)
Casing Inside Diameter:	6.0 inches		Three Casing Volumes (f * 3):	369.75	gallons	

Monitoring Well Purge Data

Purging Apparatus: Dedicated Pump

Sampling Apparatus: Pump Discharge

Decon Methods:

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes
1621	10	10	21.5	7.32	1,280	Clear, odorless
1625	10	50	21.4	7.10	1,260	Clear, odorless
1630	10	100	21.1	7.09	1,260	Clear, odorless
1640	10	200	21.1	7.09	1,260	Clear, odorless
1650	10	300	21.2	7.09	1,260	Clear, odorless
1700	10	400	21.3	7.09	1,260	Clear, odorless

Total Purged: 400 gallons Casing Volumes Purged: 3.25 volumes

Additional Notes or Comments:

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
MW-4-5-29-19	1700	1	Quarterly	No	

MONITORING WELL SAMPLING RECORD

Project:	SEGS III - VII Kramer Junction	Technician:	Ralph De La Parra
Date:	September 9, 2019	Weather:	Clear, Warm

Purge Volume Calculations

Monitoring Well ID:	**MW-1**		Depth to Water:	170.88	ft btoc	(b)
Elevation of Top of Casing:	2474.00 ft amsl	(a)	Water Elevation (a - b):	2303.12	ft amsl	(c)
Well Depth:	335.50 ft btoc		Water Thickness (c - d):	164.62	feet	(e)
Elevation of Bottom of Well:	2138.50 ft amsl	(d)	One Casing Volume (e * 1.47):	241.99	gallons	(f)
Casing Inside Diameter:	6.0 inches		Three Casing Volumes (f * 3):	725.99	gallons	

Monitoring Well Purge Data

Purging Apparatus: Dedicated Pump

Sampling Apparatus: Pump Discharge

Decon Methods:

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes
1211	20	60	24.1	7.67	2,250	Clear, odorless
1215	20	100	23.8	7.69	2,200	Clear, odorless
1220	20	200	23.8	7.73	2,190	Clear, odorless
1225	20	300	23.9	7.74	2,190	Clear, odorless
1240	20	600	24.0	7.74	2,190	Clear, odorless
1250	20	800	24.0	7.74	2,190	Clear, odorless

Total Purged: 800 gallons Casing Volumes Purged: 3.31 volumes

Additional Notes or Comments:

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
MW-1-9-9-19	1250	1	Quarterly	No	
Dup-9-9-19		1	Quarterly	No	Dup Collected

MONITORING WELL SAMPLING RECORD

Project:	SEGS III - VII Kramer Junction	Technician:	Ralph De La Parra
Date:	September 9, 2019	Weather:	Clear, warm

Purge Volume Calculations

Monitoring Well ID:	**MW-2**		Depth to Water:	244.80	ft btoc	(b)
Elevation of Top of Casing:	2454.17 ft amsl	(a)	Water Elevation (a - b):	2209.37	ft amsl	(c)
Well Depth:	257.80 ft btoc		Water Thickness (c - d):		feet	(e)
Elevation of Bottom of Well:	2196.37 ft amsl	(d)	One Casing Volume (e * 1.47):		gallons	(f)
Casing Inside Diameter:	6.0 inches		Three Casing Volumes (f * 3):		gallons	

Monitoring Well Purge Data

Purging Apparatus: Dedicated Pump

Sampling Apparatus: Pump Discharge

Decon Methods:

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes

Total Purged: 0 gallons Casing Volumes Purged: 0.00 volumes

Additional Notes or Comments: Pump will not run so could not sample (Possible low water level)

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
			Quarterly	No	

MONITORING WELL SAMPLING RECORD

Project:	SEGS III - VII Kramer Junction	Technician:	Ralph De La Parra
Date:	September 9, 2019	Weather:	Clear, warm

Purge Volume Calculations

Monitoring Well ID:	**MW-3**		Depth to Water:	172.40	ft btoc	(b)
Elevation of Top of Casing:	2454.75 ft amsl	(a)	Water Elevation (a - b):	2282.35	ft amsl	(c)
Well Depth:	259.00 ft btoc		Water Thickness (c - d):	86.6	feet	(e)
Elevation of Bottom of Well:	2195.75 ft amsl	(d)	One Casing Volume (e * 1.47):	127.3	gallons	(f)
Casing Inside Diameter:	6.0 inches		Three Casing Volumes (f * 3):	381.9	gallons	

Monitoring Well Purge Data

Purging Apparatus: Dedicated Pump

Sampling Apparatus: Pump Discharge

Decon Methods:

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes
1321	10	10	23.4	7.50	1,770	Clear, odorless
1325	10	50	22.8	7.49	1,730	Clear, odorless
1330	10	100	22.6	7.47	1,720	Clear, odorless
1340	10	200	22.7	7.47	1,710	Clear, odorless
1410	10	300	22.7	7.47	1,710	Clear, odorless
1420	10	400	22.8	7.47	1,710	Clear, odorless

Total Purged: 400 gallons Casing Volumes Purged: 3.14 volumes

Additional Notes or Comments: Pump stopped at 250 gallons (1345), Restarted at (1405)

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
MW-3-9-9-19	1420	1	Quarterly	No	

MONITORING WELL SAMPLING RECORD

Project:	SEGS III - VII Kramer Junction	Technician:	Ralph De La Parra
Date:	September 9, 2019	Weather:	Clear, warm

Purge Volume Calculations

Monitoring Well ID:	**MW-4**		Depth to Water:	174.40	ft btoc	(b)
Elevation of Top of Casing:	2459.03 ft amsl	(a)	Water Elevation (a - b):	2284.63	ft amsl	(c)
Well Depth:	258.50 ft btoc		Water Thickness (c - d):	84.1	feet	(e)
Elevation of Bottom of Well:	2200.53 ft amsl	(d)	One Casing Volume (e * 1.47):	123.63	gallons	(f)
Casing Inside Diameter:	6.0 inches		Three Casing Volumes (f * 3):	370.89	gallons	

Monitoring Well Purge Data

Purging Apparatus: Dedicated Pump

Sampling Apparatus: Pump Discharge

Decon Methods:

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes
1431	10	10	22.3	7.47	1,560	Clear, odorless
1435	10	50	22.4	7.44	1,540	Clear, odorless
1440	10	100	22.3	7.45	1,540	Clear, odorless
1450	10	200	22.3	7.45	1,540	Clear, odorless
1500	10	300	22.3	7.45	1,540	Clear, odorless
1510	10	400	22.3	7.45	1,540	Clear, odorless

Total Purged: 400 gallons Casing Volumes Purged: 3.24 volumes

Additional Notes or Comments:

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
MW-4-9-9-19	1510	1	Quarterly	No	

MONITORING WELL SAMPLING RECORD

Project:	SEGS III - VII Kramer Junction	Technician:	Ralph De La Parra
Date:	December 10, 2019	Weather:	Clear, Cool

Purge Volume Calculations

Monitoring Well ID:	**MW-1**		Depth to Water:	170.80	ft btoc	(b)
Elevation of Top of Casing:	2474.00 ft amsl	(a)	Water Elevation (a - b):	2303.20	ft amsl	(c)
Well Depth:	335.50 ft btoc		Water Thickness (c - d):	164.70	feet	(e)
Elevation of Bottom of Well:	2138.50 ft amsl	(d)	One Casing Volume (e * 1.47):	242.11	gallons	(f)
Casing Inside Diameter:	6.0 inches		Three Casing Volumes (f * 3):	726.33	gallons	

Monitoring Well Purge Data

Purging Apparatus: Dedicated Pump

Sampling Apparatus: Pump Discharge

Decon Methods:

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes
1333	20	60	23.9	7.54	2,210	Clear, odorless
1335	20	100	23.5	7.58	2,170	Clear, odorless
1340	20	200	23.4	7.57	2,170	Clear, odorless
1345	20	300	23.4	7.57	2,170	Clear, odorless
1400	20	600	23.4	7.57	2,170	Clear, odorless
1410	20	800	23.4	7.57	2,170	Clear, odorless

Total Purged: 800 gallons Casing Volumes Purged: 3.30 volumes

Additional Notes or Comments:

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
MW-1-12-10-19	1410	3	Annual	No	
Dup-12-10-19		3	Annual	No	Dup Collected

MONITORING WELL SAMPLING RECORD

Project:	SEGS III - VII Kramer Junction	Technician:	Ralph De La Parra
Date:	December 18, 2019	Weather:	Clear, Cool

Purge Volume Calculations

Monitoring Well ID:	**MW-2**		Depth to Water:	241.65	ft btoc	(b)
Elevation of Top of Casing:	2454.17 ft amsl	(a)	Water Elevation (a - b):	2212.52	ft amsl	(c)
Well Depth:	257.80 ft btoc		Water Thickness (c - d):	16.15	feet	(e)
Elevation of Bottom of Well:	2196.37 ft amsl	(d)	One Casing Volume (e * 1.47):	23.74	gallons	(f)
Casing Inside Diameter:	6.0 inches		Three Casing Volumes (f * 3):	71.22	gallons	

Monitoring Well Purge Data

Purging Apparatus: Bailer

Sampling Apparatus: Bailer

Decon Methods:

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes
1000		10	16.9	7.50	1,950	Very Cloudy, odorless
1012		20	20.2	7.45	1,970	Very Cloudy, odorless
1022		30	20.5	7.42	1,990	Very Cloudy, odorless
1125		60	18.2	7.43	1,980	Very Cloudy, odorless
1205		80	18.5	7.43	1,980	Very Cloudy, odorless

Total Purged: 80 gallons Casing Volumes Purged: 3.37 volumes

Additional Notes or Comments: BC2 removed bad pump and purged/sampled the well with a bailer.

Well Is recovering very slowly after 40 gallons

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
MW-2-12-18-19		3	Annual	No	

MONITORING WELL SAMPLING RECORD

Project:	SEGS III - VII Kramer Junction	Technician:	Ralph De La Parra
Date:	December 18, 2019	Weather:	Clear, Cool

Purge Volume Calculations

Monitoring Well ID:	**MW-3**		Depth to Water:	172.40	ft btoc	(b)
Elevation of Top of Casing:	2454.75 ft amsl	(a)	Water Elevation (a - b):	2282.35	ft amsl	(c)
Well Depth:	259.00 ft btoc		Water Thickness (c - d):	86.6	feet	(e)
Elevation of Bottom of Well:	2195.75 ft amsl	(d)	One Casing Volume (e * 1.47):	127.3	gallons	(f)
Casing Inside Diameter:	6.0 inches		Three Casing Volumes (f * 3):	381.9	gallons	

Monitoring Well Purge Data

Purging Apparatus: 3" Grundfos

Sampling Apparatus: 3" Grundfos

Decon Methods:

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes
1350	5	50	19.2	7.48	1,670	Clear, Odorless
1400	5	100	20.1	7.40	1,650	Clear, Odorless
1420	5	200	20.1	7.36	1,640	Clear, Odorless
1430		250				Pump Stopped
1500	5	300	20.2	7.35	1,640	Clear, Odorless
1520	5	400	20.2	7.35	1,640	Clear, Odorless

Total Purged: 400 gallons Casing Volumes Purged: 3.14 volumes

Additional Notes or Comments: BC2 removed bad pump and purged/sampled the well with dropin 3"Grundfos. Pump stopped at 1430 and at 1450.

