

ROY S. NELSON PLANT

Groundwater Monitoring and Corrective Action 2017 Annual Report

**PREPARED IN COMPLIANCE WITH THE
EPA FINAL RULE FOR THE DISPOSAL OF
COAL COMBUSTION RESIDUALS
TITLE 40 CODE OF FEDERAL REGULATIONS PART 257**



January 2018

**COAL ASH DISPOSAL LANDFILL
WESTLAKE, LA**

**GROUNDWATER MONITORING
AND CORRECTIVE ACTION
2017 ANNUAL REPORT**

**Prepared for
Entergy Services, Inc
639 Loyola Ave
Mail unit L-ENT 3D
New Orleans, LA 70113**

**Prepared By:

Pivotal Engineering LLC,
Eagle Environmental, and
TRC Solutions**

January 2018

TABLE OF CONTENTS

<u>Section</u>	<u>Page No.</u>
1.0 INTRODUCTION	1
2.0 GROUNDWATER MONITORING WELL NETWORK	1
3.0 INSTALLED OR DECOMMISSIONED MONITORING WELLS DURING 2017	1
4.0 GROUNDWATER MONITORING DATA.....	1
5.0 STATUS SUMMARY OF THE 2017 GROUNDWATER MONITORING PROGRAM.....	1
6.0 PROJECTED ACTIVITIES FOR 2018.....	2

Appendices

- A Site Map
- B Sampling Schedule and Analytical Data

1.0 INTRODUCTION

Entergy Louisiana LLC (Entergy), operates a Coal Ash Disposal Landfill (CADL) for the disposal of coal combustion residuals (CCR) at the Roy S. Nelson Plant located in Westlake, Louisiana. The landfill receives CCR generated from the combustion of coal at the Nelson Plant. Management of the CCR at the CADL is performed pursuant to national criteria established in Title 40 Code of Federal Regulations (40 CFR) Part 257 (CCR Rule), published by the United States Environmental Protection Agency (EPA) on April 17, 2015. Entergy has installed a groundwater monitoring system at the CADL that is subject to the groundwater monitoring and corrective action requirements provided under §§257.90 through 257.98 of the CCR Rule. In accordance with §257.90(e) of the CCR Rule, Entergy must prepare an annual report that provides information regarding the groundwater monitoring and corrective action program at the Nelson Plant CADL. This document is intended to provide the required information.

2.0 GROUNDWATER MONITORING WELL NETWORK

Entergy's groundwater monitoring system consists of 14 monitoring wells as shown in Appendix A. Pursuant to §257.91(f) of the CCR Rule, a qualified professional engineer has certified that the groundwater monitoring system has been designed and constructed to meet the requirements of this section of the regulation.

3.0 INSTALLED OR DECOMMISSIONED MONITORING WELLS DURING 2017

No monitoring wells were installed or decommissioned during 2017 at the CADL.

4.0 GROUNDWATER MONITORING DATA

In accordance with §257.90(e)(3), all the monitoring data obtained under §§257.90 through 257.98 are provided in Appendix B along with a summary of the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the sample was collected as part of detection or assessment monitoring.

5.0 STATUS SUMMARY OF THE 2017 GROUNDWATER MONITORING PROGRAM

Groundwater monitoring was performed in accordance with the detection monitoring requirements of §257.94. A summary of activities related to groundwater detection monitoring performed during 2017 is provided below:

- In accordance with §257.94(b), detection monitoring sampling for analysis of Appendix III parameters was performed in March, June and September 2017.
- Detection monitoring sampling was performed at the CADL September 6 through 8, 2017. Verification resampling was performed on October 10 and November 14, 2017 and January 11, 2018. The samples were analyzed for the Appendix III parameters.

- In accordance with §257.91(f), the design and construction of the groundwater monitoring system was certified by a qualified Louisiana-registered professional engineer.
- Pursuant to §257.93(f)(6), the appropriateness of the selected statistical method for evaluating the groundwater monitoring data was certified by a qualified Louisiana-registered professional engineer.
- Statistical evaluation of the detection monitoring data was performed in accordance with the certified statistical method available on Entergy's CCR Rule Compliance Data and Information website. Statistically significant increases (SSIs) over background levels were detected for calcium.
- No problems were encountered during 2017 with regard to the groundwater monitoring system. Therefore, no actions were required to modify the system.
- The facility remained in detection monitoring status for the duration of 2017.

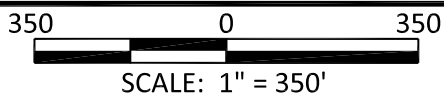
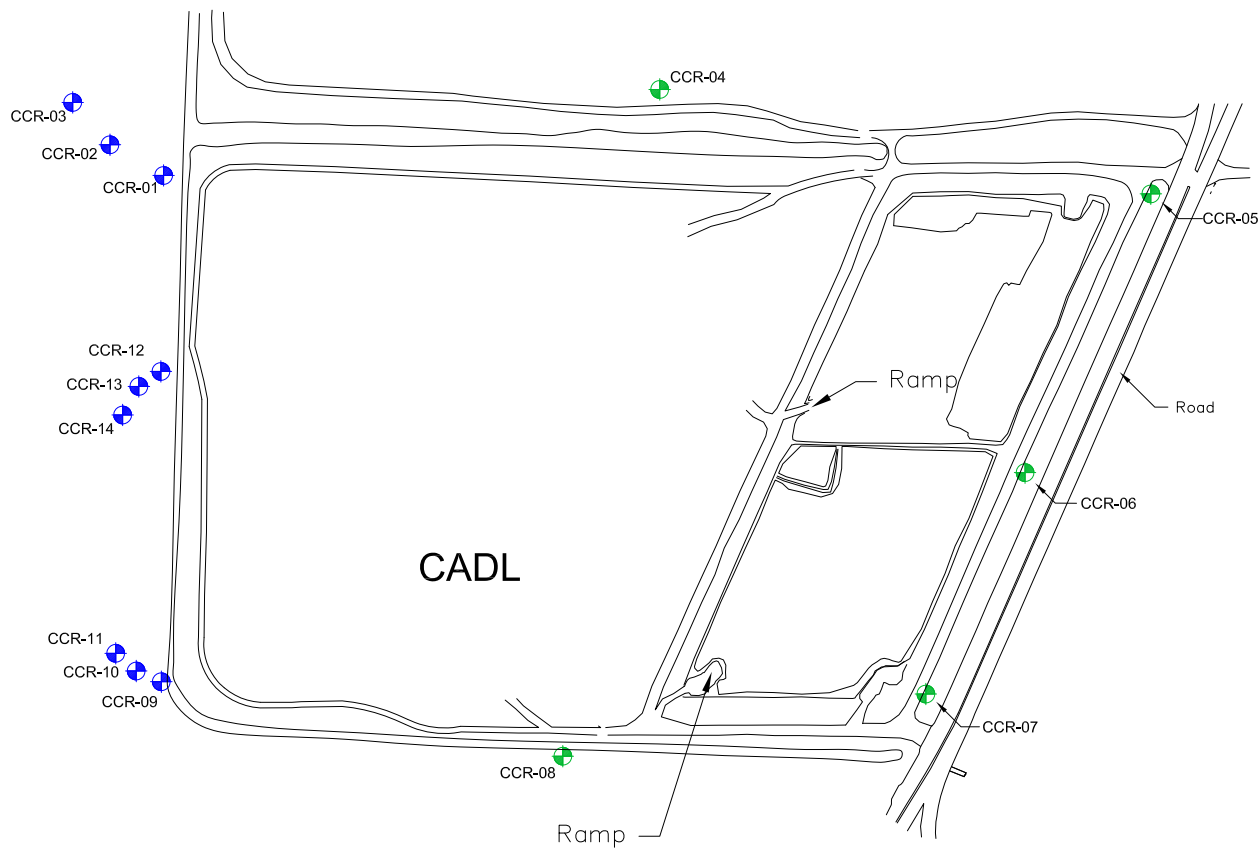
6.0 PROJECTED ACTIVITIES FOR 2018

Planned activities for the CADL's groundwater monitoring program during 2018 are listed below:

- Semiannual detection monitoring events are planned for March and September 2018.
- Entergy is undertaking an alternative source demonstration (ASD) regarding the identified SSIs pursuant to Sec. 257.95(e). Depending on the results of the ASD, Entergy will either continue with detection monitoring or implement assessment monitoring in accordance with §257.95.

APPENDIX A

SITE MAP



Legend:

-  Upgradient Monitoring Well Location
-  Down Gradient Monitoring Well Location

Note:

Base map provided by TRC Company, Inc.

Entergy Services, Inc.
Nelson Generating Plant
Coal Ash Disposal Landfill

Monitoring Well Location Map

Westlake, Calcasieu Parish, Louisiana



Drawn:	JP
Checked:	ON
Approved:	JM
Date:	01/06/16
Dwg. No.:	361-15-0001-A002

Appendix A

APPENDIX B

SAMPLING SCHEDULE AND ANALYTICAL DATA



Detection Monitoring Sampling Dates

Entergy Louisiana LLC
Nelson Coal Ash Landfill
Westlake, LA

Well	CCR-1 (BG)	CCR-2 (BG)	CCR-3 (BG)	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	CCR-9 (BG)	CCR-10 (BG)	CCR-11 (BG)	CCR-12 (BG)	CCR-13 (BG)	CCR-14 (BG)
Date	11/19/15	11/19/15	11/19/15	11/18/15	11/18/15	11/18/15	11/18/15	11/18/15	11/18/15	11/18/15	11/18/15	11/19/15	11/19/15	11/19/17
40 CFR 257 Appendix III Parameters*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Date	3/16/16	3/17/16	3/17/16	3/21/16	3/21/16	3/21/16	3/21/16	3/16/16	3/21/16	3/16/16	3/16/16	3/17/16	3/17/16	3/17/16
40 CFR 257 Appendix III Parameters*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Date	5/23/16	5/23/16	5/23/16	5/25/16	5/25/16	5/25/16	5/25/16	5/24/16	5/24/16	5/24/16	5/24/16	5/24/16	5/24/16	5/24/16
40 CFR 257 Appendix III Parameters*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Date	6/29/16	6/30/16	6/30/16	6/28/16	6/28/16	6/28/16	6/28/16	6/28/16	6/29/16	6/29/16	6/29/16	6/29/16	6/29/16	6/29/16
40 CFR 257 Appendix III Parameters*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Date	7/28/16	7/28/16	7/27/16	7/26/16	7/26/16	7/26/16	7/26/16	7/26/16	7/26/16	7/27/16	7/27/16	7/27/16	7/27/16	7/27/16
40 CFR 257 Appendix III Parameters*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Date	9/1/16	9/1/16	9/1/16	8/31/16	8/30/16	8/30/16	8/31/16	8/31/16	8/31/16	9/1/16	9/1/16	8/31/16	9/1/16	9/1/16
40 CFR 257 Appendix III Parameters*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Date	12/6/16	12/6/16	12/6/16	12/6/16	12/7/16	12/8/16	12/8/16	12/6/16	12/7/16	12/7/16	12/7/16	12/7/16	12/7/16	12/7/16
40 CFR 257 Appendix III Parameters*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Date	3/27/17	3/27/17	3/27/17	3/28/17	3/29/17	3/29/17	3/29/17	3/28/17	3/28/17	3/28/17	3/28/17	3/28/17	3/28/17	3/28/17
40 CFR 257 Appendix III Parameters*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Date	6/15/17	6/15/17	6/15/17	6/14/17	6/14/17	6/13/17	6/13/17	6/15/17	6/16/17	6/16/17	6/16/17	6/16/17	6/16/17	6/16/17
40 CFR 257 Appendix III Parameters*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Date	9/7/17	9/7/17	9/7/17	9/6/17	9/6/17	9/6/17	9/6/17	9/6/17	9/7/17	9/7/17	9/7/17	9/8/17	9/8/17	9/8/17
40 CFR 257 Appendix III Parameters*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

S.U. - Standard Units

*40 CFR 257 Appendix III Parameters collected on reference date and include Boron, Calcium, Chloride, Flouride, Sulfate, Total Disolved Solids, and pH Laboratory Reports to Follow