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
MW-3-12-18-19		3	Annual	No	

MONITORING WELL SAMPLING RECORD

Project:	SEGS III - VII Kramer Junction	Technician:	Ralph De La Parra
Date:	December 10, 2019	Weather:	Clear, Cool

Purge Volume Calculations

Monitoring Well ID:	**MW-4**		Depth to Water:	174.68	ft btoc	(b)
Elevation of Top of Casing:	2459.03 ft amsl	(a)	Water Elevation (a - b):	2284.35	ft amsl	(c)
Well Depth:	258.50 ft btoc		Water Thickness (c - d):	83.82	feet	(e)
Elevation of Bottom of Well:	2200.53 ft amsl	(d)	One Casing Volume (e * 1.47):	123.22	gallons	(f)
Casing Inside Diameter:	6.0 inches		Three Casing Volumes (f * 3):	369.66	gallons	

Monitoring Well Purge Data

Purging Apparatus: Dedicated Pump

Sampling Apparatus: Pump Discharge

Decon Methods:

Time	Purge Rate (gpm)	Purge Volume (gallons)	Temp (Deg C)	pH	Specific Conductivity (µmhos/cm)	Notes
1550	10	50	20.6	7.60	1,520	Clear, odorless
1555	10	100	21.2	7.42	1,510	Clear, odorless
1605	10	200	21.3	7.42	1,510	Clear, odorless
1615	10	300	21.4	7.42	1,510	Clear, odorless
1625	10	400	21.5	7.42	1,510	Clear, odorless

Total Purged: 400 gallons Casing Volumes Purged: 3.25 volumes

Additional Notes or Comments:

Sample Inventory

Sample ID	Time	# of Bottles	Analysis	Filtered	Notes
MW-4-12-10-19	1625	3	Annual	No	

APPENDIX B

LABORATORY REPORTS

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Irvine
17461 Derian Ave
Suite 100
Irvine, CA 92614-5817
Tel: (949)261-1022

TestAmerica Job ID: 440-235991-1
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:
3/25/2019 5:25:39 PM

Dennis Tran, Project Manager I
(949)261-1022
dennis.tran@testamericainc.com

Table of Contents

Sample Summary

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

TestAmerica Job ID: 440-235991-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-235991-1	MW-1-3-11-19	Water	03/11/19 13:10	03/11/19 18:25
440-235991-2	MW-3-3-11-19	Water	03/11/19 15:00	03/11/19 18:25
440-235991-3	MW-4-3-11-19	Water	03/11/19 16:00	03/11/19 18:25
440-235991-4	DUP-3-11-19	Water	03/11/19 00:01	03/11/19 18:25

Job ID: 440-235991-1

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-235991-1

Comments
No additional comments.

Receipt
The samples were received on 3/11/2019 6:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6º C.

HPLC/IC
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-1-3-11-19 (440-235991-1), MW-3-3-11-19 (440-235991-2), MW-4-3-11-19 (440-235991-3) and DUP-3-11-19 (440-235991-4). Regulatory documents require a 24-hour waiting period from the time of the addition of the acid preservative to the time of digestion.

3/18/19 at 14:34
HNO3 ID: 5194705
HNO3 added: 2mL

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.

Client Sample ID: MW-1-3-11-19

Lab Sample ID: 440-235991-1
Date Collected: 03/11/19 13:10
Matrix: Water
Date Received: 03/11/19 18:25

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	340		50		mg/L			03/13/19 00:58	100

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	320		0.50		mg/L		03/20/19 09:27	03/20/19 22:22	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1300		10		mg/L			03/18/19 09:05	1

Client Sample ID: MW-3-3-11-19

Lab Sample ID: 440-235991-2
Date Collected: 03/11/19 15:00
Matrix: Water
Date Received: 03/11/19 18:25

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	260		25		mg/L			03/13/19 01:12	50

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	240		0.50		mg/L		03/20/19 09:27	03/20/19 22:25	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	950		10		mg/L			03/18/19 09:05	1

Client Sample ID: MW-4-3-11-19

Lab Sample ID: 440-235991-3
Date Collected: 03/11/19 16:00
Matrix: Water
Date Received: 03/11/19 18:25

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	200		25		mg/L			03/13/19 01:28	50

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	210		0.50		mg/L		03/20/19 09:27	03/20/19 22:28	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	830		10		mg/L			03/18/19 09:05	1

Client Sample ID: DUP-3-11-19

Lab Sample ID: 440-235991-4
Date Collected: 03/11/19 00:01
Matrix: Water
Date Received: 03/11/19 18:25

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	340		25		mg/L			03/13/19 01:43	50

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

TestAmerica Job ID: 440-235991-1

Client Sample ID: DUP-3-11-19
Date Collected: 03/11/19 00:01
Date Received: 03/11/19 18:25

Lab Sample ID: 440-235991-4
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	330		0.50		mg/L		03/20/19 09:27	03/20/19 22:31	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1300		10		mg/L			03/18/19 09:05	1

Method Summary

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

TestAmerica Job ID: 440-235991-1

Method	Method Description	Protocol	Laboratory
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

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 = TestAmerica 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

TestAmerica Job ID: 440-235991-1

Client Sample ID: MW-1-3-11-19

Date Collected: 03/11/19 13:10
Date Received: 03/11/19 18:25

Lab Sample ID: 440-235991-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100			533711	03/13/19 00:58	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	535389	03/20/19 09:27	KE	TAL IRV
Total Recoverable	Analysis	6010B		1			535650	03/20/19 22:22	VS	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	534848	03/18/19 09:05	XL	TAL IRV

Client Sample ID: MW-3-3-11-19

Date Collected: 03/11/19 15:00
Date Received: 03/11/19 18:25

Lab Sample ID: 440-235991-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			533711	03/13/19 01:12	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	535389	03/20/19 09:27	KE	TAL IRV
Total Recoverable	Analysis	6010B		1			535650	03/20/19 22:25	VS	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	534848	03/18/19 09:05	XL	TAL IRV

Client Sample ID: MW-4-3-11-19

Date Collected: 03/11/19 16:00
Date Received: 03/11/19 18:25

Lab Sample ID: 440-235991-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			533711	03/13/19 01:28	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	535389	03/20/19 09:27	KE	TAL IRV
Total Recoverable	Analysis	6010B		1			535650	03/20/19 22:28	VS	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	534848	03/18/19 09:05	XL	TAL IRV

Client Sample ID: DUP-3-11-19

Date Collected: 03/11/19 00:01
Date Received: 03/11/19 18:25

Lab Sample ID: 440-235991-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			533711	03/13/19 01:43	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	535389	03/20/19 09:27	KE	TAL IRV
Total Recoverable	Analysis	6010B		1			535650	03/20/19 22:31	VS	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	534848	03/18/19 09:05	XL	TAL IRV

Laboratory References:

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-533711/6
Matrix: Water
Analysis Batch: 533711

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			03/12/19 14:31	1

Lab Sample ID: LCS 440-533711/5
Matrix: Water
Analysis Batch: 533711

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			5.00	5.02		mg/L		100	90 - 110		

Lab Sample ID: 440-235991-4 MS
Matrix: Water
Analysis Batch: 533711

Client Sample ID: DUP-3-11-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	340		250	598		mg/L		105	80 - 120		

Lab Sample ID: 440-235991-4 MSD
Matrix: Water
Analysis Batch: 533711

Client Sample ID: DUP-3-11-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	340		250	594		mg/L		103	80 - 120	1	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-535389/1-A
Matrix: Water
Analysis Batch: 535650

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 535389

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	ND		0.50		mg/L		03/20/19 09:27	03/20/19 21:43	1

Lab Sample ID: LCS 440-535389/2-A
Matrix: Water
Analysis Batch: 535650

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 535389

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sodium			10.0	9.32		mg/L		93	80 - 120		

Lab Sample ID: 440-236382-K-1-B MS
Matrix: Water
Analysis Batch: 535650

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 535389

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sodium	270		10.0	277	4	mg/L		85	75 - 125		

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

Lab Sample ID: 440-236382-K-1-C MSD
Matrix: Water
Analysis Batch: 535650

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 535389

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sodium	270		10.0	271	4	mg/L		29	75 - 125	2	20

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

Lab Sample ID: MB 440-534848/1
Matrix: Water
Analysis Batch: 534848

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			03/18/19 09:05	1

Lab Sample ID: LCS 440-534848/2
Matrix: Water
Analysis Batch: 534848

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	992		mg/L		99	90 - 110		

Lab Sample ID: 440-235960-L-10 DU
Matrix: Water
Analysis Batch: 534848

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	420			417		mg/L				1	5

HPLC/IC

Analysis Batch: 533711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-235991-1	MW-1-3-11-19	Total/NA	Water	300.0	
440-235991-2	MW-3-3-11-19	Total/NA	Water	300.0	
440-235991-3	MW-4-3-11-19	Total/NA	Water	300.0	
440-235991-4	DUP-3-11-19	Total/NA	Water	300.0	
MB 440-533711/6	Method Blank	Total/NA	Water	300.0	
LCS 440-533711/5	Lab Control Sample	Total/NA	Water	300.0	
440-235991-4 MS	DUP-3-11-19	Total/NA	Water	300.0	
440-235991-4 MSD	DUP-3-11-19	Total/NA	Water	300.0	

Metals

Prep Batch: 535389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-235991-1	MW-1-3-11-19	Total Recoverable	Water	3005A	
440-235991-2	MW-3-3-11-19	Total Recoverable	Water	3005A	
440-235991-3	MW-4-3-11-19	Total Recoverable	Water	3005A	
440-235991-4	DUP-3-11-19	Total Recoverable	Water	3005A	
MB 440-535389/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 440-535389/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-236382-K-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
440-236382-K-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 535650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-235991-1	MW-1-3-11-19	Total Recoverable	Water	6010B	535389
440-235991-2	MW-3-3-11-19	Total Recoverable	Water	6010B	535389
440-235991-3	MW-4-3-11-19	Total Recoverable	Water	6010B	535389
440-235991-4	DUP-3-11-19	Total Recoverable	Water	6010B	535389
MB 440-535389/1-A	Method Blank	Total Recoverable	Water	6010B	535389
LCS 440-535389/2-A	Lab Control Sample	Total Recoverable	Water	6010B	535389
440-236382-K-1-B MS	Matrix Spike	Total Recoverable	Water	6010B	535389
440-236382-K-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	535389

General Chemistry

Analysis Batch: 534848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-235991-1	MW-1-3-11-19	Total/NA	Water	SM 2540C	
440-235991-2	MW-3-3-11-19	Total/NA	Water	SM 2540C	
440-235991-3	MW-4-3-11-19	Total/NA	Water	SM 2540C	
440-235991-4	DUP-3-11-19	Total/NA	Water	SM 2540C	
MB 440-534848/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-534848/2	Lab Control Sample	Total/NA	Water	SM 2540C	
440-235960-L-10 DU	Duplicate	Total/NA	Water	SM 2540C	

Qualifiers

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Accreditation/Certification Summary

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

TestAmerica Job ID: 440-235991-1

Laboratory: TestAmerica Irvine

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	CA01531	06-30-19
Arizona	State Program	9	AZ0671	10-14-19
California	LA Cty Sanitation Districts	9	10256	06-30-19
California	State Program	9	CA ELAP 2706	06-30-19
Guam	State Program	9	Cert. No. 19-005R	01-23-20
Hawaii	State Program	9	N/A	01-29-20
Kansas	NELAP	7	E-10420	07-31-19
Nevada	State Program	9	CA015312018-1	07-31-19
New Mexico	State Program	6	N/A	01-29-20
Oregon	NELAP	10	4028	01-29-20
US Fish & Wildlife	Federal		058448	07-31-19
USDA	Federal		P330-18-00214	07-09-21
Washington	State Program	10	C900	09-03-19

Chain of Custody Record 316526

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

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

Client Contact	Project Manager: Glen King	Site Contact:	Date: 3-11-19	COC No
Company Name: Nexterra -	Tel/Fax:	Lab Contact:	Carrier:	1 of 1 COCs
Address	Analysis Turnaround Time			Sampler
City/State/Zip	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone.	TAT if different from Below _____			Walk-in Client
Fax	☒ 2 weeks			Lab Sampling
Project Name: Nexterra - Kremer 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)	Sediment Sulfide	Total Dissolved Solids	Sample Specific Notes
MW-1-3-11-19	3-11-19	1310	G	H2O	1	N	N	X	X	
MW-3-3-11-19		1500			1			X	X	
MW-4-3-11-19		1600			1			X	X	
Dup-3-11-19		—			1			X	X	

440-235991 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 12 Corr'd 16 | Therm ID No 10-43

Relinquished by	Company	Date/Time	Received by:	Company	Date/Time:
	NorthStar	3-11-19@1825			
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Relinquished by.	Company	Date/Time	Received in Laboratory by.	Company	Date/Time
				TA IRV	3/11/19 1825

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3/25/2019

Login Sample Receipt Checklist

Client: FPL Energy Solar Partners III-VII, LLC

Job Number: 440-235991-1

Login Number: 235991
List Number: 1
Creator: Skinner, Alma D

List Source: TestAmerica 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	

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 440-242700-1
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:
6/17/2019 10:04:02 AM

Nicole McCabe, Project Manager I
(949)261-1022
nicole.mccabe@testamericainc.com

Table of Contents

Sample Summary

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

Job ID: 440-242700-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-242700-1	MW-1-5-29-19	Water	05/29/19 14:50	05/31/19 15:30	
440-242700-2	MW-3-5-29-19	Water	05/29/19 16:10	05/31/19 15:30	
440-242700-3	MW-4-5-29-19	Water	05/29/19 17:00	05/31/19 15:30	
440-242700-4	DUP-5-29-19	Water	05/29/19 00:00	05/31/19 15:30	

Job ID: 440-242700-1

Laboratory: Eurofins TestAmerica, Irvine

Narrative

Receipt
The samples were received on 5/31/2019 3:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8º C.

HPLC/IC
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-1-5-29-19 (440-242700-1), MW-3-5-29-19 (440-242700-2), MW-4-5-29-19 (440-242700-3) and DUP-5-29-19 (440-242700-4). Regulatory documents require a 24-hour waiting period from the time of the addition of the acid preservative to the time of digestion.

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.

Client Sample ID: MW-1-5-29-19

Lab Sample ID: 440-242700-1

Date Collected: 05/29/19 14:50
Matrix: Water
Date Received: 05/31/19 15:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	330		25		mg/L			06/04/19 20:07	50

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	320		0.50		mg/L		06/14/19 08:56	06/14/19 20:34	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1300		10		mg/L			06/05/19 15:39	1

Client Sample ID: MW-3-5-29-19

Lab Sample ID: 440-242700-2

Date Collected: 05/29/19 16:10
Matrix: Water
Date Received: 05/31/19 15:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	220		25		mg/L			06/04/19 20:23	50

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	250		0.50		mg/L		06/14/19 08:56	06/14/19 20:36	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	940		10		mg/L			06/05/19 15:39	1

Client Sample ID: MW-4-5-29-19

Lab Sample ID: 440-242700-3

Date Collected: 05/29/19 17:00
Matrix: Water
Date Received: 05/31/19 15:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	200		25		mg/L			06/04/19 20:39	50

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	220		0.50		mg/L		06/14/19 08:56	06/14/19 20:39	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	860		10		mg/L			06/05/19 15:39	1

Client Sample ID: DUP-5-29-19

Lab Sample ID: 440-242700-4

Date Collected: 05/29/19 00:00
Matrix: Water
Date Received: 05/31/19 15:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	340		25		mg/L			06/04/19 20:55	50

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	300		0.50		mg/L		06/14/19 08:56	06/14/19 20:41	1

Client Sample Results

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

Job ID: 440-242700-1

Client Sample ID: DUP-5-29-19
Date Collected: 05/29/19 00:00
Date Received: 05/31/19 15:30

Lab Sample ID: 440-242700-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1300		10		mg/L			06/05/19 15:39	1

Method Summary

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

Job ID: 440-242700-1

Method	Method Description	Protocol	Laboratory
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

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 TestAmerica, 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: 440-242700-1

Client Sample ID: MW-1-5-29-19

Lab Sample ID: 440-242700-1

Date Collected: 05/29/19 14:50

Matrix: Water

Date Received: 05/31/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			550618	06/04/19 20:07	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	552709	06/14/19 08:56	BV	TAL IRV
Total Recoverable	Analysis	6010B		1			552986	06/14/19 20:34	P1R	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	550979	06/05/19 15:39	KM	TAL IRV

Client Sample ID: MW-3-5-29-19

Lab Sample ID: 440-242700-2

Date Collected: 05/29/19 16:10

Matrix: Water

Date Received: 05/31/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			550618	06/04/19 20:23	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	552709	06/14/19 08:56	BV	TAL IRV
Total Recoverable	Analysis	6010B		1			552986	06/14/19 20:36	P1R	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	550979	06/05/19 15:39	KM	TAL IRV

Client Sample ID: MW-4-5-29-19

Lab Sample ID: 440-242700-3

Date Collected: 05/29/19 17:00

Matrix: Water

Date Received: 05/31/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			550618	06/04/19 20:39	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	552709	06/14/19 08:56	BV	TAL IRV
Total Recoverable	Analysis	6010B		1			552986	06/14/19 20:39	P1R	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	550979	06/05/19 15:39	KM	TAL IRV

Client Sample ID: DUP-5-29-19

Lab Sample ID: 440-242700-4

Date Collected: 05/29/19 00:00

Matrix: Water

Date Received: 05/31/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			550618	06/04/19 20:55	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	552709	06/14/19 08:56	BV	TAL IRV
Total Recoverable	Analysis	6010B		1			552986	06/14/19 20:41	P1R	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	550979	06/05/19 15:39	KM	TAL IRV

Laboratory References:

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-550618/6
Matrix: Water
Analysis Batch: 550618

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			06/04/19 12:26	1

Lab Sample ID: LCS 440-550618/5
Matrix: Water
Analysis Batch: 550618

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			5.00	5.14		mg/L		103	90 - 110		

Lab Sample ID: 440-242700-4 MS
Matrix: Water
Analysis Batch: 550618

Client Sample ID: DUP-5-29-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	340		250	588		mg/L		101	80 - 120		

Lab Sample ID: 440-242700-4 MSD
Matrix: Water
Analysis Batch: 550618

Client Sample ID: DUP-5-29-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	340		250	593		mg/L		103	80 - 120	1	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-552709/1-A
Matrix: Water
Analysis Batch: 552986

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 552709

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	ND		0.50		mg/L		06/14/19 08:56	06/14/19 19:52	1

Lab Sample ID: LCS 440-552709/2-A
Matrix: Water
Analysis Batch: 552986

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 552709

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sodium			10.0	9.32		mg/L		93	80 - 120		

Lab Sample ID: 440-243420-M-1-B MS
Matrix: Water
Analysis Batch: 552986

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 552709

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sodium	25		10.0	34.6		mg/L		99	75 - 125		

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

Lab Sample ID: 440-243420-M-1-C MSD
Matrix: Water
Analysis Batch: 552986

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 552709

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sodium	25		10.0	32.9		mg/L		82	75 - 125	5	20

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

Lab Sample ID: MB 440-550979/1
Matrix: Water
Analysis Batch: 550979

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			06/05/19 15:39	1

Lab Sample ID: LCS 440-550979/2
Matrix: Water
Analysis Batch: 550979

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	994		mg/L		99	90 - 110		

Lab Sample ID: 440-242684-A-1 DU
Matrix: Water
Analysis Batch: 550979

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	140			148		mg/L				3	5

QC Association Summary

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

Job ID: 440-242700-1

HPLC/IC

Analysis Batch: 550618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-242700-1	MW-1-5-29-19	Total/NA	Water	300.0	
440-242700-2	MW-3-5-29-19	Total/NA	Water	300.0	
440-242700-3	MW-4-5-29-19	Total/NA	Water	300.0	
440-242700-4	DUP-5-29-19	Total/NA	Water	300.0	
MB 440-550618/6	Method Blank	Total/NA	Water	300.0	
LCS 440-550618/5	Lab Control Sample	Total/NA	Water	300.0	
440-242700-4 MS	DUP-5-29-19	Total/NA	Water	300.0	
440-242700-4 MSD	DUP-5-29-19	Total/NA	Water	300.0	

Metals

Prep Batch: 552709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-242700-1	MW-1-5-29-19	Total Recoverable	Water	3005A	
440-242700-2	MW-3-5-29-19	Total Recoverable	Water	3005A	
440-242700-3	MW-4-5-29-19	Total Recoverable	Water	3005A	
440-242700-4	DUP-5-29-19	Total Recoverable	Water	3005A	
MB 440-552709/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 440-552709/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-243420-M-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
440-243420-M-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 552986