Detection Monitoring pH Results

Entergy Louisiana LLC
Nelson Coal Ash Landfill
Westlake, LA

Well	CCR-1 (BG)	CCR-2 (BG)	CCR-3 (BG)	CCR-4	CCR-5	CCR-6	CCR-7	CCR-8	CCR-9 (BG)	CCR-10 (BG)	CCR-11 (BG)	CCR-12 (BG)	CCR-13 (BG)	CCR-14 (BG)
Date	11/19/15	11/19/15	11/19/15	11/18/15	11/18/15	11/18/15	11/18/15	11/18/15	11/18/15	11/18/15	11/18/15	11/19/15	11/19/15	11/19/17
pH (S.U.)	7.2	6.81	6.98	6.61	6.8	6.61	6.64	6.21	6.94	6.49	7.12	6.67	6.8	6.55
Date	3/16/16	3/17/16	3/17/16	3/21/16	3/21/16	3/21/16	3/21/16	3/16/16	3/21/16	3/16/16	3/16/16	3/17/16	3/17/16	3/17/16
pH (S.U.)	7.18	6.87	6.96	6.7	6.3	6.75	6.8	6.48	7.05	7.16	7.34	6.59	6.97	6.83
Date	5/23/16	5/23/16	5/23/16	5/25/16	5/25/16	5/25/16	5/25/16	5/24/16	5/24/16	5/24/16	5/24/16	5/24/16	5/24/16	5/24/16
pH (S.U.)	7	6.67	6.84	6.69	6.93	6.78	6.79	6.22	7.1	7.21	7.16	6.42	7.21	6.54
Date	6/29/16	6/30/16	6/30/16	6/28/16	6/28/16	6/28/16	6/28/16	6/28/16	6/29/16	6/29/16	6/29/16	6/29/16	6/29/16	6/29/16
pH (S.U.)	7.17	6.8	6.9	6.88	7.11	6.9	6.91	6.49	7.16	7.18	7.29	6.52	7.22	6.56
Date	7/28/16	7/28/16	7/27/16	7/26/16	7/26/16	7/26/16	7/26/16	7/26/16	7/26/16	7/27/16	7/27/16	7/27/16	7/27/16	7/27/16
pH (S.U.)	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Date	9/1/16	9/1/16	9/1/16	8/31/16	8/30/16	8/30/16	8/31/16	8/31/16	8/31/16	9/1/16	9/1/16	8/31/16	9/1/16	9/1/16
pH (S.U.)	7.2	6.8	7.12	6.95	7.17	7.09	7.02	6.56	7.26	7.31	7.21	6.53	7.18	6.55
Date	12/6/16	12/6/16	12/6/16	12/6/16	12/7/16	12/8/16	12/8/16	12/6/16	12/7/16	12/7/16	12/7/16	12/7/16	12/7/16	12/7/16
pH (S.U.)	7.78	7.43	7.4	7.18	7.36	7.03	7.21	6.84	7.63	7.62	7.68	6.87	7.35	6.96
Date	3/27/17	3/27/17	3/27/17	3/28/17	3/29/17	3/29/17	3/29/17	3/28/17	3/28/17	3/28/17	3/28/17	3/28/17	3/28/17	3/28/17
pH (S.U.)	7.68	7.43	7.44	7.11	7.32	7.23	7.24	6.85	7.77	7.83	7.68	6.84	7.3	7.01
Date	6/15/17	6/15/17	6/15/17	6/14/17	6/14/17	6/13/17	6/13/17	6/15/17	6/16/17	6/16/17	6/16/17	6/16/17	6/16/17	6/16/17
pH (S.U.)	7.3	7.1	7.02	7.67	7.33	7.46	7.78	7.05	7.26	7.37	7.66	7.03	7.27	7.03
Date	9/7/17	9/7/17	9/7/17	9/6/17	9/6/17	9/6/17	9/6/17	9/6/17	9/7/17	9/7/17	9/7/17	9/8/17	9/8/17	9/8/17
pH (S.U.)	7.14	6.89	6.93	6.58	6.99	6.81	6.88	6.43 / 6.5**	7.25	7.2	7.39	6.45	6.94	6.64

S.U. - Standard Units

* Field logs destroyed during Baton Rouge flood of August 2016.

** 11/14/17 verification resampling result.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-114163-1

Client Project/Site: Nelson Unit 6 CADL

For:

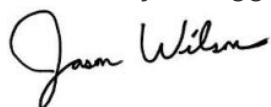
Pivotal Engineering LLC

1515 Poydras Street

Suite 1875

New Orleans, Louisiana 70112

Attn: Terry Elnaggar



Authorized for release by:

12/11/2015 9:51:02 AM

Jason Wilson, Project Manager I

(251)706-3217

jason.wilson@testamericainc.com

LINKS

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results through

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

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4

5

6

7

8

9



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Client Sample Results	5
Definitions	15
QC Sample Results	16
Chronicle	24
Chain of Custody	29

Case Narrative

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Job ID: 400-114163-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-114163-1

Comments

No additional comments.

Receipt

The samples were received on 11/20/2015 8:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.9° C, 1.2° C, 1.4° C and 2.4° C.

Receipt Exceptions

MS/MSD received without indication as to the parent sample. Client contacted and confirmed samples were CCR-5.

CCR-5 (400-114163-2[MS]) and CCR-5 (400-114163-2[MSD])

HPLC/IC

Method(s) 300.0: The following samples was diluted to bring the concentration of target analytes within the calibration range: CCR-5 (400-114163-2), CCR-5 (400-114163-2[MS]), CCR-5 (400-114163-2[MSD]), CCR-3 (400-114163-10), CCR-9 (400-114163-11), CCR-10 (400-114163-12), CCR-11 (400-114163-13), CCR-12 (400-114163-14), CCR-13 (400-114163-15), CCR-4 (400-114163-1), CCR-6 (400-114163-3), CCR-7 (400-114163-4), CCR-8 (400-114163-5), DUP (400-114163-6), FB (400-114163-7), CCR-1 (400-114163-8), and CCR-2 (400-114163-9). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-285031 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-285660 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Metals

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

General Chemistry

Method(s) 325.2, SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-286086 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Sample Summary

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-114163-1	CCR-4	Water	11/18/15 11:45	11/20/15 08:20
400-114163-2	CCR-5	Water	11/18/15 10:40	11/20/15 08:20
400-114163-3	CCR-6	Water	11/18/15 09:40	11/20/15 08:20
400-114163-4	CCR-7	Water	11/18/15 08:40	11/20/15 08:20
400-114163-5	CCR-8	Water	11/18/15 12:40	11/20/15 08:20
400-114163-6	DUP	Water	11/18/15 00:00	11/20/15 08:20
400-114163-7	FB	Water	11/18/15 12:30	11/20/15 08:20
400-114163-8	CCR-1	Water	11/19/15 14:45	11/20/15 08:20
400-114163-9	CCR-2	Water	11/19/15 13:40	11/20/15 08:20
400-114163-10	CCR-3	Water	11/19/15 12:30	11/20/15 08:20
400-114163-11	CCR-9	Water	11/18/15 16:00	11/20/15 08:20
400-114163-12	CCR-10	Water	11/18/15 14:50	11/20/15 08:20
400-114163-13	CCR-11	Water	11/18/15 14:00	11/20/15 08:20
400-114163-14	CCR-12	Water	11/19/15 10:50	11/20/15 08:20
400-114163-15	CCR-13	Water	11/19/15 09:45	11/20/15 08:20
400-114163-16	CCR-14	Water	11/19/15 08:45	11/20/15 08:20
400-114163-17	DUP	Water	11/19/15 00:00	11/20/15 08:20
400-114163-18	FB	Water	11/19/15 14:30	11/20/15 08:20

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Client Sample ID: CCR-4

Date Collected: 11/18/15 11:45

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			12/03/15 22:48	1
Sulfate	13		1.0		mg/L			12/03/15 22:48	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.12		0.050		mg/L		11/24/15 08:15	11/25/15 16:27	5
Calcium	20		0.25		mg/L		11/24/15 08:15	11/25/15 16:27	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49		4.0		mg/L			12/09/15 08:40	2
Total Dissolved Solids	290		5.0		mg/L			11/24/15 12:55	1

Client Sample ID: CCR-5

Date Collected: 11/18/15 10:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-2

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			12/03/15 23:11	1
Sulfate	2.0		1.0		mg/L			12/03/15 23:11	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.12		0.050		mg/L		11/24/15 08:15	11/25/15 16:32	5
Calcium	40		0.25		mg/L		11/24/15 08:15	11/25/15 16:32	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	53	F1	4.0		mg/L			12/05/15 09:02	2
Total Dissolved Solids	360		5.0		mg/L			11/24/15 12:55	1

Client Sample ID: CCR-6

Date Collected: 11/18/15 09:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			11/26/15 11:55	1
Sulfate	ND		1.0		mg/L			11/26/15 11:55	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.11		0.050		mg/L		11/24/15 08:15	11/25/15 16:55	5
Calcium	32		0.25		mg/L		11/24/15 08:15	11/25/15 16:55	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86		10		mg/L			12/05/15 09:03	5
Total Dissolved Solids	310		5.0		mg/L			11/24/15 12:55	1

TestAmerica Pensacola

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Client Sample ID: CCR-7

Date Collected: 11/18/15 08:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND	F1	0.20		mg/L			11/26/15 12:18	1
Sulfate	7.4		5.0		mg/L			11/25/15 10:50	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.099		0.050		mg/L		11/24/15 08:15	11/25/15 16:59	5
Calcium	46		0.25		mg/L		11/24/15 08:15	11/25/15 16:59	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65		4.0		mg/L			12/05/15 09:48	2
Total Dissolved Solids	340		5.0		mg/L			11/24/15 12:55	1

Client Sample ID: CCR-8

Date Collected: 11/18/15 12:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-5

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			12/04/15 00:19	1
Sulfate	2.4		1.0		mg/L			12/04/15 00:19	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.079		0.050		mg/L		11/24/15 08:15	11/25/15 17:04	5
Calcium	14		0.25		mg/L		11/24/15 08:15	11/25/15 17:04	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87		10		mg/L			12/05/15 09:48	5
Total Dissolved Solids	310		5.0		mg/L			11/24/15 12:55	1

Client Sample ID: DUP

Date Collected: 11/18/15 00:00

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-6

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			12/04/15 01:28	1
Sulfate	2.0		1.0		mg/L			12/04/15 01:28	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.12		0.050		mg/L		11/24/15 08:15	11/25/15 17:09	5
Calcium	40		0.25		mg/L		11/24/15 08:15	11/25/15 17:09	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	53		4.0		mg/L			12/02/15 12:58	2
Total Dissolved Solids	390		5.0		mg/L			11/24/15 12:55	1

TestAmerica Pensacola

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Client Sample ID: FB

Date Collected: 11/18/15 12:30

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-7

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			11/25/15 11:58	1
Sulfate	ND		1.0		mg/L			11/25/15 11:58	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		11/24/15 08:15	11/25/15 16:04	5
Calcium	ND		0.25		mg/L		11/24/15 08:15	11/25/15 16:04	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/02/15 12:21	1
Total Dissolved Solids	ND		5.0		mg/L			11/24/15 12:55	1

Client Sample ID: CCR-1

Date Collected: 11/19/15 14:45

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-8

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.37		0.20		mg/L			11/26/15 13:49	1
Sulfate	46		5.0		mg/L			11/25/15 13:07	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:27	5
Arsenic	0.0043		0.0013		mg/L		11/24/15 08:15	11/25/15 17:27	5
Barium	0.10		0.0025		mg/L		11/24/15 08:15	11/25/15 17:27	5
Beryllium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:27	5
Boron	0.14		0.050		mg/L		11/24/15 08:15	11/25/15 17:27	5
Cadmium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:27	5
Calcium	19		0.25		mg/L		11/24/15 08:15	11/25/15 17:27	5
Chromium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:27	5
Cobalt	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:27	5
Lead	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 17:27	5
Lithium	0.021		0.0025		mg/L		11/24/15 08:15	11/25/15 17:27	5
Molybdenum	ND		0.015		mg/L		11/24/15 08:15	11/25/15 17:27	5
Selenium	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 17:27	5
Thallium	ND		0.00050		mg/L		11/24/15 08:15	11/25/15 17:27	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/23/15 10:33	11/25/15 13:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	53		4.0		mg/L			12/02/15 12:58	2
Total Dissolved Solids	540		5.0		mg/L			11/25/15 18:59	1

TestAmerica Pensacola

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Client Sample ID: CCR-2

Date Collected: 11/19/15 13:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-9

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.29		0.20		mg/L			12/04/15 01:51	1
Sulfate	45		5.0		mg/L			11/25/15 13:29	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:32	5
Arsenic	0.0042		0.0013		mg/L		11/24/15 08:15	11/25/15 17:32	5
Barium	0.14		0.0025		mg/L		11/24/15 08:15	11/25/15 17:32	5
Beryllium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:32	5
Boron	0.098		0.050		mg/L		11/24/15 08:15	11/25/15 17:32	5
Cadmium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:32	5
Calcium	23		0.25		mg/L		11/24/15 08:15	11/25/15 17:32	5
Chromium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:32	5
Cobalt	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:32	5
Lead	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 17:32	5
Lithium	0.018		0.0025		mg/L		11/24/15 08:15	11/25/15 17:32	5
Molybdenum	ND		0.015		mg/L		11/24/15 08:15	11/25/15 17:32	5
Selenium	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 17:32	5
Thallium	ND		0.00050		mg/L		11/24/15 08:15	11/25/15 17:32	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/23/15 10:33	11/25/15 13:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63		10		mg/L			12/02/15 12:58	5
Total Dissolved Solids	450		5.0		mg/L			11/25/15 18:59	1

Client Sample ID: CCR-3

Date Collected: 11/19/15 12:30

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-10

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.23		0.20		mg/L			12/04/15 02:13	1
Sulfate	140		5.0		mg/L			11/25/15 22:14	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:36	5
Arsenic	0.0036		0.0013		mg/L		11/24/15 08:15	11/25/15 17:36	5
Barium	0.26		0.0025		mg/L		11/24/15 08:15	11/25/15 17:36	5
Beryllium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:36	5
Boron	0.11		0.050		mg/L		11/24/15 08:15	11/25/15 17:36	5
Cadmium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:36	5
Calcium	27		0.25		mg/L		11/24/15 08:15	11/25/15 17:36	5
Chromium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:36	5
Cobalt	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:36	5
Lead	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 17:36	5
Lithium	0.019		0.0025		mg/L		11/24/15 08:15	11/25/15 17:36	5

TestAmerica Pensacola

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Client Sample ID: CCR-3

Date Collected: 11/19/15 12:30

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-10

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.015		mg/L		11/24/15 08:15	11/25/15 17:36	5
Selenium	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 17:36	5
Thallium	ND		0.00050		mg/L		11/24/15 08:15	11/25/15 17:36	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/23/15 10:33	11/25/15 14:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	78		10		mg/L			12/02/15 12:58	5
Total Dissolved Solids	610		5.0		mg/L			11/25/15 18:59	1

Client Sample ID: CCR-9

Date Collected: 11/18/15 16:00

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-11

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.47		0.20		mg/L			12/04/15 02:36	1
Sulfate	15		5.0		mg/L			11/25/15 22:37	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:41	5
Arsenic	0.0030		0.0013		mg/L		11/24/15 08:15	11/25/15 17:41	5
Barium	0.20		0.0025		mg/L		11/24/15 08:15	11/25/15 17:41	5
Beryllium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:41	5
Boron	0.086		0.050		mg/L		11/24/15 08:15	11/25/15 17:41	5
Cadmium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:41	5
Calcium	27		0.25		mg/L		11/24/15 08:15	11/25/15 17:41	5
Chromium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:41	5
Cobalt	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:41	5
Lead	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 17:41	5
Lithium	0.0078		0.0025		mg/L		11/24/15 08:15	11/25/15 17:41	5
Molybdenum	ND		0.015		mg/L		11/24/15 08:15	11/25/15 17:41	5
Selenium	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 17:41	5
Thallium	ND		0.00050		mg/L		11/24/15 08:15	11/25/15 17:41	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/23/15 10:33	11/25/15 14:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47		4.0		mg/L			12/02/15 12:58	2
Total Dissolved Solids	370		5.0		mg/L			11/24/15 12:55	1

TestAmerica Pensacola

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Client Sample ID: CCR-10

Date Collected: 11/18/15 14:50

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-12

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.41		0.20		mg/L			12/04/15 02:59	1
Sulfate	1.1		1.0		mg/L			12/04/15 02:59	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:45	5
Arsenic	0.0033		0.0013		mg/L		11/24/15 08:15	11/25/15 17:45	5
Barium	0.26		0.0025		mg/L		11/24/15 08:15	11/25/15 17:45	5
Beryllium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:45	5
Boron	0.075		0.050		mg/L		11/24/15 08:15	11/25/15 17:45	5
Cadmium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:45	5
Calcium	31		0.25		mg/L		11/24/15 08:15	11/25/15 17:45	5
Chromium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:45	5
Cobalt	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:45	5
Lead	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 17:45	5
Lithium	0.0058		0.0025		mg/L		11/24/15 08:15	11/25/15 17:45	5
Molybdenum	ND		0.015		mg/L		11/24/15 08:15	11/25/15 17:45	5
Selenium	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 17:45	5
Thallium	ND		0.00050		mg/L		11/24/15 08:15	11/25/15 17:45	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/23/15 10:33	11/25/15 14:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40		4.0		mg/L			12/02/15 12:59	2
Total Dissolved Solids	310		5.0		mg/L			11/24/15 12:55	1

Client Sample ID: CCR-11

Date Collected: 11/18/15 14:00

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-13

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.57		0.20		mg/L			12/04/15 04:30	1
Sulfate	49		5.0		mg/L			11/25/15 23:22	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:50	5
Arsenic	0.0051		0.0013		mg/L		11/24/15 08:15	11/25/15 17:50	5
Barium	0.14		0.0025		mg/L		11/24/15 08:15	11/25/15 17:50	5
Beryllium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:50	5
Boron	0.089		0.050		mg/L		11/24/15 08:15	11/25/15 17:50	5
Cadmium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:50	5
Calcium	30		0.25		mg/L		11/24/15 08:15	11/25/15 17:50	5
Chromium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:50	5
Cobalt	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:50	5
Lead	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 17:50	5
Lithium	0.0077		0.0025		mg/L		11/24/15 08:15	11/25/15 17:50	5

TestAmerica Pensacola

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Client Sample ID: CCR-11

Date Collected: 11/18/15 14:00

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-13

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.015		mg/L		11/24/15 08:15	11/25/15 17:50	5
Selenium	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 17:50	5
Thallium	ND		0.00050		mg/L		11/24/15 08:15	11/25/15 17:50	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/23/15 10:33	11/25/15 14:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28		2.0		mg/L			12/02/15 12:27	1
Total Dissolved Solids	350		5.0		mg/L			11/24/15 12:55	1

Client Sample ID: CCR-12

Date Collected: 11/19/15 10:50

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-14

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			11/25/15 23:45	1
Sulfate	70	F1	5.0		mg/L			12/02/15 06:38	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:55	5
Arsenic	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 17:55	5
Barium	0.20		0.0025		mg/L		11/24/15 08:15	11/25/15 17:55	5
Beryllium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:55	5
Boron	0.060		0.050		mg/L		11/24/15 08:15	11/25/15 17:55	5
Cadmium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:55	5
Calcium	27		0.25		mg/L		11/24/15 08:15	11/25/15 17:55	5
Chromium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:55	5
Cobalt	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:55	5
Lead	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 17:55	5
Lithium	0.021		0.0025		mg/L		11/24/15 08:15	11/25/15 17:55	5
Molybdenum	ND		0.015		mg/L		11/24/15 08:15	11/25/15 17:55	5
Selenium	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 17:55	5
Thallium	ND		0.00050		mg/L		11/24/15 08:15	11/25/15 17:55	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/23/15 10:33	11/25/15 14:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		2.0		mg/L			12/02/15 12:27	1
Total Dissolved Solids	290		5.0		mg/L			11/25/15 18:59	1

TestAmerica Pensacola

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Client Sample ID: CCR-13

Date Collected: 11/19/15 09:45

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-15

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			12/04/15 04:53	1
Sulfate	180		5.0		mg/L			11/26/15 00:08	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:59	5
Arsenic	0.0040		0.0013		mg/L		11/24/15 08:15	11/25/15 17:59	5
Barium	0.12		0.0025		mg/L		11/24/15 08:15	11/25/15 17:59	5
Beryllium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:59	5
Boron	0.079		0.050		mg/L		11/24/15 08:15	11/25/15 17:59	5
Cadmium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:59	5
Calcium	32		0.25		mg/L		11/24/15 08:15	11/25/15 17:59	5
Chromium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:59	5
Cobalt	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 17:59	5
Lead	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 17:59	5
Lithium	0.016		0.0025		mg/L		11/24/15 08:15	11/25/15 17:59	5
Molybdenum	ND		0.015		mg/L		11/24/15 08:15	11/25/15 17:59	5
Selenium	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 17:59	5
Thallium	ND		0.00050		mg/L		11/24/15 08:15	11/25/15 17:59	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/23/15 10:33	11/25/15 14:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23		2.0		mg/L			12/02/15 12:27	1
Total Dissolved Solids	530		5.0		mg/L			11/25/15 18:59	1

Client Sample ID: CCR-14

Date Collected: 11/19/15 08:45

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-16

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			11/26/15 00:31	1
Sulfate	ND		1.0		mg/L			11/26/15 00:31	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 18:04	5
Arsenic	0.0036		0.0013		mg/L		11/24/15 08:15	11/25/15 18:04	5
Barium	0.11		0.0025		mg/L		11/24/15 08:15	11/25/15 18:04	5
Beryllium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 18:04	5
Boron	ND		0.050		mg/L		11/24/15 08:15	11/25/15 18:04	5
Cadmium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 18:04	5
Calcium	21		0.25		mg/L		11/24/15 08:15	11/25/15 18:04	5
Chromium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 18:04	5
Cobalt	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 18:04	5
Lead	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 18:04	5
Lithium	0.013		0.0025		mg/L		11/24/15 08:15	11/25/15 18:04	5

TestAmerica Pensacola

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Client Sample ID: CCR-14

Date Collected: 11/19/15 08:45

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-16

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Molybdenum	ND		0.015		mg/L		11/24/15 08:15	11/25/15 18:04	5
Selenium	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 18:04	5
Thallium	ND		0.00050		mg/L		11/24/15 08:15	11/25/15 18:04	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/23/15 10:33	11/25/15 14:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0		mg/L			12/02/15 12:27	1
Total Dissolved Solids	160		5.0		mg/L			11/25/15 18:59	1

Client Sample ID: DUP

Date Collected: 11/19/15 00:00

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-17

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 18:09	5
Arsenic	0.0033		0.0013		mg/L		11/24/15 08:15	11/25/15 18:09	5
Barium	0.25		0.0025		mg/L		11/24/15 08:15	11/25/15 18:09	5
Beryllium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 18:09	5
Boron	0.10		0.050		mg/L		11/24/15 08:15	11/25/15 18:09	5
Cadmium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 18:09	5
Calcium	26		0.25		mg/L		11/24/15 08:15	11/25/15 18:09	5
Chromium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 18:09	5
Cobalt	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 18:09	5
Lead	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 18:09	5
Lithium	0.018		0.0025		mg/L		11/24/15 08:15	11/25/15 18:09	5
Molybdenum	ND		0.015		mg/L		11/24/15 08:15	11/25/15 18:09	5
Selenium	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 18:09	5
Thallium	ND		0.00050		mg/L		11/24/15 08:15	11/25/15 18:09	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/23/15 10:33	11/25/15 14:11	1

Client Sample ID: FB

Date Collected: 11/19/15 14:30

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-18

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 16:09	5
Arsenic	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 16:09	5
Barium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 16:09	5
Beryllium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 16:09	5
Boron	ND		0.050		mg/L		11/24/15 08:15	11/25/15 16:09	5
Cadmium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 16:09	5
Calcium	ND		0.25		mg/L		11/24/15 08:15	11/25/15 16:09	5

TestAmerica Pensacola

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Client Sample ID: FB

Lab Sample ID: 400-114163-18

Date Collected: 11/19/15 14:30

Matrix: Water

Date Received: 11/20/15 08:20

Method: 6020 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 16:09	5
Cobalt	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 16:09	5
Lead	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 16:09	5
Lithium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 16:09	5
Molybdenum	ND		0.015		mg/L		11/24/15 08:15	11/25/15 16:09	5
Selenium	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 16:09	5
Thallium	ND		0.00050		mg/L		11/24/15 08:15	11/25/15 16:09	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/23/15 10:33	11/25/15 14:12	1

Definitions/Glossary

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
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.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-284920/34