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-242700-1	MW-1-5-29-19	Total Recoverable	Water	6010B	552709
440-242700-2	MW-3-5-29-19	Total Recoverable	Water	6010B	552709
440-242700-3	MW-4-5-29-19	Total Recoverable	Water	6010B	552709
440-242700-4	DUP-5-29-19	Total Recoverable	Water	6010B	552709
MB 440-552709/1-A	Method Blank	Total Recoverable	Water	6010B	552709
LCS 440-552709/2-A	Lab Control Sample	Total Recoverable	Water	6010B	552709
440-243420-M-1-B MS	Matrix Spike	Total Recoverable	Water	6010B	552709
440-243420-M-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	552709

General Chemistry

Analysis Batch: 550979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-242700-1	MW-1-5-29-19	Total/NA	Water	SM 2540C	
440-242700-2	MW-3-5-29-19	Total/NA	Water	SM 2540C	
440-242700-3	MW-4-5-29-19	Total/NA	Water	SM 2540C	
440-242700-4	DUP-5-29-19	Total/NA	Water	SM 2540C	
MB 440-550979/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-550979/2	Lab Control Sample	Total/NA	Water	SM 2540C	
440-242684-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Definitions/Glossary

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

Job ID: 440-242700-1

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Accreditation/Certification Summary

Client: FPL Energy Solar Partners III-VII, LLC
Job ID: 440-242700-1
Project/Site: Nextera Kramer Junction

Laboratory: Eurofins TestAmerica, Irvine

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	CA01531	06-30-19 *
Arizona	State Program	9	AZ0671	10-14-19
California	LA Cty Sanitation Districts	9	10256	06-30-19 *
California	State Program	9	CA ELAP 2706	06-30-19 *
Guam	State Program	9	Cert. No. 19-005R	01-23-20
Hawaii	State Program	9	N/A	01-29-20
Kansas	NELAP	7	E-10420	07-31-19 *
Nevada	State Program	9	CA015312018-1	07-31-19
New Mexico	State Program	6	N/A	01-29-20
Oregon	NELAP	10	4028	01-29-20
US Fish & Wildlife	Federal		058448	07-31-19
USDA	Federal		P330-18-00214	07-09-21
Washington	State Program	10	C900	09-03-19

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody Record 309788

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

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

Client Contact	Project Manager: Glen Kelly	Site Contact:	Date: 5-31-19	COC No: 1 of 1 COCs
Company Name: Nextera	Tel/Fax:	Lab Contact:	Carrier:	Sampler:
Address:	Analysis Turnaround Time: ☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only: Walk-in Client: Lab Sampling:
City/State/Zip:	TAT if different from Below: ☒ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day			Job / SDG No :
Phone:				
Fax:				
Project Name: Nextera - Kramer Junction				
Site:				
P O #				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Sodium Sulfate SPLP	Sample Specific Notes.
MW-1-5-29-19	5-29-19	1450	G	GW	1	N	N	X X X	
MW-3- "		1610			1			X X X	
MW-4- "		1700			1			X X X	
Dup- "		—			1			X X X	
									5/31/19 dc

440-242700 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: 1.5 Corr'd 1.8 | Therm ID No : 93

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Nextera	5-31-19 1530			
Relinquished by:	Company:	Date/Time	Received by:	Company:	Date/Time
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time
				TA-IRV	5/31/19 1530

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Chain of Custody Record 309788

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

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

Client Contact	Project Manager: Glen Kirby	Site Contact:	Date: 5-31-19	COC No: 1 of 1 COCs
Company Name: Nextera	Tel/Fax:	Lab Contact:	Carrier:	Sampler:
Address:	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip:	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
Phone	TAT if different from Below			Lab Sampling:
Fax:	☒ 2 weeks			
Project Name: Nextera - Kramer Junction	☐ 1 week			Job / SDG No.:
Site	☐ 2 days			
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)	Sodium Sulfate			Sample Specific Notes:
MW-1-5-29-19	5-29-19	1450	G	GW	1	N	N	X	X	X	
MW-3- "		1610			1			X	X	X	
MW-4- "		1700			1			X	X	X	
Dup- "		—			1			X	X	X	

5/31/19 dc

440-242700 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. 1.5 Corr'd. 1.8 | Therm ID No. 93

Relinquished by:	Company:	Date/Time	Received by:	Company:	Date/Time
		5-31-19 1530			
Relinquished by	Company	Date/Time:	Received by	Company	Date/Time
Relinquished by:	Company	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TA-IRV	5/31/19 1530

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6/17/2019

Login Sample Receipt Checklist

Client: FPL Energy Solar Partners III-VII, LLC

Job Number: 440-242700-1

Login Number: 242700
List Number: 1
Creator: Escalante, Maria I

List Source: Eurofins TestAmerica, 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	

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 440-249907-1
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:
9/25/2019 12:15:54 PM

Nicole McCabe, Project Manager I
(916)374-4344
nicole.mccabe@testamericainc.com

Table of Contents

Sample Summary

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

Job ID: 440-249907-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-249907-1	MW-1-9-9-19	Water	09/09/19 12:50	09/11/19 15:20	
440-249907-2	MW-3-9-9-19	Water	09/09/19 14:20	09/11/19 15:20	
440-249907-3	MW-4-9-9-19	Water	09/09/19 15:10	09/11/19 15:20	
440-249907-4	DUP-9-9-19	Water	09/09/19 00:01	09/11/19 15:20	

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

Job ID: 440-249907-1

Job ID: 440-249907-1

Laboratory: Eurofins TestAmerica, Irvine

Narrative

Receipt
The samples were received on 9/11/2019 3:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.1º C.

Receipt Exceptions
The following samples were improperly preserved in the field: MW-1-9-9-19 (440-249907-1), MW-3-9-9-19 (440-249907-2), MW-4-9-9-19 (440-249907-3) and DUP-9-9-19 (440-249907-4). The preservative used is not compatible with the analytes requested

Preserved A-1, A-2. A-3, A-4 with nitric acid for Sodium analysis. The rest of the sample was split into a separate 1L poly for Sulfate and TDS

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

Metals
Method(s) 6010B: The continuing calibration blank (CCB) for analytical batch 440-569719 contained Sodium above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method(s) 6010B: The method blank for preparation batch 440-569592 and analytical batch 440-569719 contained Sodium above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

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.

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

Job ID: 440-249907-1

Client Sample ID: MW-1-9-9-19

Lab Sample ID: 440-249907-1

Date Collected: 09/09/19 12:50
Matrix: Water
Date Received: 09/11/19 15:20

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	340		25		mg/L			09/11/19 18:54	50

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	320	B ^	0.50		mg/L		09/19/19 08:08	09/19/19 14:58	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1300		10		mg/L			09/16/19 08:50	1

Client Sample ID: MW-3-9-9-19

Lab Sample ID: 440-249907-2

Date Collected: 09/09/19 14:20
Matrix: Water
Date Received: 09/11/19 15:20

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	220		25		mg/L			09/11/19 19:08	50

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	250	B ^	0.50		mg/L		09/19/19 08:08	09/19/19 15:00	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	950		10		mg/L			09/16/19 08:50	1

Client Sample ID: MW-4-9-9-19

Lab Sample ID: 440-249907-3

Date Collected: 09/09/19 15:10
Matrix: Water
Date Received: 09/11/19 15:20

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	200		25		mg/L			09/11/19 19:22	50

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	220	B ^	0.50		mg/L		09/19/19 08:08	09/19/19 15:03	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	840		10		mg/L			09/16/19 08:50	1

Client Sample ID: DUP-9-9-19

Lab Sample ID: 440-249907-4

Date Collected: 09/09/19 00:01
Matrix: Water
Date Received: 09/11/19 15:20

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	340		25		mg/L			09/11/19 19:36	50

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	320	B ^	0.50		mg/L		09/19/19 08:08	09/19/19 15:12	1

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

Job ID: 440-249907-1

Client Sample ID: DUP-9-9-19
Date Collected: 09/09/19 00:01
Date Received: 09/11/19 15:20

Lab Sample ID: 440-249907-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1300		10		mg/L			09/16/19 08:50	1

Method Summary

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

Job ID: 440-249907-1

Method	Method Description	Protocol	Laboratory
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

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 TestAmerica, 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: 440-249907-1

Client Sample ID: MW-1-9-9-19

Lab Sample ID: 440-249907-1

Date Collected: 09/09/19 12:50
Matrix: Water
Date Received: 09/11/19 15:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			568103	09/11/19 18:54	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	569592	09/19/19 08:08	BV	TAL IRV
Total Recoverable	Analysis	6010B		1			569719	09/19/19 14:58	TQN	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	568882	09/16/19 08:50	XL	TAL IRV

Client Sample ID: MW-3-9-9-19

Lab Sample ID: 440-249907-2

Date Collected: 09/09/19 14:20
Matrix: Water
Date Received: 09/11/19 15:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			568103	09/11/19 19:08	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	569592	09/19/19 08:08	BV	TAL IRV
Total Recoverable	Analysis	6010B		1			569719	09/19/19 15:00	TQN	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	568882	09/16/19 08:50	XL	TAL IRV

Client Sample ID: MW-4-9-9-19

Lab Sample ID: 440-249907-3

Date Collected: 09/09/19 15:10
Matrix: Water
Date Received: 09/11/19 15:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			568103	09/11/19 19:22	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	569592	09/19/19 08:08	BV	TAL IRV
Total Recoverable	Analysis	6010B		1			569719	09/19/19 15:03	TQN	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	568882	09/16/19 08:50	XL	TAL IRV

Client Sample ID: DUP-9-9-19

Lab Sample ID: 440-249907-4

Date Collected: 09/09/19 00:01
Matrix: Water
Date Received: 09/11/19 15:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		50			568103	09/11/19 19:36	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	569592	09/19/19 08:08	BV	TAL IRV
Total Recoverable	Analysis	6010B		1			569719	09/19/19 15:12	TQN	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	568882	09/16/19 08:50	XL	TAL IRV

Laboratory References:

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

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

Job ID: 440-249907-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-568103/6
Matrix: Water
Analysis Batch: 568103

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		0.50		mg/L			09/11/19 11:10	1

Lab Sample ID: LCS 440-568103/5
Matrix: Water
Analysis Batch: 568103

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			5.00	5.02		mg/L		100	90 - 110		

Lab Sample ID: 440-249907-4 MS
Matrix: Water
Analysis Batch: 568103

Client Sample ID: DUP-9-9-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	340		250	584		mg/L		99	80 - 120		

Lab Sample ID: 440-249907-4 MSD
Matrix: Water
Analysis Batch: 568103

Client Sample ID: DUP-9-9-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	340		250	587		mg/L		100	80 - 120	0	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-569592/1-A
Matrix: Water
Analysis Batch: 569719

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 569592

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	0.811		0.50		mg/L		09/19/19 08:08	09/19/19 14:40	1

Lab Sample ID: LCS 440-569592/2-A
Matrix: Water
Analysis Batch: 569719

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 569592

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sodium			10.0	10.4		mg/L		104	80 - 120		