Matrix: Water

Analysis Batch: 284920

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			11/25/15 01:42	1
Sulfate	ND		1.0		mg/L			11/25/15 01:42	1

Lab Sample ID: LCS 400-284920/35

Matrix: Water

Analysis Batch: 284920

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	9.81		mg/L		98	90 - 110
Sulfate	10.0	9.75		mg/L		98	90 - 110

Lab Sample ID: LCSD 400-284920/36

Matrix: Water

Analysis Batch: 284920

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	9.62		mg/L		96	90 - 110	2	15
Sulfate	10.0	9.69		mg/L		97	90 - 110	1	15

Lab Sample ID: MB 400-285031/15

Matrix: Water

Analysis Batch: 285031

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			11/25/15 18:03	1
Sulfate	ND		1.0		mg/L			11/25/15 18:03	1

Lab Sample ID: MB 400-285031/46

Matrix: Water

Analysis Batch: 285031

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			11/26/15 05:50	1
Sulfate	ND		1.0		mg/L			11/26/15 05:50	1

Lab Sample ID: LCS 400-285031/16

Matrix: Water

Analysis Batch: 285031

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	9.86		mg/L		99	90 - 110
Sulfate	10.0	9.57		mg/L		96	90 - 110

Lab Sample ID: LCS 400-285031/47

Matrix: Water

Analysis Batch: 285031

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	9.03		mg/L		90	90 - 110

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-285031/47

Matrix: Water

Analysis Batch: 285031

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	9.28		mg/L		93	90 - 110

Lab Sample ID: LCSD 400-285031/17

Matrix: Water

Analysis Batch: 285031

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	9.81		mg/L		98	90 - 110	1	15
Sulfate	10.0	9.62		mg/L		96	90 - 110	0	15

Lab Sample ID: LCSD 400-285031/48

Matrix: Water

Analysis Batch: 285031

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	9.30		mg/L		93	90 - 110	3	15
Sulfate	10.0	9.24		mg/L		92	90 - 110	0	15

Lab Sample ID: 400-114163-4 MS

Matrix: Water

Analysis Batch: 285031

Client Sample ID: CCR-7

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	ND	F1	10.0	12.4	F1	mg/L		124	80 - 120
Sulfate	7.3	F1	10.0	21.6	F1	mg/L		143	80 - 120

Lab Sample ID: MB 400-285660/36

Matrix: Water

Analysis Batch: 285660

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			12/02/15 03:58	1
Sulfate	ND		1.0		mg/L			12/02/15 03:58	1

Lab Sample ID: LCS 400-285660/37

Matrix: Water

Analysis Batch: 285660

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	9.20		mg/L		92	90 - 110
Sulfate	10.0	10.1		mg/L		101	90 - 110

Lab Sample ID: LCSD 400-285660/40

Matrix: Water

Analysis Batch: 285660

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	9.10		mg/L		91	90 - 110	1	15
Sulfate	10.0	10.1		mg/L		101	90 - 110	0	15

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 400-114163-14 MS

Matrix: Water

Analysis Batch: 285660

Client Sample ID: CCR-12

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	ND		50.0	49.8		mg/L		100	80 - 120
Sulfate	70	F1	50.0	133	F1	mg/L		125	80 - 120

Lab Sample ID: MB 400-285947/10

Matrix: Water

Analysis Batch: 285947

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			12/03/15 20:54	1
Sulfate	ND		1.0		mg/L			12/03/15 20:54	1

Lab Sample ID: LCS 400-285947/11

Matrix: Water

Analysis Batch: 285947

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	9.64		mg/L		96	90 - 110
Sulfate	10.0	9.52		mg/L		95	90 - 110

Lab Sample ID: LCSD 400-285947/12

Matrix: Water

Analysis Batch: 285947

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	9.49		mg/L		95	90 - 110	2	15
Sulfate	10.0	9.70		mg/L		97	90 - 110	2	15

Lab Sample ID: 400-114163-2 MS

Matrix: Water

Analysis Batch: 285947

Client Sample ID: CCR-5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	ND		10.0	10.2		mg/L		100	80 - 120
Sulfate	2.0		10.0	12.5		mg/L		105	80 - 120

Lab Sample ID: 400-114163-2 MSD

Matrix: Water

Analysis Batch: 285947

Client Sample ID: CCR-5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	ND		10.0	9.99		mg/L		99	80 - 120	2	20
Sulfate	2.0		10.0	12.7		mg/L		107	80 - 120	2	20

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-284572/1-A ^5

Matrix: Water

Analysis Batch: 285085

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 284572

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 15:41	5
Arsenic	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 15:41	5
Barium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 15:41	5
Beryllium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 15:41	5
Boron	ND		0.050		mg/L		11/24/15 08:15	11/25/15 15:41	5
Cadmium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 15:41	5
Calcium	ND		0.25		mg/L		11/24/15 08:15	11/25/15 15:41	5
Chromium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 15:41	5
Cobalt	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 15:41	5
Lead	0.00346		0.0013		mg/L		11/24/15 08:15	11/25/15 15:41	5
Lithium	ND		0.0025		mg/L		11/24/15 08:15	11/25/15 15:41	5
Molybdenum	ND		0.015		mg/L		11/24/15 08:15	11/25/15 15:41	5
Selenium	ND		0.0013		mg/L		11/24/15 08:15	11/25/15 15:41	5
Thallium	ND		0.00050		mg/L		11/24/15 08:15	11/25/15 15:41	5

Lab Sample ID: LCS 400-284572/2-A ^5

Matrix: Water

Analysis Batch: 285085

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 284572

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0474		mg/L		95	80 - 120
Arsenic	0.0500	0.0521		mg/L		104	80 - 120
Barium	0.0500	0.0474		mg/L		95	80 - 120
Beryllium	0.0500	0.0514		mg/L		103	80 - 120
Boron	0.100	0.104		mg/L		104	80 - 120
Cadmium	0.0500	0.0494		mg/L		99	80 - 120
Calcium	5.00	5.25		mg/L		105	80 - 120
Chromium	0.0500	0.0473		mg/L		95	80 - 120
Cobalt	0.0500	0.0505		mg/L		101	80 - 120
Lead	0.0500	0.0479		mg/L		96	80 - 120
Lithium	0.0500	0.0461		mg/L		92	80 - 120
Molybdenum	0.0500	0.0489		mg/L		98	80 - 120
Selenium	0.0500	0.0519		mg/L		104	80 - 120
Thallium	0.0100	0.00975		mg/L		97	80 - 120

Lab Sample ID: 400-114163-2 MS

Matrix: Water

Analysis Batch: 285085

Client Sample ID: CCR-5

Prep Type: Total Recoverable

Prep Batch: 284572

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.12		0.100	0.239		mg/L		120	75 - 125
Calcium	40		5.00	45.0	4	mg/L		100	75 - 125

Lab Sample ID: 400-114163-2 MSD

Matrix: Water

Analysis Batch: 285085

Client Sample ID: CCR-5

Prep Type: Total Recoverable

Prep Batch: 284572

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Boron	0.12		0.100	0.237		mg/L		118	75 - 125	1	20

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-114163-2 MSD

Matrix: Water

Analysis Batch: 285085

Client Sample ID: CCR-5
Prep Type: Total Recoverable

Prep Batch: 284572

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	40		5.00	45.0	4	mg/L		101	75 - 125	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-284555/14-A

Matrix: Water

Analysis Batch: 284981

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 284555

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		11/23/15 10:33	11/25/15 13:42	1

Lab Sample ID: LCS 400-284555/15-A

Matrix: Water

Analysis Batch: 284981

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 284555

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00101	0.00105		mg/L		105	80 - 120

Lab Sample ID: 400-114163-8 MS

Matrix: Water

Analysis Batch: 284981

Client Sample ID: CCR-1

Prep Type: Total/NA

Prep Batch: 284555

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00201	0.00202		mg/L		96	80 - 120

Lab Sample ID: 400-114163-8 MSD

Matrix: Water

Analysis Batch: 284981

Client Sample ID: CCR-1

Prep Type: Total/NA

Prep Batch: 284555

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00201	0.00202		mg/L		96	80 - 120	0	20

Method: 325.2 - Chloride

Lab Sample ID: MB 400-285760/6

Matrix: Water

Analysis Batch: 285760

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/02/15 12:20	1

Lab Sample ID: LCS 400-285760/7

Matrix: Water

Analysis Batch: 285760

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.4		mg/L		105	90 - 110

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Method: 325.2 - Chloride (Continued)

Lab Sample ID: 400-114163-7 DU

Matrix: Water

Analysis Batch: 285760

Client Sample ID: FB

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Chloride	ND		ND		mg/L		NC	8

Lab Sample ID: MB 400-286086/6

Matrix: Water

Analysis Batch: 286086

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/05/15 07:58	1

Lab Sample ID: LCS 400-286086/7

Matrix: Water

Analysis Batch: 286086

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	30.2		mg/L		101	90 - 110

Lab Sample ID: 400-114163-2 MS

Matrix: Water

Analysis Batch: 286086

Client Sample ID: CCR-5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	53	F1	20.0	61.0	F1	mg/L		42	73 - 120

Lab Sample ID: 400-114163-2 MSD

Matrix: Water

Analysis Batch: 286086

Client Sample ID: CCR-5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	53	F1	20.0	61.1	F1	mg/L		42	73 - 120	0	8

Lab Sample ID: 400-114163-3 DU

Matrix: Water

Analysis Batch: 286086

Client Sample ID: CCR-6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Chloride	86		86.2		mg/L		0.7	8

Lab Sample ID: MB 400-286093/6

Matrix: Water

Analysis Batch: 286093

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/05/15 09:25	1

Lab Sample ID: LCS 400-286093/7

Matrix: Water

Analysis Batch: 286093

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	30.7		mg/L		102	90 - 110

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Lab Sample ID: MB 400-286471/6
Matrix: Water
Analysis Batch: 286471

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/09/15 08:13	1

Lab Sample ID: LCS 400-286471/7
Matrix: Water
Analysis Batch: 286471

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	30.0		mg/L		100	90 - 110

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

Lab Sample ID: MB 400-284755/1
Matrix: Water
Analysis Batch: 284755

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			11/24/15 12:55	1

Lab Sample ID: LCS 400-284755/2
Matrix: Water
Analysis Batch: 284755

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	293	296		mg/L		101	78 - 122

Lab Sample ID: 400-114163-3 DU
Matrix: Water
Analysis Batch: 284755

Client Sample ID: CCR-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	310		312		mg/L		0	5

Lab Sample ID: MB 400-285025/1
Matrix: Water
Analysis Batch: 285025

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			11/25/15 18:59	1

Lab Sample ID: LCS 400-285025/2
Matrix: Water
Analysis Batch: 285025

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	293	290		mg/L		99	78 - 122

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

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

Lab Sample ID: 400-114163-10 DU

Matrix: Water

Analysis Batch: 285025

Client Sample ID: CCR-3

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	610		608		mg/L	—	0	5

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Client Sample ID: CCR-4

Date Collected: 11/18/15 11:45

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	285947	12/03/15 22:48	TAJ	TAL PEN
Total Recoverable	Prep	3005A			284572	11/24/15 08:15	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	285085	11/25/15 16:27	RJB	TAL PEN
Total/NA	Analysis	325.2		2	286471	12/09/15 08:40	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	284755	11/24/15 12:55	TET	TAL PEN

Client Sample ID: CCR-5

Date Collected: 11/18/15 10:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	285947	12/03/15 23:11	TAJ	TAL PEN
Total Recoverable	Prep	3005A			284572	11/24/15 08:15	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	285085	11/25/15 16:32	RJB	TAL PEN
Total/NA	Analysis	325.2		2	286086	12/05/15 09:02	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	284755	11/24/15 12:55	TET	TAL PEN

Client Sample ID: CCR-6

Date Collected: 11/18/15 09:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	285031	11/26/15 11:55	TAJ	TAL PEN
Total Recoverable	Prep	3005A			284572	11/24/15 08:15	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	285085	11/25/15 16:55	RJB	TAL PEN
Total/NA	Analysis	325.2		5	286086	12/05/15 09:03	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	284755	11/24/15 12:55	TET	TAL PEN

Client Sample ID: CCR-7

Date Collected: 11/18/15 08:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	284920	11/25/15 10:50	TAJ	TAL PEN
Total/NA	Analysis	300.0		1	285031	11/26/15 12:18	TAJ	TAL PEN
Total Recoverable	Prep	3005A			284572	11/24/15 08:15	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	285085	11/25/15 16:59	RJB	TAL PEN
Total/NA	Analysis	325.2		2	286093	12/05/15 09:48	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	284755	11/24/15 12:55	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Client Sample ID: CCR-8

Date Collected: 11/18/15 12:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	285947	12/04/15 00:19	TAJ	TAL PEN
Total Recoverable	Prep	3005A			284572	11/24/15 08:15	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	285085	11/25/15 17:04	RJB	TAL PEN
Total/NA	Analysis	325.2		5	286093	12/05/15 09:48	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	284755	11/24/15 12:55	TET	TAL PEN

Client Sample ID: DUP

Date Collected: 11/18/15 00:00

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	285947	12/04/15 01:28	TAJ	TAL PEN
Total Recoverable	Prep	3005A			284572	11/24/15 08:15	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	285085	11/25/15 17:09	RJB	TAL PEN
Total/NA	Analysis	325.2		2	285760	12/02/15 12:58	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	284755	11/24/15 12:55	TET	TAL PEN

Client Sample ID: FB

Date Collected: 11/18/15 12:30

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	284920	11/25/15 11:58	TAJ	TAL PEN
Total Recoverable	Prep	3005A			284572	11/24/15 08:15	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	285085	11/25/15 16:04	RJB	TAL PEN
Total/NA	Analysis	325.2		1	285760	12/02/15 12:21	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	284755	11/24/15 12:55	TET	TAL PEN

Client Sample ID: CCR-1

Date Collected: 11/19/15 14:45

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	284920	11/25/15 13:07	TAJ	TAL PEN
Total/NA	Analysis	300.0		1	285031	11/26/15 13:49	TAJ	TAL PEN
Total Recoverable	Prep	3005A			284572	11/24/15 08:15	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	285085	11/25/15 17:27	RJB	TAL PEN
Total/NA	Prep	7470A			284555	11/23/15 10:33	JAP	TAL PEN
Total/NA	Analysis	7470A		1	284981	11/25/15 13:44	JAP	TAL PEN
Total/NA	Analysis	325.2		2	285760	12/02/15 12:58	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	285025	11/25/15 18:59	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Client Sample ID: CCR-2

Date Collected: 11/19/15 13:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	284920	11/25/15 13:29	TAJ	TAL PEN
Total/NA	Analysis	300.0		1	285947	12/04/15 01:51	TAJ	TAL PEN
Total Recoverable	Prep	3005A			284572	11/24/15 08:15	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	285085	11/25/15 17:32	RJB	TAL PEN
Total/NA	Prep	7470A			284555	11/23/15 10:33	JAP	TAL PEN
Total/NA	Analysis	7470A		1	284981	11/25/15 13:49	JAP	TAL PEN
Total/NA	Analysis	325.2		5	285760	12/02/15 12:58	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	285025	11/25/15 18:59	TET	TAL PEN

Client Sample ID: CCR-3

Date Collected: 11/19/15 12:30

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	285031	11/25/15 22:14	TAJ	TAL PEN
Total/NA	Analysis	300.0		1	285947	12/04/15 02:13	TAJ	TAL PEN
Total Recoverable	Prep	3005A			284572	11/24/15 08:15	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	285085	11/25/15 17:36	RJB	TAL PEN
Total/NA	Prep	7470A			284555	11/23/15 10:33	JAP	TAL PEN
Total/NA	Analysis	7470A		1	284981	11/25/15 14:02	JAP	TAL PEN
Total/NA	Analysis	325.2		5	285760	12/02/15 12:58	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	285025	11/25/15 18:59	TET	TAL PEN

Client Sample ID: CCR-9

Date Collected: 11/18/15 16:00

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	285031	11/25/15 22:37	TAJ	TAL PEN
Total/NA	Analysis	300.0		1	285947	12/04/15 02:36	TAJ	TAL PEN
Total Recoverable	Prep	3005A			284572	11/24/15 08:15	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	285085	11/25/15 17:41	RJB	TAL PEN
Total/NA	Prep	7470A			284555	11/23/15 10:33	JAP	TAL PEN
Total/NA	Analysis	7470A		1	284981	11/25/15 14:03	JAP	TAL PEN
Total/NA	Analysis	325.2		2	285760	12/02/15 12:58	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	284755	11/24/15 12:55	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Client Sample ID: CCR-10

Date Collected: 11/18/15 14:50

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	285947	12/04/15 02:59	TAJ	TAL PEN
Total Recoverable	Prep	3005A			284572	11/24/15 08:15	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	285085	11/25/15 17:45	RJB	TAL PEN
Total/NA	Prep	7470A			284555	11/23/15 10:33	JAP	TAL PEN
Total/NA	Analysis	7470A		1	284981	11/25/15 14:05	JAP	TAL PEN
Total/NA	Analysis	325.2		2	285760	12/02/15 12:59	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	284755	11/24/15 12:55	TET	TAL PEN

Client Sample ID: CCR-11

Date Collected: 11/18/15 14:00

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	285031	11/25/15 23:22	TAJ	TAL PEN
Total/NA	Analysis	300.0		1	285947	12/04/15 04:30	TAJ	TAL PEN
Total Recoverable	Prep	3005A			284572	11/24/15 08:15	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	285085	11/25/15 17:50	RJB	TAL PEN
Total/NA	Prep	7470A			284555	11/23/15 10:33	JAP	TAL PEN
Total/NA	Analysis	7470A		1	284981	11/25/15 14:06	JAP	TAL PEN
Total/NA	Analysis	325.2		1	285760	12/02/15 12:27	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	284755	11/24/15 12:55	TET	TAL PEN

Client Sample ID: CCR-12

Date Collected: 11/19/15 10:50

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	285031	11/25/15 23:45	TAJ	TAL PEN
Total/NA	Analysis	300.0		5	285660	12/02/15 06:38	TAJ	TAL PEN
Total Recoverable	Prep	3005A			284572	11/24/15 08:15	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	285085	11/25/15 17:55	RJB	TAL PEN
Total/NA	Prep	7470A			284555	11/23/15 10:33	JAP	TAL PEN
Total/NA	Analysis	7470A		1	284981	11/25/15 14:07	JAP	TAL PEN
Total/NA	Analysis	325.2		1	285760	12/02/15 12:27	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	285025	11/25/15 18:59	TET	TAL PEN

Client Sample ID: CCR-13

Date Collected: 11/19/15 09:45

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	285031	11/26/15 00:08	TAJ	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-1

Client Sample ID: CCR-13

Date Collected: 11/19/15 09:45

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	285947	12/04/15 04:53	TAJ	TAL PEN
Total Recoverable	Prep	3005A			284572	11/24/15 08:15	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	285085	11/25/15 17:59	RJB	TAL PEN
Total/NA	Prep	7470A			284555	11/23/15 10:33	JAP	TAL PEN
Total/NA	Analysis	7470A		1	284981	11/25/15 14:08	JAP	TAL PEN
Total/NA	Analysis	325.2		1	285760	12/02/15 12:27	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	285025	11/25/15 18:59	TET	TAL PEN

Client Sample ID: CCR-14

Date Collected: 11/19/15 08:45

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	285031	11/26/15 00:31	TAJ	TAL PEN
Total Recoverable	Prep	3005A			284572	11/24/15 08:15	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	285085	11/25/15 18:04	RJB	TAL PEN
Total/NA	Prep	7470A			284555	11/23/15 10:33	JAP	TAL PEN
Total/NA	Analysis	7470A		1	284981	11/25/15 14:10	JAP	TAL PEN
Total/NA	Analysis	325.2		1	285760	12/02/15 12:27	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	285025	11/25/15 18:59	TET	TAL PEN

Client Sample ID: DUP

Date Collected: 11/19/15 00:00

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			284572	11/24/15 08:15	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	285085	11/25/15 18:09	RJB	TAL PEN
Total/NA	Prep	7470A			284555	11/23/15 10:33	JAP	TAL PEN
Total/NA	Analysis	7470A		1	284981	11/25/15 14:11	JAP	TAL PEN

Client Sample ID: FB

Date Collected: 11/19/15 14:30

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-18

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			284572	11/24/15 08:15	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	285085	11/25/15 16:09	RJB	TAL PEN
Total/NA	Prep	7470A			284555	11/23/15 10:33	JAP	TAL PEN
Total/NA	Analysis	7470A		1	284981	11/25/15 14:12	JAP	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Pensacola

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information Client Contact: <u>TEREX ELWAGGAR</u> Company: <u>PIVOTAL ENG.</u> Address: <u>14440 Highway 100 North</u> City: <u>Steddington</u> State: <u>LA</u> Zip: <u>71260</u> Phone: <u>400-5346</u> Email: <u>terex@pivotaleng.com</u> Project Name: <u>CCR Groundwater Sampling - Nov 2015</u> Site: <u>NELSON UNIT 6 CADL</u>		Sampler: <u>L. McDER</u> Phone: <u>225-505-5124</u> Lab P.M.: <u>Wilson, Jason A</u> E-Mail: <u>jason.wilson@testamericainc.com</u>		Carrier Tracking No(s): COC No: <u>400-50215-23023.1</u> Page: <u>Page 1 of 2</u> Job #:	
Due Date Requested: TAT Requested (days): PO #: <u>Pre-Payment by CC Required</u> WO #: <u>400-5346</u> Project #: <u>400-5346</u> SSOW#:		Analysis Requested 300 ORGFM, 28D - Chloride, Fluoride, Sulfate 6010B - Boron, Calcium 620C - Total Dissolved Solids 803.0, 904.0 6020, 7470A  400-114163 COC			
Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=wastewater, BT=Tissue, A=Air)		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 Other: M - Hexane N - None O - AsNaO2 P - Na2CO3 Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)			
Special Instructions/Note: Chloride by 325.2 HOLD REMAINING FOR RESULTS		Total Number of Containers:			
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☒ Archive For <u>1</u> Months		Special Instructions/QC Requirements:			
Empty Kit Relinquished by: Relinquished by: <u>Terex Elwaggar</u> Relinquished by: <u>Terex Elwaggar</u> Relinquished by:		Date: <u>11/19/15 1600</u> Date/Time: <u>11/19/15 8:20</u> Date/Time:			
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Method of Shipment:			
Custody Seal No.: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks: <u>0.9°C IR-6</u>			

Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

45

TestAmerica

ONLST: TWENTYFOUR W. BROAD ST. NEW YORK, N.Y. 10038

Client Information Client Contact: Ms. Kathy Brown Company: Enterprise Operations Inc. Address: 11140 Highway 466 North City: Stedington State: LA Zip: 714206 Phone: 504-742-0606 Email: kbrown13@enterprisegroup.com		Lab Pw: Wilson, Jason A E-Mail: jason.wilson@testamericainc.com		Carrier Tracking No(s): 400-50215-23023.2 Page: Page 2 of 2 Job #:	
Due Date Requested: TAT Requested (days): PO #: Pre-Payment by CC Required WO #: Project #: 40005346 SSOW#:		Analysis Requested			
Sample Identification CCR-3 CCR-9 CCR-10 CCR-11 CCR-12 CCR-13 CCR-14 DUP FB MO MO		Sample Date 11/19 11/18 11/18 11/18 11/19 11/19 11/19 11/19 11/19 11/19		Sample Time 1230 1600 1430 1400 1050 0845 0845 — 1430	
Sample Type (C=Comp, G=grab) G I I I I I I I I		Matrix (W=water, S=solid, O=oil, BT=Tissue, A=Air) Water Water Water Water Water Water Water Water Water Water		Field Filtered Sample (Yes or No) 300, ORGFM, 28D - Chloride, Fluoride, Sulfate 2440C - Total Dissolved Solids 6010B - Boron, Calcium 8020, 7470A 8020, 7470A	
Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecylhydrate U - Acetone V - MCAA W - pH 4.5 L - EDTA Z - other (specify) Other:		Special Instructions/Note: Chloride by 325.2 Acid REMANEND FOR RESULTS			
Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☒ Archive For 1 Months			
Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by:		Special Instructions/QC Requirements: Deliverable Requested: I, II, III, IV, Other (specify)			
Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by:		Method of Shipment: Date/Time: 11/19/2015 1600 Date/Time: 11/19/2015 1600 Date/Time: 11/19/2015 1600			
Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by:		Company: Enterprise Operations Inc. Enterprise Operations Inc. Enterprise Operations Inc.			
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Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by:		Company: Enterprise Operations Inc.<			

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-114163-3

Client Project/Site: Nelson Unit 6 CADL

For:

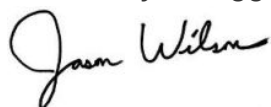
Pivotal Engineering LLC

1515 Poydras Street

Suite 1875

New Orleans, Louisiana 70112

Attn: Terry Elnaggar



Authorized for release by:

12/17/2015 5:09:45 PM

Jason Wilson, Project Manager I

(251)706-3217

jason.wilson@testamericainc.com

LINKS

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results through

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www.testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Client Sample Results	5
Definitions	8
QC Sample Results	9
Chronicle	10

Case Narrative

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-3

Job ID: 400-114163-3

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-114163-3

Comments

No additional comments.