Lab Sample ID: 440-250279-C-1-B MS
Matrix: Water
Analysis Batch: 569719

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 569592

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sodium	11	B ^	10.0	21.1		mg/L		105	75 - 125		

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

Lab Sample ID: 440-250279-C-1-C MSD
Matrix: Water
Analysis Batch: 569719

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 569592

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sodium	11	B ^	10.0	20.6		mg/L		101	75 - 125	2	20

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

Lab Sample ID: MB 440-568882/1
Matrix: Water
Analysis Batch: 568882

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			09/16/19 08:50	1

Lab Sample ID: LCS 440-568882/2
Matrix: Water
Analysis Batch: 568882

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	988		mg/L		99	90 - 110		

Lab Sample ID: 440-249672-G-1 DU
Matrix: Water
Analysis Batch: 568882

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	4700			4580		mg/L				2	5

QC Association Summary

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

Job ID: 440-249907-1

HPLC/IC

Analysis Batch: 568103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-249907-1	MW-1-9-9-19	Total/NA	Water	300.0	
440-249907-2	MW-3-9-9-19	Total/NA	Water	300.0	
440-249907-3	MW-4-9-9-19	Total/NA	Water	300.0	
440-249907-4	DUP-9-9-19	Total/NA	Water	300.0	
MB 440-568103/6	Method Blank	Total/NA	Water	300.0	
LCS 440-568103/5	Lab Control Sample	Total/NA	Water	300.0	
440-249907-4 MS	DUP-9-9-19	Total/NA	Water	300.0	
440-249907-4 MSD	DUP-9-9-19	Total/NA	Water	300.0	

Metals

Prep Batch: 569592

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-249907-1	MW-1-9-9-19	Total Recoverable	Water	3005A	
440-249907-2	MW-3-9-9-19	Total Recoverable	Water	3005A	
440-249907-3	MW-4-9-9-19	Total Recoverable	Water	3005A	
440-249907-4	DUP-9-9-19	Total Recoverable	Water	3005A	
MB 440-569592/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 440-569592/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-250279-C-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
440-250279-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 569719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-249907-1	MW-1-9-9-19	Total Recoverable	Water	6010B	569592
440-249907-2	MW-3-9-9-19	Total Recoverable	Water	6010B	569592
440-249907-3	MW-4-9-9-19	Total Recoverable	Water	6010B	569592
440-249907-4	DUP-9-9-19	Total Recoverable	Water	6010B	569592
MB 440-569592/1-A	Method Blank	Total Recoverable	Water	6010B	569592
LCS 440-569592/2-A	Lab Control Sample	Total Recoverable	Water	6010B	569592
440-250279-C-1-B MS	Matrix Spike	Total Recoverable	Water	6010B	569592
440-250279-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	569592

General Chemistry

Analysis Batch: 568882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-249907-1	MW-1-9-9-19	Total/NA	Water	SM 2540C	
440-249907-2	MW-3-9-9-19	Total/NA	Water	SM 2540C	
440-249907-3	MW-4-9-9-19	Total/NA	Water	SM 2540C	
440-249907-4	DUP-9-9-19	Total/NA	Water	SM 2540C	
MB 440-568882/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-568882/2	Lab Control Sample	Total/NA	Water	SM 2540C	
440-249672-G-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Definitions/Glossary

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

Job ID: 440-249907-1

Qualifiers

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
B	Compound was found in the blank and sample.

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Accreditation/Certification Summary

Client: FPL Energy Solar Partners III-VII, LLC
Job ID: 440-249907-1
Project/Site: Nextera Kramer Junction

Laboratory: Eurofins TestAmerica, Irvine

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska	State	CA01531	06-30-20
Alaska	State Program	CA01531	06-30-20
Arizona	State Program	AZ0671	10-14-19 *
California	LA Cty Sanitation Districts	10256	06-30-20
California	State	2706	06-30-20
California	State Program	CA ELAP 2706	06-30-20
Guam	State	19-005R	01-23-20
Guam	State Program	Cert. No. 19-005R	01-23-20
Hawaii	State Program	N/A	01-29-20
Kansas	NELAP	E-10420	07-31-20
Kansas	NELAP	E-10420	07-31-20
Nevada	State Program	CA015312019-5	07-31-20
New Mexico	State Program	N/A	01-29-20
Oregon	NELAP	4028	01-29-20
Oregon	NELAP	4028 - 006	01-29-20
US Fish & Wildlife	Federal	058448	07-31-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	Federal	P330-18-00214	07-09-21
USDA	US Federal Programs	P330-18-00214	07-09-21
Washington	State Program	C900	09-03-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Chain of Custody Record

392013

eurofins | Environment Testing TestAmerica

Address: _____

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

TAL-8210

Client Contact	Project Manager: Glen King	Site Contact:	Date: 9-11-19	COC No
Company Name: NextEra	Tel/Email:	Lab Contact:	Carrier:	1 of 1 COCs
Address:	Analysis Turnaround Time			Sampler.
City/State/Zip:	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone	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)				Sample Specific Notes
MW-1-9-9-19	9-9-19	1250	G	GW	1	N	N	X	X	X	
MW-3 - "		1420			1			X	X	X	
MW-4 - "		1570			1			X	X	X	
Dup - "		—			1			X	X	X	

440-249907 Chain of Custody

9/11/19 4D

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. 0.4 Corr'd 0.1 | Therm ID No. IR94

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
	NextEra	9-11-19 1520			
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Relinquished by:	Company.	Date/Time.	Received in Laboratory by:	Company	Date/Time:
				TAIRV	9/11/19 1520

Login Sample Receipt Checklist

Client: FPL Energy Solar Partners III-VII, LLC

Job Number: 440-249907-1

Login Number: 249907

List Source: Eurofins TestAmerica, Irvine

List Number: 1

Creator: Dolidze, Lado

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.	False	Refer to Job Narrative for details.
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.	False	Refer to Job Narrative for details.
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

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

Laboratory Job ID: 440-257199-1
Laboratory Sample Delivery Group: California
Client Project/Site: Nextera Kramer Junction

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

Attn: Ralph DeLaParra

Authorized for release by:
12/31/2019 2:31:05 PM

Sheri Fama, Project Manager I
(949)260-3274
sheri.fama@testamericainc.com

Table of Contents

Sample Summary

Client: Northstar Environmental Remediation
Project/Site: Nextera Kramer Junction

Job ID: 440-257199-1
SDG: California

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-257199-1	MW-1-12-10-19	Water	12/10/19 14:10	12/12/19 13:35	
440-257199-2	MW-4-12-10-19	Water	12/10/19 16:25	12/12/19 13:35	
440-257199-3	Dup-12-10-19	Water	12/10/19 00:01	12/12/19 13:35	
440-257199-4	LFCG'-12-10-19	Solid	12/10/19 12:40	12/12/19 13:35	

Job ID: 440-257199-1

Laboratory: Eurofins TestAmerica, Irvine

Narrative

Job Narrative
440-257199-1

Comments
No additional comments.

Receipt
The samples were received on 12/12/2019 1:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.5º C.

HPLC/IC
Method 300.0: The following samples were received outside of holding time: MW-1-12-10-19 (440-257199-1) and Dup-12-10-19 (440-257199-3).

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

GC Semi VOA
Method 8015B: Insufficient 8015-DRO sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 440-585671 and analytical batch 440-586137. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch: (LCS 440-585671/4-A)

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

Metals
Method 3005A: The following samples for metals were received unpreserved and were preserved upon receipt to the laboratory: MW-1-12-10-19 (440-257199-1), MW-4-12-10-19 (440-257199-2) and Dup-12-10-19 (440-257199-3). Regulatory documents require a 24-hour waiting period from the time of the addition of the acid preservative to the time of digestion.

1.0mL of HNO3 was added to each container A-1, A-2, and A-3 on 12/27/19 at 10:22

HNO3 Bottle Lot # 000221803

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 440-585671. 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-1-12-10-19

Lab Sample ID: 440-257199-1

Date Collected: 12/10/19 14:10
Matrix: Water
Date Received: 12/12/19 13:35

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		12/13/19 05:47	12/16/19 12:26	1
1,1'-Biphenyl	ND		0.097		mg/L		12/13/19 05:47	12/16/19 12:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*79*		*45 - 120*	*12/13/19 05:47*	*12/16/19 12:26*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**280**		25		mg/L			12/12/19 17:46	50
Orthophosphate as PO4	ND	H	0.50		mg/L			12/12/19 17:30	1
Sulfate	**320**		25		mg/L			12/12/19 17:46	50

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**11**		0.50		mg/L		12/28/19 11:21	12/29/19 11:30	1
Sodium	**340**		0.50		mg/L		12/28/19 11:21	12/29/19 11:30	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1200**		10		mg/L			12/16/19 15:00	1

Client Sample ID: MW-4-12-10-19

Lab Sample ID: 440-257199-2

Date Collected: 12/10/19 16:25
Matrix: Water
Date Received: 12/12/19 13:35

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.098		mg/L		12/13/19 05:47	12/16/19 12:49	1
1,1'-Biphenyl	ND		0.098		mg/L		12/13/19 05:47	12/16/19 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*68*		*45 - 120*	*12/13/19 05:47*	*12/16/19 12:49*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**200**		25		mg/L			12/12/19 16:39	50
Orthophosphate as PO4	ND		0.50		mg/L			12/12/19 16:15	1
Sulfate	**200**		25		mg/L			12/12/19 16:39	50

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**5.7**		0.50		mg/L		12/28/19 11:21	12/29/19 11:32	1
Sodium	**230**		0.50		mg/L		12/28/19 11:21	12/29/19 11:32	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**840**		10		mg/L			12/16/19 15:00	1

Client: Northstar Environmental Remediation
Project/Site: Nextera Kramer Junction

Job ID: 440-257199-1
SDG: California

Client Sample ID: Dup-12-10-19

Lab Sample ID: 440-257199-3

Date Collected: 12/10/19 00:01
Matrix: Water
Date Received: 12/12/19 13:35

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.098		mg/L		12/13/19 05:47	12/16/19 13:12	1
1,1'-Biphenyl	ND		0.098		mg/L		12/13/19 05:47	12/16/19 13:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*68*		*45 - 120*	*12/13/19 05:47*	*12/16/19 13:12*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate as PO4	**0.92**	**H F1 H3**	0.50		mg/L			12/12/19 16:19	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**290**		25		mg/L			12/12/19 17:14	50
Sulfate	**340**		25		mg/L			12/12/19 17:14	50

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**11**		0.50		mg/L		12/28/19 11:21	12/29/19 11:34	1
Sodium	**340**		0.50		mg/L		12/28/19 11:21	12/29/19 11:34	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1200**		10		mg/L			12/16/19 15:00	1