Receipt

The samples were received on 11/20/2015 8:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.9° C, 1.2° C, 1.4° C and 2.4° C.

HPLC/IC

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

Sample Summary

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-114163-1	CCR-4	Water	11/18/15 11:45	11/20/15 08:20
400-114163-2	CCR-5	Water	11/18/15 10:40	11/20/15 08:20
400-114163-3	CCR-6	Water	11/18/15 09:40	11/20/15 08:20
400-114163-4	CCR-7	Water	11/18/15 08:40	11/20/15 08:20
400-114163-5	CCR-8	Water	11/18/15 12:40	11/20/15 08:20
400-114163-6	DUP	Water	11/18/15 00:00	11/20/15 08:20
400-114163-7	FB	Water	11/18/15 12:30	11/20/15 08:20
400-114163-8	CCR-1	Water	11/19/15 14:45	11/20/15 08:20
400-114163-9	CCR-2	Water	11/19/15 13:40	11/20/15 08:20
400-114163-10	CCR-3	Water	11/19/15 12:30	11/20/15 08:20
400-114163-11	CCR-9	Water	11/18/15 16:00	11/20/15 08:20
400-114163-12	CCR-10	Water	11/18/15 14:50	11/20/15 08:20
400-114163-13	CCR-11	Water	11/18/15 14:00	11/20/15 08:20
400-114163-14	CCR-12	Water	11/19/15 10:50	11/20/15 08:20
400-114163-15	CCR-13	Water	11/19/15 09:45	11/20/15 08:20
400-114163-16	CCR-14	Water	11/19/15 08:45	11/20/15 08:20

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-3

Client Sample ID: CCR-4

Date Collected: 11/18/15 11:45

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	52		5.0		mg/L	-		11/25/15 10:04	5

Client Sample ID: CCR-5

Date Collected: 11/18/15 10:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-2

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55		5.0		mg/L	-		12/04/15 03:22	5

Client Sample ID: CCR-6

Date Collected: 11/18/15 09:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	91		5.0		mg/L	-		11/25/15 10:27	5

Client Sample ID: CCR-7

Date Collected: 11/18/15 08:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	76		5.0		mg/L	-		11/25/15 10:50	5

Client Sample ID: CCR-8

Date Collected: 11/18/15 12:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-5

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		5.0		mg/L	-		11/25/15 11:13	5

Client Sample ID: DUP

Date Collected: 11/18/15 00:00

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-6

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57		5.0		mg/L	-		11/25/15 11:35	5

Client Sample ID: FB

Date Collected: 11/18/15 12:30

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-7

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L	-		11/25/15 11:58	1

TestAmerica Pensacola

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-3

Client Sample ID: CCR-1

Date Collected: 11/19/15 14:45

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-8

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	54		5.0		mg/L			11/25/15 13:07	5

Client Sample ID: CCR-2

Date Collected: 11/19/15 13:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-9

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62		5.0		mg/L			11/25/15 13:29	5

Client Sample ID: CCR-3

Date Collected: 11/19/15 12:30

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-10

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77		5.0		mg/L			11/25/15 22:14	5

Client Sample ID: CCR-9

Date Collected: 11/18/15 16:00

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-11

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48		5.0		mg/L			11/25/15 22:37	5

Client Sample ID: CCR-10

Date Collected: 11/18/15 14:50

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-12

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35		5.0		mg/L			11/25/15 23:00	5

Client Sample ID: CCR-11

Date Collected: 11/18/15 14:00

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-13

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		5.0		mg/L			11/25/15 23:22	5

Client Sample ID: CCR-12

Date Collected: 11/19/15 10:50

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-14

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23		1.0		mg/L			11/25/15 23:45	1

TestAmerica Pensacola

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-3

Client Sample ID: CCR-13

Date Collected: 11/19/15 09:45

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-15

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23		5.0		mg/L			11/26/15 00:08	5

Client Sample ID: CCR-14

Date Collected: 11/19/15 08:45

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-16

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		1.0		mg/L			11/26/15 00:31	1

Definitions/Glossary

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-3

Qualifiers

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.

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-3

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-285031/46

Matrix: Water

Analysis Batch: 285031

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			11/26/15 05:50	1

Lab Sample ID: LCS 400-285031/47

Matrix: Water

Analysis Batch: 285031

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	10.0	9.28		mg/L		93	90 - 110

Lab Sample ID: LCSD 400-285031/48

Matrix: Water

Analysis Batch: 285031

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	10.0	9.21		mg/L		92	90 - 110	1	15

Lab Sample ID: 400-114163-A-4 MS

Matrix: Water

Analysis Batch: 285031

Client Sample ID: 400-114163-A-4 MS

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	70	E	10.0	80.6	E 4	mg/L		109	80 - 120

Lab Sample ID: 400-114163-2 MS

Matrix: Water

Analysis Batch: 285947

Client Sample ID: CCR-5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	55		50.0	107		mg/L		103	80 - 120

Lab Sample ID: 400-114163-2 MSD

Matrix: Water

Analysis Batch: 285947

Client Sample ID: CCR-5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	55		50.0	107		mg/L					

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-3

Client Sample ID: CCR-4

Date Collected: 11/18/15 11:45

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	284920	11/25/15 10:04	TAJ	TAL PEN

Client Sample ID: CCR-5

Date Collected: 11/18/15 10:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	285947	12/04/15 03:22	TAJ	TAL PEN

Client Sample ID: CCR-6

Date Collected: 11/18/15 09:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	284920	11/25/15 10:27	TAJ	TAL PEN

Client Sample ID: CCR-7

Date Collected: 11/18/15 08:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	284920	11/25/15 10:50	TAJ	TAL PEN

Client Sample ID: CCR-8

Date Collected: 11/18/15 12:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	284920	11/25/15 11:13	TAJ	TAL PEN

Client Sample ID: DUP

Date Collected: 11/18/15 00:00

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	284920	11/25/15 11:35	TAJ	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-3

Client Sample ID: FB

Date Collected: 11/18/15 12:30

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	284920	11/25/15 11:58	TAJ	TAL PEN

Client Sample ID: CCR-1

Date Collected: 11/19/15 14:45

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	284920	11/25/15 13:07	TAJ	TAL PEN

Client Sample ID: CCR-2

Date Collected: 11/19/15 13:40

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	284920	11/25/15 13:29	TAJ	TAL PEN

Client Sample ID: CCR-3

Date Collected: 11/19/15 12:30

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	285031	11/25/15 22:14	TAJ	TAL PEN

Client Sample ID: CCR-9

Date Collected: 11/18/15 16:00

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	285031	11/25/15 22:37	TAJ	TAL PEN

Client Sample ID: CCR-10

Date Collected: 11/18/15 14:50

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	285031	11/25/15 23:00	TAJ	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Nelson Unit 6 CADL

TestAmerica Job ID: 400-114163-3

Client Sample ID: CCR-11

Date Collected: 11/18/15 14:00

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	285031	11/25/15 23:22	TAJ	TAL PEN

Client Sample ID: CCR-12

Date Collected: 11/19/15 10:50

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	285031	11/25/15 23:45	TAJ	TAL PEN

Client Sample ID: CCR-13

Date Collected: 11/19/15 09:45

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5	285031	11/26/15 00:08	TAJ	TAL PEN

Client Sample ID: CCR-14

Date Collected: 11/19/15 08:45

Date Received: 11/20/15 08:20

Lab Sample ID: 400-114163-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	285031	11/26/15 00:31	TAJ	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

TestAmerica Job ID: 400-119047-1

Client Project/Site: Nelson CCR Wells- CCR (Detection)

For:

Pivotal Engineering LLC
1515 Poydras Street
Suite 1875
New Orleans, Louisiana 70112

Attn: Terry Elnaggar



Authorized for release by:
4/15/2016 12:26:51 PM

Jason Wilson, Project Manager I
(251)706-3217

jason.wilson@testamericainc.com

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Sample Summary	4
Client Sample Results	5
Definitions	11
QC Sample Results	12
Chronicle	21
Chain of Custody	25

Case Narrative

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Job ID: 400-119047-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-119047-1

Comments

No additional comments.

Receipt

The samples were received on 3/17/2016 9:23 AM, 3/19/2016 9:41 AM and 3/24/2016 8:17 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 9 coolers at receipt time were 0.2° C, 1.2° C, 1.7° C, 1.8° C, 2.4° C, 2.6° C, 4.5° C, 4.5° C and 4.8° C.

HPLC/IC

Method(s) 300.0: The following samples was diluted to bring the concentration of target analytes within the calibration range: CCR-13 (400-119083-6) and (400-119076-F-1). Elevated reporting limits (RLs) are provided.

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

Metals

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

General Chemistry

Method(s) 325.2, 9251, SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-298942 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Sample Summary

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-119047-1	CCR-1	Water	03/16/16 10:15	03/17/16 09:23
400-119047-2	CCR-8	Water	03/16/16 13:30	03/17/16 09:23
400-119083-1	CCR-2	Water	03/17/16 11:45	03/19/16 09:41
400-119083-2	CCR-3	Water	03/17/16 10:30	03/19/16 09:41
400-119083-3	CCR-10	Water	03/16/16 16:45	03/19/16 09:41
400-119083-4	CCR-11	Water	03/16/16 18:45	03/19/16 09:41
400-119083-5	CCR-12	Water	03/17/16 16:45	03/19/16 09:41
400-119083-6	CCR-13	Water	03/17/16 15:15	03/19/16 09:41
400-119083-7	CCR-14	Water	03/17/16 13:30	03/19/16 09:41
400-119083-8	FIELD BLANK	Water	03/17/16 11:00	03/19/16 09:41
400-119310-1	CCR-4	Water	03/21/16 08:30	03/24/16 08:17
400-119310-2	CCR-5	Water	03/21/16 10:30	03/24/16 08:17
400-119310-3	CCR-6	Water	03/21/16 13:15	03/24/16 08:17
400-119310-4	CCR-7	Water	03/21/16 15:15	03/24/16 08:17
400-119310-5	CCR-9	Water	03/21/16 17:30	03/24/16 08:17
400-119310-6	DUPLICATE	Water	03/21/16 00:00	03/24/16 08:17

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Client Sample ID: CCR-1

Date Collected: 03/16/16 10:15

Date Received: 03/17/16 09:23

Lab Sample ID: 400-119047-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.46		0.20		mg/L			03/23/16 20:50	1
Sulfate	5.9		1.0		mg/L			03/23/16 20:50	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	87		50		ug/L		03/21/16 12:20	03/22/16 17:54	5
Calcium	21000		250		ug/L		03/21/16 12:20	03/22/16 17:54	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49		4.0		mg/L			03/25/16 09:56	2
Total Dissolved Solids	330		5.0		mg/L			03/21/16 16:00	1

Client Sample ID: CCR-8

Date Collected: 03/16/16 13:30

Date Received: 03/17/16 09:23

Lab Sample ID: 400-119047-2

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			03/23/16 18:56	1
Sulfate	2.2		1.0		mg/L			03/23/16 18:56	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	60		50		ug/L		03/21/16 12:20	03/22/16 17:59	5
Calcium	12000		250		ug/L		03/21/16 12:20	03/22/16 17:59	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	99	F1	20		mg/L			03/25/16 09:56	10
Total Dissolved Solids	290		5.0		mg/L			03/21/16 16:00	1

Client Sample ID: CCR-2

Date Collected: 03/17/16 11:45

Date Received: 03/19/16 09:41

Lab Sample ID: 400-119083-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.39		0.20		mg/L			03/26/16 01:30	1
Sulfate	1.2		1.0		mg/L			03/26/16 01:30	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	67		50		ug/L		03/21/16 12:20	03/22/16 18:41	5
Calcium	20000		250		ug/L		03/21/16 12:20	03/22/16 18:41	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58		4.0		mg/L			03/25/16 11:43	2
Total Dissolved Solids	260		5.0		mg/L			03/23/16 10:38	1