Client Sample ID: LFCG'-12-10-19

Lab Sample ID: 440-257199-4

Date Collected: 12/10/19 12:40
Matrix: Solid
Date Received: 12/12/19 13:35

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		12/13/19 08:22	12/13/19 14:02	1
1,1'-Biphenyl	ND		5.0		mg/Kg		12/13/19 08:22	12/13/19 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*89*		*40 - 140*	*12/13/19 08:22*	*12/13/19 14:02*	*1*

Method Summary

Client: Northstar Environmental Remediation
Project/Site: Nextera Kramer Junction

Job ID: 440-257199-1
SDG: California

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 TestAmerica, Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

Lab Chronicle

Client: Northstar Environmental Remediation
Project/Site: Nextera Kramer Junction

Job ID: 440-257199-1
SDG: California

Client Sample ID: MW-1-12-10-19
Date Collected: 12/10/19 14:10
Date Received: 12/12/19 13:35

Lab Sample ID: 440-257199-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1035 mL	1 mL	585671	12/13/19 05:47	L1H	TAL IRV
Total/NA	Analysis	8015B		1			586137	12/16/19 12:26	MPD	TAL IRV
Total/NA	Analysis	300.0		1			585468	12/12/19 17:30	NTN	TAL IRV
Total/NA	Analysis	300.0		50			585469	12/12/19 17:46	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	588199	12/28/19 11:21	M1G	TAL IRV
Total Recoverable	Analysis	6010B		1			588368	12/29/19 11:30	KE	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	586152	12/16/19 15:00	XL	TAL IRV

Client Sample ID: MW-4-12-10-19
Date Collected: 12/10/19 16:25
Date Received: 12/12/19 13:35

Lab Sample ID: 440-257199-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1020 mL	1 mL	585671	12/13/19 05:47	L1H	TAL IRV
Total/NA	Analysis	8015B		1			586137	12/16/19 12:49	MPD	TAL IRV
Total/NA	Analysis	300.0		1			585470	12/12/19 16:15	NTN	TAL IRV
Total/NA	Analysis	300.0		50			585471	12/12/19 16:39	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	588199	12/28/19 11:21	M1G	TAL IRV
Total Recoverable	Analysis	6010B		1			588368	12/29/19 11:32	KE	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	586152	12/16/19 15:00	XL	TAL IRV

Client Sample ID: Dup-12-10-19
Date Collected: 12/10/19 00:01
Date Received: 12/12/19 13:35

Lab Sample ID: 440-257199-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1020 mL	1 mL	585671	12/13/19 05:47	L1H	TAL IRV
Total/NA	Analysis	8015B		1			586137	12/16/19 13:12	MPD	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	585468	12/12/19 16:19	NTN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	585469	12/12/19 16:19	NTN	TAL IRV
Total/NA	Analysis	300.0	DL	50	5 mL	1.0 mL	585469	12/12/19 17:14	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	588199	12/28/19 11:21	M1G	TAL IRV
Total Recoverable	Analysis	6010B		1			588368	12/29/19 11:34	KE	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	586152	12/16/19 15:00	XL	TAL IRV

Client Sample ID: LFCG'-12-10-19
Date Collected: 12/10/19 12:40
Date Received: 12/12/19 13:35

Lab Sample ID: 440-257199-4
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			15.00 g	1 mL	585724	12/13/19 08:22	EGC	TAL IRV
Total/NA	Analysis	8015B		1			585704	12/13/19 14:02	MPD	TAL IRV

Laboratory References:
TAL IRV = Eurofins TestAmerica, 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 440-585671/1-A
Matrix: Water
Analysis Batch: 586137

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 585671

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.10		mg/L		12/13/19 05:47	12/16/19 11:15	1
1,1'-Biphenyl	ND		0.10		mg/L		12/13/19 05:47	12/16/19 11:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*85*		*45 - 120*	*12/13/19 05:47*	*12/16/19 11:15*	*1*

Lab Sample ID: LCS 440-585671/4-A
Matrix: Water
Analysis Batch: 586137

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 585671

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene, 1,1'-oxybis-			0.100	0.0770	J	mg/L		77	50 - 115		
1,1'-Biphenyl			0.100	0.0763	J	mg/L		76	50 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*74*		*45 - 120*

Lab Sample ID: LCSD 440-585671/5-A
Matrix: Water
Analysis Batch: 586137

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 585671

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene, 1,1'-oxybis-			0.100	0.0802	J	mg/L		80	50 - 115	4	30
1,1'-Biphenyl			0.100	0.0791	J	mg/L		79	50 - 115	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane	*78*		*45 - 120*

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

Lab Sample ID: MB 440-585724/1-A
Matrix: Solid
Analysis Batch: 585704

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 585724

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		5.0		mg/Kg		12/13/19 08:22	12/13/19 12:28	1
1,1'-Biphenyl	ND		5.0		mg/Kg		12/13/19 08:22	12/13/19 12:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*105*		*40 - 140*	*12/13/19 08:22*	*12/13/19 12:28*	*1*

Lab Sample ID: LCS 440-585724/5-A
Matrix: Solid
Analysis Batch: 585704

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 585724

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene, 1,1'-oxybis-			6.67	7.20		mg/Kg		108	45 - 115		
1,1'-Biphenyl			6.67	7.48		mg/Kg		112	45 - 115		

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
n-Octacosane	109		40 - 140

Lab Sample ID: 440-257199-4 MS — **Client Sample ID: LFCG'-12-10-19**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 585704 — **Prep Batch: 585724**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene, 1,1'-oxybis-	ND		6.65	6.01		mg/Kg		90	40 - 120
1,1'-Biphenyl	ND		6.65	6.03		mg/Kg		91	40 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
n-Octacosane	91		40 - 140

Lab Sample ID: 440-257199-4 MSD — **Client Sample ID: LFCG'-12-10-19**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 585704 — **Prep Batch: 585724**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene, 1,1'-oxybis-	ND		6.66	6.18		mg/Kg		93	40 - 120	3	30
1,1'-Biphenyl	ND		6.66	6.32		mg/Kg		95	40 - 120	5	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
n-Octacosane	93		40 - 140

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-585468/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 585468

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate as PO4	ND		0.50		mg/L			12/12/19 12:41	1

Lab Sample ID: LCS 440-585468/5 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 585468

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Orthophosphate as PO4	5.00	5.00		mg/L		100	90 - 110

Lab Sample ID: 440-257199-3 MS — **Client Sample ID: Dup-12-10-19**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 585468

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Orthophosphate as PO4	0.92	H F1 H3	5.00	7.05	F1	mg/L		123	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 440-257199-3 MSD
Matrix: Water
Analysis Batch: 585468

Client Sample ID: Dup-12-10-19
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	0.92	H F1 H3	5.00	7.61	F1	mg/L		134	80 - 120	8	20

Lab Sample ID: MB 440-585469/6
Matrix: Water
Analysis Batch: 585469

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			12/12/19 12:41	1
Sulfate	ND		0.50		mg/L			12/12/19 12:41	1

Lab Sample ID: LCS 440-585469/5
Matrix: Water
Analysis Batch: 585469

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	4.72		mg/L		94	90 - 110		

Lab Sample ID: 440-257199-3 MS
Matrix: Water
Analysis Batch: 585469

Client Sample ID: Dup-12-10-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	430	E	5.00	423	E 4	mg/L		-62	80 - 120		
Sulfate	460	E	5.00	463	E 4	mg/L		39	80 - 120		

Lab Sample ID: 440-257199-3 MSD
Matrix: Water
Analysis Batch: 585469

Client Sample ID: Dup-12-10-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	430	E	5.00	424	E 4	mg/L		-51	80 - 120	0	20
Sulfate	460	E	5.00	463	E 4	mg/L		41	80 - 120	0	20

Lab Sample ID: MB 440-585470/6
Matrix: Water
Analysis Batch: 585470

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			12/12/19 11:45	1

Lab Sample ID: LCS 440-585470/5
Matrix: Water
Analysis Batch: 585470

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	4.90		mg/L		98	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 440-257089-A-12 MS
Matrix: Water
Analysis Batch: 585470

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		50.0	43.1		mg/L		86	80 - 120		

Lab Sample ID: 440-257089-A-12 MSD
Matrix: Water
Analysis Batch: 585470

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		50.0	41.2		mg/L		82	80 - 120	4	20

Lab Sample ID: MB 440-585471/6
Matrix: Water
Analysis Batch: 585471

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			12/12/19 11:45	1
Sulfate	ND		0.50		mg/L			12/12/19 11:45	1

Lab Sample ID: LCS 440-585471/5
Matrix: Water
Analysis Batch: 585471

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	4.91		mg/L		98	90 - 110		
Sulfate			5.00	4.90		mg/L		98	90 - 110		

Lab Sample ID: 440-257089-A-12 MS
Matrix: Water
Analysis Batch: 585471

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	58		50.0	109		mg/L		102	80 - 120		
Sulfate	1800	E	50.0	1850	E 4	mg/L		117	80 - 120		

Lab Sample ID: 440-257089-A-12 MSD
Matrix: Water
Analysis Batch: 585471

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	58		50.0	110		mg/L		103	80 - 120	0	20
Sulfate	1800	E	50.0	1840	E 4	mg/L		98	80 - 120	1	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-588199/1-A
Matrix: Water
Analysis Batch: 588368

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 588199

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Potassium	ND		0.50		mg/L		12/28/19 11:21	12/29/19 10:36	1
Sodium	ND		0.50		mg/L		12/28/19 11:21	12/29/19 10:36	1

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

Lab Sample ID: LCS 440-588199/2-A
Matrix: Water
Analysis Batch: 588368

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 588199

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Potassium			10.0	10.3		mg/L		103	80 - 120		
Sodium			10.0	10.2		mg/L		102	80 - 120		

Lab Sample ID: 440-257894-C-1-E MS
Matrix: Water
Analysis Batch: 588368

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 588199

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Potassium	14		10.0	25.9		mg/L		122	75 - 125		
Sodium	88		10.0	106	4	mg/L		183	75 - 125		

Lab Sample ID: 440-257894-C-1-F MSD
Matrix: Water
Analysis Batch: 588368

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 588199

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Potassium	14		10.0	24.4		mg/L		107	75 - 125	6	20
Sodium	88		10.0	101	4	mg/L		134	75 - 125	5	20

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

Lab Sample ID: MB 440-586152/1
Matrix: Water
Analysis Batch: 586152

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			12/16/19 15:00	1

Lab Sample ID: LCS 440-586152/2
Matrix: Water
Analysis Batch: 586152

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	970		mg/L		97	90 - 110		

Lab Sample ID: 440-257199-1 DU
Matrix: Water
Analysis Batch: 586152

Client Sample ID: MW-1-12-10-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1200			1270		mg/L				2	5

GC Semi VOA

Prep Batch: 585671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257199-1	MW-1-12-10-19	Total/NA	Water	3510C	
440-257199-2	MW-4-12-10-19	Total/NA	Water	3510C	
440-257199-3	Dup-12-10-19	Total/NA	Water	3510C	
MB 440-585671/1-A	Method Blank	Total/NA	Water	3510C	
LCS 440-585671/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-585671/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 585704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257199-4	LFCG'-12-10-19	Total/NA	Solid	8015B	585724
MB 440-585724/1-A	Method Blank	Total/NA	Solid	8015B	585724
LCS 440-585724/5-A	Lab Control Sample	Total/NA	Solid	8015B	585724
440-257199-4 MS	LFCG'-12-10-19	Total/NA	Solid	8015B	585724
440-257199-4 MSD	LFCG'-12-10-19	Total/NA	Solid	8015B	585724

Prep Batch: 585724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257199-4	LFCG'-12-10-19	Total/NA	Solid	3546	
MB 440-585724/1-A	Method Blank	Total/NA	Solid	3546	
LCS 440-585724/5-A	Lab Control Sample	Total/NA	Solid	3546	
440-257199-4 MS	LFCG'-12-10-19	Total/NA	Solid	3546	
440-257199-4 MSD	LFCG'-12-10-19	Total/NA	Solid	3546	

Analysis Batch: 586137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257199-1	MW-1-12-10-19	Total/NA	Water	8015B	585671
440-257199-2	MW-4-12-10-19	Total/NA	Water	8015B	585671
440-257199-3	Dup-12-10-19	Total/NA	Water	8015B	585671
MB 440-585671/1-A	Method Blank	Total/NA	Water	8015B	585671
LCS 440-585671/4-A	Lab Control Sample	Total/NA	Water	8015B	585671
LCSD 440-585671/5-A	Lab Control Sample Dup	Total/NA	Water	8015B	585671

HPLC/IC

Analysis Batch: 585468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257199-1	MW-1-12-10-19	Total/NA	Water	300.0	
440-257199-3	Dup-12-10-19	Total/NA	Water	300.0	
MB 440-585468/6	Method Blank	Total/NA	Water	300.0	
LCS 440-585468/5	Lab Control Sample	Total/NA	Water	300.0	
440-257199-3 MS	Dup-12-10-19	Total/NA	Water	300.0	
440-257199-3 MSD	Dup-12-10-19	Total/NA	Water	300.0	

Analysis Batch: 585469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257199-1	MW-1-12-10-19	Total/NA	Water	300.0	
440-257199-3	Dup-12-10-19	Total/NA	Water	300.0	
440-257199-3 - DL	Dup-12-10-19	Total/NA	Water	300.0	
MB 440-585469/6	Method Blank	Total/NA	Water	300.0	
LCS 440-585469/5	Lab Control Sample	Total/NA	Water	300.0	
440-257199-3 MS	Dup-12-10-19	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 585469 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257199-3 MSD	Dup-12-10-19	Total/NA	Water	300.0	

Analysis Batch: 585470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257199-2	MW-4-12-10-19	Total/NA	Water	300.0	
MB 440-585470/6	Method Blank	Total/NA	Water	300.0	
LCS 440-585470/5	Lab Control Sample	Total/NA	Water	300.0	
440-257089-A-12 MS	Matrix Spike	Total/NA	Water	300.0	
440-257089-A-12 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 585471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257199-2	MW-4-12-10-19	Total/NA	Water	300.0	
MB 440-585471/6	Method Blank	Total/NA	Water	300.0	
LCS 440-585471/5	Lab Control Sample	Total/NA	Water	300.0	
440-257089-A-12 MS	Matrix Spike	Total/NA	Water	300.0	
440-257089-A-12 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 588199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257199-1	MW-1-12-10-19	Total Recoverable	Water	3005A	
440-257199-2	MW-4-12-10-19	Total Recoverable	Water	3005A	
440-257199-3	Dup-12-10-19	Total Recoverable	Water	3005A	
MB 440-588199/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 440-588199/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-257894-C-1-E MS	Matrix Spike	Total Recoverable	Water	3005A	
440-257894-C-1-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 588368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257199-1	MW-1-12-10-19	Total Recoverable	Water	6010B	588199
440-257199-2	MW-4-12-10-19	Total Recoverable	Water	6010B	588199
440-257199-3	Dup-12-10-19	Total Recoverable	Water	6010B	588199
MB 440-588199/1-A	Method Blank	Total Recoverable	Water	6010B	588199
LCS 440-588199/2-A	Lab Control Sample	Total Recoverable	Water	6010B	588199
440-257894-C-1-E MS	Matrix Spike	Total Recoverable	Water	6010B	588199
440-257894-C-1-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	588199

General Chemistry

Analysis Batch: 586152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257199-1	MW-1-12-10-19	Total/NA	Water	SM 2540C	
440-257199-2	MW-4-12-10-19	Total/NA	Water	SM 2540C	
440-257199-3	Dup-12-10-19	Total/NA	Water	SM 2540C	
MB 440-586152/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-586152/2	Lab Control Sample	Total/NA	Water	SM 2540C	
440-257199-1 DU	MW-1-12-10-19	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 is outside acceptance 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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Accreditation/Certification Summary

Client: Northstar Environmental Remediation
Project/Site: Nextera Kramer Junction

Job ID: 440-257199-1
SDG: California

Laboratory: Eurofins TestAmerica, Irvine

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

Authority	Program	Identification Number	Expiration Date
California	State Program	CA ELAP 2706	06-30-20

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

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

Chain of Custody Record

eurofins

Client Information	Sampler: Ralph DeLaParra	Lab PM: Fama, Sheri M	Carrier Tracking No(s):	COC No: 440-174726-32251 1
Client Contact: Ralph DeLaParra	Phone:	E-Mail: sheri.fama@testamericainc.com		Page: Page 1 of 1
Company: Northstar Environmental Remediation				Job #:
Address: 26225 Enterprise Court	Due Date Requested:			
City: Lake Forest	TAT Requested (days):			
State, Zip: CA, 92630				
Phone: 760-762-3100(Tel)	PO #: Glen King			
Email: ralphdelaparra@cox.net	WO #:			
Project Name: Nextera Kramer Junction	Project #: 44005151			
Site: California	SSOW#:			

Analysis Requested

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

JCL 12/12/19

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_PRO_Flowmar	Mud for Thermal	Chloride	Sodium	Sulfate	TDS	Biphenyl Oxide	Diphenyl Oxide	Potassium	Phosphate	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N											
MW-1-12-10-19	12-10-19	1410	G	Water				X	X	X	X	X	X	X	X			
MW-4 "		1625		Water				X	X	X	X	X	X	X	X			
Dup - "		—		Water				X	X	X	X	X	X	X	X			
LFCG'- "		1240		Solid			X											
				Solid			X											

440-257199 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
X Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ 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
[signature]	12-12-19 @ 1335	NorthStar			
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
			[signature]	12/12/19 1335	TAI

Custody Seals Intact. Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks:
		1.1/1.5 IR-94

Ver 01/16/2019

Login Sample Receipt Checklist

Client: Northstar Environmental Remediation

Job Number: 440-257199-1
SDG Number: California

Login Number: 257199
List Number: 1
Creator: Lagunas, Jorge L

List Source: Eurofins TestAmerica, 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	

ANALYTICAL REPORT

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

Laboratory Job ID: 440-257830-1
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:
1/2/2020 2:06:51 PM

Sheri Fama, Project Manager I
(949)260-3274
sheri.fama@testamericainc.com

Table of Contents

Sample Summary

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

Job ID: 440-257830-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-257830-1	MW-2-12-18-19	Water	12/18/19 12:30	12/19/19 17:08	
440-257830-2	MW-3-12-18-19	Water	12/18/19 15:00	12/19/19 17:08	

Case Narrative

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

Job ID: 440-257830-1

Job ID: 440-257830-1

Laboratory: Eurofins Calscience Irvine

Narrative

Job Narrative
440-257830-1

Comments
No additional comments.

Receipt
The samples were received on 12/19/2019 5:08 PM; the samples arrived in good condition and on ice. The temperature of the cooler at receipt was 1.2º C.

Receipt Exceptions
The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): MW-3-12-18-19 (440-257830-2). The time listed on the COC was 1500 and on the container was listed 1520

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

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

GC Semi VOA
Method 8015B: Insufficient 8015-DRO sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch preparation batch 440-587331 and analytical batch 440-587800. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch: (LCS 440-587331/2-A)

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

Metals
The following samples for metals were received unpreserved and were preserved upon receipt to the laboratory: MW-2-12-18-19 (440-257830-1) and MW-3-12-18-19 (440-257830-2). Regulatory documents require a 24-hour waiting period from the time of the addition of the acid preservative to the time of digestion.

Samples were split and preserved
200mL from each container A-1 and A-2 were preserved in HNO3 poly bottles on 12/30/19 at 07:55
HNO3 Lot # 0000234822
Botttle/Container Lot # 0303801E

Split sample IDs iin TALS:
440-257830-D-1 and D-2

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

Client Sample ID: MW-2-12-18-19

Date Collected: 12/18/19 12:30
Date Received: 12/19/19 17:08

Lab Sample ID: 440-257830-1

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.095		mg/L		12/21/19 06:08	12/23/19 16:53	1
1,1'-Biphenyl	ND		0.095		mg/L		12/21/19 06:08	12/23/19 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*69*		*45 - 120*	*12/21/19 06:08*	*12/23/19 16:53*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**300**		25		mg/L			12/19/19 21:15	50
Orthophosphate as PO4	ND		0.50		mg/L			12/19/19 20:59	1
Sulfate	**230**		25		mg/L			12/19/19 21:15	50

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**44**		0.50		mg/L		12/31/19 08:08	12/31/19 21:12	1
Sodium	**320**		0.50		mg/L		12/31/19 08:08	12/31/19 21:12	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**1100**		10		mg/L			12/23/19 09:11	1

Client Sample ID: MW-3-12-18-19

Date Collected: 12/18/19 15:00
Date Received: 12/19/19 17:08

Lab Sample ID: 440-257830-2

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.098		mg/L		12/21/19 06:18	12/23/19 17:40	1
1,1'-Biphenyl	ND		0.098		mg/L		12/21/19 06:18	12/23/19 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*69*		*45 - 120*	*12/21/19 06:18*	*12/23/19 17:40*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Orthophosphate as PO4	ND	F1	0.50		mg/L			12/19/19 21:31	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**220**		25		mg/L			12/19/19 22:19	50
Sulfate	**220**		25		mg/L			12/19/19 22:19	50

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Potassium	**5.6**		0.50		mg/L		12/31/19 08:08	12/31/19 21:09	1
Sodium	**270**		0.50		mg/L		12/31/19 08:08	12/31/19 21:09	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	**920**		10		mg/L			12/23/19 09:11	1

Method Summary

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

Job ID: 440-257830-1

Method	Method Description	Protocol	Laboratory
8015B	Diesel Range Organics (DRO) (GC)	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