TestAmerica Pensacola

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Client Sample ID: CCR-3

Date Collected: 03/17/16 10:30

Date Received: 03/19/16 09:41

Lab Sample ID: 400-119083-2

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.49		0.20		mg/L			03/26/16 16:43	1
Sulfate	24		1.0		mg/L			03/26/16 16:43	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	80		50		ug/L		03/21/16 12:20	03/22/16 18:46	5
Calcium	24000		250		ug/L		03/21/16 12:20	03/22/16 18:46	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		10		mg/L			03/25/16 11:43	5
Total Dissolved Solids	400		5.0		mg/L			03/23/16 10:38	1

Client Sample ID: CCR-10

Date Collected: 03/16/16 16:45

Date Received: 03/19/16 09:41

Lab Sample ID: 400-119083-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.75		0.20		mg/L			03/26/16 17:06	1
Sulfate	ND		1.0		mg/L			03/26/16 17:06	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	63		50		ug/L		03/21/16 12:20	03/22/16 18:51	5
Calcium	30000		250		ug/L		03/21/16 12:20	03/22/16 18:51	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44		4.0		mg/L			03/25/16 11:43	2
Total Dissolved Solids	280		5.0		mg/L			03/21/16 16:00	1

Client Sample ID: CCR-11

Date Collected: 03/16/16 18:45

Date Received: 03/19/16 09:41

Lab Sample ID: 400-119083-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.79		0.20		mg/L			03/26/16 17:28	1
Sulfate	4.6		1.0		mg/L			03/26/16 17:28	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	63		50		ug/L		03/21/16 12:20	03/22/16 18:55	5
Calcium	28000		250		ug/L		03/21/16 12:20	03/22/16 18:55	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29		2.0		mg/L			03/25/16 11:18	1
Total Dissolved Solids	240		5.0		mg/L			03/21/16 16:00	1

TestAmerica Pensacola

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Client Sample ID: CCR-12

Date Collected: 03/17/16 16:45

Date Received: 03/19/16 09:41

Lab Sample ID: 400-119083-5

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			03/26/16 18:37	1
Sulfate	26		1.0		mg/L			03/26/16 18:37	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		50		ug/L		03/21/16 12:20	03/22/16 19:00	5
Calcium	20000		250		ug/L		03/21/16 12:20	03/22/16 19:00	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20		2.0		mg/L			03/25/16 11:18	1
Total Dissolved Solids	180		5.0		mg/L			03/23/16 10:38	1

Client Sample ID: CCR-13

Date Collected: 03/17/16 15:15

Date Received: 03/19/16 09:41

Lab Sample ID: 400-119083-6

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.25		0.20		mg/L			03/26/16 19:00	1
Sulfate	56		5.0		mg/L			03/28/16 23:39	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	60		50		ug/L		03/21/16 12:20	03/22/16 19:19	5
Calcium	22000		250		ug/L		03/21/16 12:20	03/22/16 19:19	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19		2.0		mg/L			03/25/16 11:18	1
Total Dissolved Solids	270		5.0		mg/L			03/23/16 10:38	1

Client Sample ID: CCR-14

Date Collected: 03/17/16 13:30

Date Received: 03/19/16 09:41

Lab Sample ID: 400-119083-7

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.25		0.20		mg/L			03/26/16 19:45	1
Sulfate	ND		1.0		mg/L			03/26/16 19:45	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		50		ug/L		03/21/16 12:20	03/22/16 19:23	5
Calcium	19000		250		ug/L		03/21/16 12:20	03/22/16 19:23	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14		2.0		mg/L			03/25/16 11:18	1
Total Dissolved Solids	130		5.0		mg/L			03/23/16 10:38	1

TestAmerica Pensacola

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Client Sample ID: FIELD BLANK

Date Collected: 03/17/16 11:00

Date Received: 03/19/16 09:41

Lab Sample ID: 400-119083-8

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			03/26/16 20:08	1
Sulfate	ND		1.0		mg/L			03/26/16 20:08	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		50		ug/L		03/21/16 12:20	03/22/16 19:28	5
Calcium	ND		250		ug/L		03/21/16 12:20	03/22/16 19:28	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			03/25/16 11:18	1
Total Dissolved Solids	ND		5.0		mg/L			03/23/16 11:46	1

Client Sample ID: CCR-4

Date Collected: 03/21/16 08:30

Date Received: 03/24/16 08:17

Lab Sample ID: 400-119310-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.26		0.20		mg/L			03/30/16 16:53	1
Sulfate	8.6		1.0		mg/L			03/30/16 16:53	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	95		50		ug/L		03/30/16 09:00	03/31/16 18:14	5
Calcium	20000		250		ug/L		03/30/16 09:00	03/31/16 18:14	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51		4.0		mg/L			03/25/16 17:53	2
Total Dissolved Solids	230		5.0		mg/L			03/25/16 12:28	1

Client Sample ID: CCR-5

Date Collected: 03/21/16 10:30

Date Received: 03/24/16 08:17

Lab Sample ID: 400-119310-2

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.27		0.20		mg/L			03/30/16 17:16	1
Sulfate	ND		1.0		mg/L			03/30/16 17:16	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	92		50		ug/L		03/30/16 09:00	03/31/16 18:18	5
Calcium	35000		250		ug/L		03/30/16 09:00	03/31/16 18:18	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58		4.0		mg/L			03/25/16 17:53	2
Total Dissolved Solids	330		5.0		mg/L			03/25/16 12:28	1

TestAmerica Pensacola

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Client Sample ID: CCR-6

Date Collected: 03/21/16 13:15

Date Received: 03/24/16 08:17

Lab Sample ID: 400-119310-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.27		0.20		mg/L			03/30/16 17:39	1
Sulfate	ND		1.0		mg/L			03/30/16 17:39	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	87		50		ug/L		03/30/16 09:00	03/31/16 18:23	5
Calcium	30000		250		ug/L		03/30/16 09:00	03/31/16 18:23	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	89		10		mg/L			03/26/16 10:52	5
Total Dissolved Solids	260		5.0		mg/L			03/25/16 12:28	1

Client Sample ID: CCR-7

Date Collected: 03/21/16 15:15

Date Received: 03/24/16 08:17

Lab Sample ID: 400-119310-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.30		0.20		mg/L			03/30/16 18:02	1
Sulfate	1.1		1.0		mg/L			03/30/16 18:02	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	73		50		ug/L		03/30/16 09:00	03/31/16 18:27	5
Calcium	42000		250		ug/L		03/30/16 09:00	03/31/16 18:27	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	67		10		mg/L			03/26/16 11:08	5
Total Dissolved Solids	320		5.0		mg/L			03/25/16 12:28	1

Client Sample ID: CCR-9

Date Collected: 03/21/16 17:30

Date Received: 03/24/16 08:17

Lab Sample ID: 400-119310-5

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.61		0.20		mg/L			03/30/16 18:24	1
Sulfate	7.6		1.0		mg/L			03/30/16 18:24	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	78		50		ug/L		03/30/16 09:00	04/04/16 17:24	5
Calcium	28000		250		ug/L		03/30/16 09:00	04/04/16 17:24	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56		4.0		mg/L			03/26/16 10:49	2
Total Dissolved Solids	350		5.0		mg/L			03/25/16 12:28	1

TestAmerica Pensacola

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Client Sample ID: DUPLICATE

Lab Sample ID: 400-119310-6

Date Collected: 03/21/16 00:00

Matrix: Water

Date Received: 03/24/16 08:17

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.28		0.20		mg/L			03/30/16 20:18	1
Sulfate	ND		1.0		mg/L			03/30/16 20:18	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100		50		ug/L		03/30/16 09:00	04/04/16 17:28	5
Calcium	37000		250		ug/L		03/30/16 09:00	04/04/16 17:28	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58		4.0		mg/L			03/26/16 10:49	2
Total Dissolved Solids	400		5.0		mg/L			03/25/16 12:28	1

Definitions/Glossary

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Qualifiers

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.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-298783/4

Matrix: Water

Analysis Batch: 298783

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			03/23/16 17:48	1
Sulfate	ND		1.0		mg/L			03/23/16 17:48	1

Lab Sample ID: LCS 400-298783/5

Matrix: Water

Analysis Batch: 298783

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	9.52		mg/L		95	90 - 110
Sulfate	10.0	10.3		mg/L		103	90 - 110

Lab Sample ID: LCSD 400-298783/6

Matrix: Water

Analysis Batch: 298783

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	9.52		mg/L		95	90 - 110	0	15
Sulfate	10.0	10.3		mg/L		103	90 - 110	0	15

Lab Sample ID: 400-119047-2 MS

Matrix: Water

Analysis Batch: 298783

Client Sample ID: CCR-8

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	ND		10.0	10.0		mg/L		99	80 - 120
Sulfate	2.2		10.0	13.0		mg/L		108	80 - 120

Lab Sample ID: 400-119047-2 MSD

Matrix: Water

Analysis Batch: 298783

Client Sample ID: CCR-8

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	ND		10.0	10.1		mg/L		99	80 - 120	0	20
Sulfate	2.2		10.0	13.0		mg/L		108	80 - 120	0	20

Lab Sample ID: MB 400-299216/65

Matrix: Water

Analysis Batch: 299216

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			03/26/16 11:46	1
Sulfate	ND		1.0		mg/L			03/26/16 11:46	1

Lab Sample ID: LCS 400-299216/66

Matrix: Water

Analysis Batch: 299216

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	9.54		mg/L		95	90 - 110

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-299216/66

Matrix: Water

Analysis Batch: 299216

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	10.0		mg/L		100	90 - 110

Lab Sample ID: LCSD 400-299216/67

Matrix: Water

Analysis Batch: 299216

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	9.51		mg/L		95	90 - 110	0	15
Sulfate	10.0	9.95		mg/L		100	90 - 110	1	15

Lab Sample ID: 400-119083-6 MS

Matrix: Water

Analysis Batch: 299216

Client Sample ID: CCR-13

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.25		10.0	10.8		mg/L		106	80 - 120
Sulfate	53	E	10.0	63.8	E 4	mg/L		110	80 - 120

Lab Sample ID: MB 400-299268/34

Matrix: Water

Analysis Batch: 299268

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			03/25/16 23:59	1
Sulfate	ND		1.0		mg/L			03/25/16 23:59	1

Lab Sample ID: LCS 400-299268/36

Matrix: Water

Analysis Batch: 299268

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	9.55		mg/L		96	90 - 110
Sulfate	10.0	10.2		mg/L		102	90 - 110

Lab Sample ID: LCSD 400-299268/37

Matrix: Water

Analysis Batch: 299268

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	9.57		mg/L		96	90 - 110	0	15
Sulfate	10.0	10.2		mg/L		102	90 - 110	0	15

Lab Sample ID: 400-119083-1 MS

Matrix: Water

Analysis Batch: 299268

Client Sample ID: CCR-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.39		10.0	10.3		mg/L		99	80 - 120
Sulfate	1.2		10.0	11.7		mg/L		106	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 400-119083-1 MSD

Matrix: Water

Analysis Batch: 299268

Client Sample ID: CCR-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.39		10.0	10.3		mg/L		99	80 - 120	0	20
Sulfate	1.2		10.0	11.7		mg/L		105	80 - 120	0	20

Lab Sample ID: MB 400-299284/4

Matrix: Water

Analysis Batch: 299284

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			03/28/16 15:07	1
Sulfate	ND		1.0		mg/L			03/28/16 15:07	1

Lab Sample ID: LCS 400-299284/5

Matrix: Water

Analysis Batch: 299284

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	9.61		mg/L		96	90 - 110
Sulfate	10.0	10.5		mg/L		105	90 - 110

Lab Sample ID: LCSD 400-299284/6

Matrix: Water

Analysis Batch: 299284

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	9.74		mg/L		97	90 - 110	1	15
Sulfate	10.0	10.6		mg/L		106	90 - 110	1	15

Lab Sample ID: MB 400-299640/4

Matrix: Water

Analysis Batch: 299640

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			03/30/16 12:19	1
Sulfate	ND		1.0		mg/L			03/30/16 12:19	1

Lab Sample ID: LCS 400-299640/5

Matrix: Water

Analysis Batch: 299640

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	9.60		mg/L		96	90 - 110
Sulfate	10.0	10.2		mg/L		102	90 - 110