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: 440-257830-1

Client Sample ID: MW-2-12-18-19

Date Collected: 12/18/19 12:30
Date Received: 12/19/19 17:08

Lab Sample ID: 440-257830-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1055 mL	1 mL	587331	12/21/19 06:08	L1H	TAL IRV
Total/NA	Analysis	8015B		1			587603	12/23/19 16:53	RMP	TAL IRV
Total/NA	Analysis	300.0		1			586902	12/19/19 20:59	NTN	TAL IRV
Total/NA	Analysis	300.0		50			586903	12/19/19 21:15	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	588646	12/31/19 08:08	EP	TAL IRV
Total Recoverable	Analysis	6010B		1			588819	12/31/19 21:12	KE	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	587529	12/23/19 09:11	XL	TAL IRV

Client Sample ID: MW-3-12-18-19

Date Collected: 12/18/19 15:00
Date Received: 12/19/19 17:08

Lab Sample ID: 440-257830-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1025 mL	1 mL	587331	12/21/19 06:18	L1H	TAL IRV
Total/NA	Analysis	8015B		1			587603	12/23/19 17:40	RMP	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	586902	12/19/19 21:31	NTN	TAL IRV
Total/NA	Analysis	300.0		1	5 mL	1.0 mL	586903	12/19/19 21:31	NTN	TAL IRV
Total/NA	Analysis	300.0	DL	50			586903	12/19/19 22:19	NTN	TAL IRV
Total Recoverable	Prep	3005A			25 mL	25 mL	588646	12/31/19 08:08	EP	TAL IRV
Total Recoverable	Analysis	6010B		1			588819	12/31/19 21:09	KE	TAL IRV
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	587529	12/23/19 09:11	XL	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 440-587331/1-A
Matrix: Water
Analysis Batch: 587603

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 587331

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene, 1,1'-oxybis-	ND		0.10		mg/L		12/21/19 06:08	12/23/19 16:29	1
1,1'-Biphenyl	ND		0.10		mg/L		12/21/19 06:08	12/23/19 16:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*73*		*45 - 120*	*12/21/19 06:08*	*12/23/19 16:29*	*1*

Lab Sample ID: LCS 440-587331/2-A
Matrix: Water
Analysis Batch: 587800

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 587331

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene, 1,1'-oxybis-			0.100	0.0775	J	mg/L		77	50 - 115		
1,1'-Biphenyl			0.100	0.0513	J	mg/L		51	50 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*72*		*45 - 120*

Lab Sample ID: LCSD 440-587331/3-A
Matrix: Water
Analysis Batch: 587603

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 587331

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene, 1,1'-oxybis-			0.100	0.0745	J	mg/L		75	50 - 115	4	30
1,1'-Biphenyl			0.100	0.0510	J	mg/L		51	50 - 115	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane	*70*		*45 - 120*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 440-586902/6
Matrix: Water
Analysis Batch: 586902

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			12/19/19 11:34	1

Lab Sample ID: LCS 440-586902/5
Matrix: Water
Analysis Batch: 586902

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	4.76		mg/L		95	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 440-257830-2 MS
Matrix: Water
Analysis Batch: 586902

Client Sample ID: MW-3-12-18-19
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	6.53	F1	mg/L		131	80 - 120

Lab Sample ID: 440-257830-2 MSD
Matrix: Water
Analysis Batch: 586902

Client Sample ID: MW-3-12-18-19
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	6.88	F1	mg/L		138	80 - 120	5	20

Lab Sample ID: MB 440-586903/6
Matrix: Water
Analysis Batch: 586903

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			12/19/19 11:34	1
Sulfate	ND		0.50		mg/L			12/19/19 11:34	1

Lab Sample ID: LCS 440-586903/5
Matrix: Water
Analysis Batch: 586903

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	4.87		mg/L		97	90 - 110
Sulfate	5.00	4.89		mg/L		98	90 - 110

Lab Sample ID: 440-257830-2 MS
Matrix: Water
Analysis Batch: 586903

Client Sample ID: MW-3-12-18-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	330	E	5.00	330	E 4	mg/L		39	80 - 120
Sulfate	290	E	5.00	296	E 4	mg/L		77	80 - 120

Lab Sample ID: 440-257830-2 MSD
Matrix: Water
Analysis Batch: 586903

Client Sample ID: MW-3-12-18-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	330	E	5.00	331	E 4	mg/L		63	80 - 120	0	20
Sulfate	290	E	5.00	298	E 4	mg/L		114	80 - 120	1	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-588646/1-A
Matrix: Water
Analysis Batch: 588819

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 588646

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Potassium	ND		0.50		mg/L		12/31/19 08:08	12/31/19 20:33	1
Sodium	ND		0.50		mg/L		12/31/19 08:08	12/31/19 20:33	1

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

Lab Sample ID: LCS 440-588646/2-A
Matrix: Water
Analysis Batch: 588819

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 588646

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	10.0	9.70		mg/L		97	80 - 120
Sodium	10.0	9.94		mg/L		99	80 - 120

Lab Sample ID: 440-258293-C-1-B MS
Matrix: Water
Analysis Batch: 588819

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 588646

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Potassium	15		10.0	26.0		mg/L		111	75 - 125
Sodium	210		10.0	225	4	mg/L		177	75 - 125

Lab Sample ID: 440-258293-C-1-C MSD
Matrix: Water
Analysis Batch: 588819

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 588646

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Potassium	15		10.0	24.5		mg/L		96	75 - 125	6	20
Sodium	210		10.0	211	4	mg/L		30	75 - 125	7	20

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

Lab Sample ID: MB 440-587529/1
Matrix: Water
Analysis Batch: 587529

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			12/23/19 09:11	1

Lab Sample ID: LCS 440-587529/2
Matrix: Water
Analysis Batch: 587529

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	972		mg/L		97	90 - 110

Lab Sample ID: 440-257830-1 DU
Matrix: Water
Analysis Batch: 587529

Client Sample ID: MW-2-12-18-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1100		1130		mg/L		0.3	5

GC Semi VOA

Prep Batch: 587331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257830-1	MW-2-12-18-19	Total/NA	Water	3510C	
440-257830-2	MW-3-12-18-19	Total/NA	Water	3510C	
MB 440-587331/1-A	Method Blank	Total/NA	Water	3510C	
LCS 440-587331/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-587331/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 587603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257830-1	MW-2-12-18-19	Total/NA	Water	8015B	587331
440-257830-2	MW-3-12-18-19	Total/NA	Water	8015B	587331
MB 440-587331/1-A	Method Blank	Total/NA	Water	8015B	587331
LCSD 440-587331/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	587331

Analysis Batch: 587800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 440-587331/2-A	Lab Control Sample	Total/NA	Water	8015B	587331

HPLC/IC

Analysis Batch: 586902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257830-1	MW-2-12-18-19	Total/NA	Water	300.0	
440-257830-2	MW-3-12-18-19	Total/NA	Water	300.0	
MB 440-586902/6	Method Blank	Total/NA	Water	300.0	
LCS 440-586902/5	Lab Control Sample	Total/NA	Water	300.0	
440-257830-2 MS	MW-3-12-18-19	Total/NA	Water	300.0	
440-257830-2 MSD	MW-3-12-18-19	Total/NA	Water	300.0	

Analysis Batch: 586903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257830-1	MW-2-12-18-19	Total/NA	Water	300.0	
440-257830-2	MW-3-12-18-19	Total/NA	Water	300.0	
440-257830-2 - DL	MW-3-12-18-19	Total/NA	Water	300.0	
MB 440-586903/6	Method Blank	Total/NA	Water	300.0	
LCS 440-586903/5	Lab Control Sample	Total/NA	Water	300.0	
440-257830-2 MS	MW-3-12-18-19	Total/NA	Water	300.0	
440-257830-2 MSD	MW-3-12-18-19	Total/NA	Water	300.0	

Metals

Prep Batch: 588646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257830-1	MW-2-12-18-19	Total Recoverable	Water	3005A	
440-257830-2	MW-3-12-18-19	Total Recoverable	Water	3005A	
MB 440-588646/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 440-588646/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-258293-C-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
440-258293-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 588819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257830-1	MW-2-12-18-19	Total Recoverable	Water	6010B	588646

Metals (Continued)

Analysis Batch: 588819 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257830-2	MW-3-12-18-19	Total Recoverable	Water	6010B	588646
MB 440-588646/1-A	Method Blank	Total Recoverable	Water	6010B	588646
LCS 440-588646/2-A	Lab Control Sample	Total Recoverable	Water	6010B	588646
440-258293-C-1-B MS	Matrix Spike	Total Recoverable	Water	6010B	588646
440-258293-C-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	588646

General Chemistry

Analysis Batch: 587529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-257830-1	MW-2-12-18-19	Total/NA	Water	SM 2540C	
440-257830-2	MW-3-12-18-19	Total/NA	Water	SM 2540C	
MB 440-587529/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 440-587529/2	Lab Control Sample	Total/NA	Water	SM 2540C	
440-257830-1 DU	MW-2-12-18-19	Total/NA	Water	SM 2540C	

Definitions/Glossary

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

Job ID: 440-257830-1

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 is outside acceptance limits.

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Accreditation/Certification Summary

Client: FPL Energy Solar Partners III-VII, LLC
Job ID: 440-257830-1
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 Program	CA ELAP 2706	06-30-20

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

Chain of Custody Record

396338

eurofins | Environment Testing TestAmerica

Address: _____

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

TAL-8210

Contact: Northern	Project Manager: Glenn Long	Site Contact:	Date: 12-19-19	COC No. 1 of 1 COCs
Company Name: NewStar Environmental	Tel/Email:	Lab Contact:	Carrier:	Sampler:
Address: 26225 Enterprise	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip:	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client.
Phone:	TAT if different from Below _____			Lab Sampling:
Fax:	☒ 2 weeks			
Project Name: Northern Former Junction	☐ 1 week			Job / SDG No.:
Site.	☐ 2 days			
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	Sodium Sulfate	TDS	Bi-phenyl Oxide	Bi-phenyl Oxide	Potassium Phosphate	Sample Specific Notes:
MW-2-12-18-19	12-18-19	1230	G	GW	3	N	N	X	X	X	X	X	X	X	
MW-3 "	"	15	G	"	3	N	N	X	X	X	X	X	X	X	

12/19/19

440-257830 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. 1.4 Corr'd: 1.2 | Therm ID No.: 12-39

Relinquished by:	Company: NewStar	Date/Time. 12-19-19 1708	Received by:	Company:	Date/Time:
Relinquished by.	Company	Date/Time:	Received by	Company	Date/Time
Relinquished by	Company:	Date/Time.	Received in Laboratory by:	Company: TA-Ku	Date/Time 12/19/19 17:08

Login Sample Receipt Checklist

Client: FPL Energy Solar Partners III-VII, LLC

Job Number: 440-257830-1

Login Number: 257830
List Number: 1
Creator: Bonta, Lucia F

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)	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	