Lab Sample ID: LCSD 400-299640/6

Matrix: Water

Analysis Batch: 299640

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	9.53		mg/L		95	90 - 110	1	15

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 400-299640/6

Matrix: Water

Analysis Batch: 299640

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	10.0	10.2		mg/L		102	90 - 110	1	15

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MRL 400-298462/22

Matrix: Water

Analysis Batch: 298462

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	5.00	ND		ug/L		83	50 - 150
Calcium	50.0	ND		ug/L		115	50 - 150

Lab Sample ID: MRL 400-299812/24

Matrix: Water

Analysis Batch: 299812

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	5.00	ND		ug/L		93	50 - 150
Calcium	50.0	ND		ug/L		90	50 - 150

Lab Sample ID: MRL 400-300336/21

Matrix: Water

Analysis Batch: 300336

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	5.00	ND		ug/L		77	50 - 150
Calcium	50.0	ND		ug/L		103	50 - 150

Lab Sample ID: MB 400-298175/1-A ^5

Matrix: Water

Analysis Batch: 298462

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 298175

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		50		ug/L		03/21/16 12:20	03/22/16 17:45	5
Calcium	ND		250		ug/L		03/21/16 12:20	03/22/16 17:45	5

Lab Sample ID: LCS 400-298175/2-A ^1

Matrix: Water

Analysis Batch: 298462

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 298175

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	100	93.3		ug/L		93	80 - 120
Calcium	5000	5090		ug/L		102	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-119047-2 MS

Matrix: Water

Analysis Batch: 298462

Client Sample ID: CCR-8

Prep Type: Total Recoverable

Prep Batch: 298175

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	60		100	172		ug/L		112	75 - 125
Calcium	12000		5000	17700		ug/L		106	75 - 125

Lab Sample ID: 400-119047-2 MSD

Matrix: Water

Analysis Batch: 298462

Client Sample ID: CCR-8

Prep Type: Total Recoverable

Prep Batch: 298175

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	60		100	162		ug/L		101	75 - 125	6	20
Calcium	12000		5000	17600		ug/L		104	75 - 125	1	20

Lab Sample ID: MB 400-299408/1-A ^5

Matrix: Water

Analysis Batch: 299812

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 299408

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		50		ug/L		03/30/16 09:00	03/31/16 14:01	5
Calcium	ND		250		ug/L		03/30/16 09:00	03/31/16 14:01	5

Lab Sample ID: LCS 400-299408/2-A ^1

Matrix: Water

Analysis Batch: 299812

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 299408

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	100	89.2		ug/L		89	80 - 120
Calcium	5000	4810		ug/L		96	80 - 120

Lab Sample ID: MB 400-299410/1-A ^5

Matrix: Water

Analysis Batch: 300336

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 299410

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		50		ug/L		03/30/16 09:00	04/04/16 17:15	5
Calcium	ND		250		ug/L		03/30/16 09:00	04/04/16 17:15	5

Lab Sample ID: LCS 400-299410/2-A ^1

Matrix: Water

Analysis Batch: 300336

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 299410

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	100	97.9		ug/L		98	80 - 120
Calcium	5000	5120		ug/L		102	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Method: 325.2 - Chloride

Lab Sample ID: MB 400-298942/6

Matrix: Water

Analysis Batch: 298942

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			03/25/16 09:17	1

Lab Sample ID: LCS 400-298942/7

Matrix: Water

Analysis Batch: 298942

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.7		mg/L		106	90 - 110

Lab Sample ID: LCSD 400-298942/4

Matrix: Water

Analysis Batch: 298942

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	30.0	31.7		mg/L		106	90 - 110	0	8

Lab Sample ID: 400-119047-2 MS

Matrix: Water

Analysis Batch: 298942

Client Sample ID: CCR-8

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	99	F1	100	108	F1	mg/L		9	73 - 120

Lab Sample ID: 400-119047-2 MSD

Matrix: Water

Analysis Batch: 298942

Client Sample ID: CCR-8

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	99	F1	100	108	F1	mg/L		9	73 - 120	0	8

Lab Sample ID: MB 400-298988/6

Matrix: Water

Analysis Batch: 298988

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			03/25/16 10:46	1

Lab Sample ID: LCS 400-298988/7

Matrix: Water

Analysis Batch: 298988

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	32.2		mg/L		107	90 - 110

Lab Sample ID: 400-119083-8 MS

Matrix: Water

Analysis Batch: 298988

Client Sample ID: FIELD BLANK

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	ND		10.0	9.70		mg/L		97	73 - 120

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Lab Sample ID: 400-119083-8 MSD

Matrix: Water

Analysis Batch: 298988

Client Sample ID: FIELD BLANK

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	ND		10.0	9.71		mg/L		97	73 - 120	0	8

Lab Sample ID: MB 400-299077/6

Matrix: Water

Analysis Batch: 299077

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			03/25/16 13:41	1

Lab Sample ID: LCS 400-299077/7

Matrix: Water

Analysis Batch: 299077

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.8		mg/L		106	90 - 110

Lab Sample ID: MB 400-299113/6

Matrix: Water

Analysis Batch: 299113

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			03/26/16 09:31	1

Lab Sample ID: LCS 400-299113/7

Matrix: Water

Analysis Batch: 299113

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	32.4		mg/L		108	90 - 110

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

Lab Sample ID: MB 400-298201/1

Matrix: Water

Analysis Batch: 298201

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			03/21/16 16:00	1

Lab Sample ID: LCS 400-298201/2

Matrix: Water

Analysis Batch: 298201

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	293	244		mg/L		83	78 - 122

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

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

Lab Sample ID: MB 400-298500/1

Matrix: Water

Analysis Batch: 298500

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			03/23/16 10:38	1

Lab Sample ID: LCS 400-298500/2

Matrix: Water

Analysis Batch: 298500

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	293	264		mg/L		90	78 - 122

Lab Sample ID: 400-119083-1 DU

Matrix: Water

Analysis Batch: 298500

Client Sample ID: CCR-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	260		264		mg/L		0	5

Lab Sample ID: MB 400-298508/1

Matrix: Water

Analysis Batch: 298508

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			03/23/16 11:46	1

Lab Sample ID: LCS 400-298508/2

Matrix: Water

Analysis Batch: 298508

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	293	278		mg/L		95	78 - 122

Lab Sample ID: MB 400-298980/1

Matrix: Water

Analysis Batch: 298980

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			03/25/16 12:28	1

Lab Sample ID: LCS 400-298980/2

Matrix: Water

Analysis Batch: 298980

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	293	272		mg/L		93	78 - 122

Lab Sample ID: 400-119310-5 DU

Matrix: Water

Analysis Batch: 298980

Client Sample ID: CCR-9

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	350		346		mg/L		0	5

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Lab Sample ID: MB 400-299423/1

Matrix: Water

Analysis Batch: 299423

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			03/29/16 16:38	1

Lab Sample ID: LCS 400-299423/2

Matrix: Water

Analysis Batch: 299423

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	293	280		mg/L		96	78 - 122

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Client Sample ID: CCR-1

Date Collected: 03/16/16 10:15

Date Received: 03/17/16 09:23

Lab Sample ID: 400-119047-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	298783	03/23/16 20:50	TAJ	TAL PEN
Total Recoverable	Prep	3005A			298175	03/21/16 12:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	298462	03/22/16 17:54	RJB	TAL PEN
Total/NA	Analysis	325.2		2	298942	03/25/16 09:56	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	298201	03/21/16 16:00	TET	TAL PEN

Client Sample ID: CCR-8

Date Collected: 03/16/16 13:30

Date Received: 03/17/16 09:23

Lab Sample ID: 400-119047-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	298783	03/23/16 18:56	TAJ	TAL PEN
Total Recoverable	Prep	3005A			298175	03/21/16 12:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	298462	03/22/16 17:59	RJB	TAL PEN
Total/NA	Analysis	325.2		10	298942	03/25/16 09:56	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	298201	03/21/16 16:00	TET	TAL PEN

Client Sample ID: CCR-2

Date Collected: 03/17/16 11:45

Date Received: 03/19/16 09:41

Lab Sample ID: 400-119083-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	299268	03/26/16 01:30	TAJ	TAL PEN
Total Recoverable	Prep	3005A			298175	03/21/16 12:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	298462	03/22/16 18:41	RJB	TAL PEN
Total/NA	Analysis	325.2		2	298988	03/25/16 11:43	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	298500	03/23/16 10:38	TET	TAL PEN

Client Sample ID: CCR-3

Date Collected: 03/17/16 10:30

Date Received: 03/19/16 09:41

Lab Sample ID: 400-119083-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	299216	03/26/16 16:43	TAJ	TAL PEN
Total Recoverable	Prep	3005A			298175	03/21/16 12:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	298462	03/22/16 18:46	RJB	TAL PEN
Total/NA	Analysis	325.2		5	298988	03/25/16 11:43	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	298500	03/23/16 10:38	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Client Sample ID: CCR-10

Date Collected: 03/16/16 16:45

Date Received: 03/19/16 09:41

Lab Sample ID: 400-119083-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	299216	03/26/16 17:06	TAJ	TAL PEN
Total Recoverable	Prep	3005A			298175	03/21/16 12:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	298462	03/22/16 18:51	RJB	TAL PEN
Total/NA	Analysis	325.2		2	298988	03/25/16 11:43	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	298201	03/21/16 16:00	TET	TAL PEN

Client Sample ID: CCR-11

Date Collected: 03/16/16 18:45

Date Received: 03/19/16 09:41

Lab Sample ID: 400-119083-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	299216	03/26/16 17:28	TAJ	TAL PEN
Total Recoverable	Prep	3005A			298175	03/21/16 12:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	298462	03/22/16 18:55	RJB	TAL PEN
Total/NA	Analysis	325.2		1	298988	03/25/16 11:18	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	298201	03/21/16 16:00	TET	TAL PEN

Client Sample ID: CCR-12

Date Collected: 03/17/16 16:45

Date Received: 03/19/16 09:41

Lab Sample ID: 400-119083-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	299216	03/26/16 18:37	TAJ	TAL PEN
Total Recoverable	Prep	3005A			298175	03/21/16 12:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	298462	03/22/16 19:00	RJB	TAL PEN
Total/NA	Analysis	325.2		1	298988	03/25/16 11:18	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	298500	03/23/16 10:38	TET	TAL PEN

Client Sample ID: CCR-13

Date Collected: 03/17/16 15:15

Date Received: 03/19/16 09:41

Lab Sample ID: 400-119083-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	299216	03/26/16 19:00	TAJ	TAL PEN
Total/NA	Analysis	300.0		5	299284	03/28/16 23:39	TAJ	TAL PEN
Total Recoverable	Prep	3005A			298175	03/21/16 12:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	298462	03/22/16 19:19	RJB	TAL PEN
Total/NA	Analysis	325.2		1	298988	03/25/16 11:18	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	298500	03/23/16 10:38	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Client Sample ID: CCR-14

Lab Sample ID: 400-119083-7

Date Collected: 03/17/16 13:30

Matrix: Water

Date Received: 03/19/16 09:41

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	299216	03/26/16 19:45	TAJ	TAL PEN
Total Recoverable	Prep	3005A			298175	03/21/16 12:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	298462	03/22/16 19:23	RJB	TAL PEN
Total/NA	Analysis	325.2		1	298988	03/25/16 11:18	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	298500	03/23/16 10:38	TET	TAL PEN

Client Sample ID: FIELD BLANK

Lab Sample ID: 400-119083-8

Date Collected: 03/17/16 11:00

Matrix: Water

Date Received: 03/19/16 09:41

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	299216	03/26/16 20:08	TAJ	TAL PEN
Total Recoverable	Prep	3005A			298175	03/21/16 12:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	298462	03/22/16 19:28	RJB	TAL PEN
Total/NA	Analysis	325.2		1	298988	03/25/16 11:18	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	298508	03/23/16 11:46	TET	TAL PEN

Client Sample ID: CCR-4

Lab Sample ID: 400-119310-1

Date Collected: 03/21/16 08:30

Matrix: Water

Date Received: 03/24/16 08:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	299640	03/30/16 16:53	TAJ	TAL PEN
Total Recoverable	Prep	3005A			299408	03/30/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	299812	03/31/16 18:14	RJB	TAL PEN
Total/NA	Analysis	325.2		2	299077	03/25/16 17:53	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	298980	03/25/16 12:28	TET	TAL PEN

Client Sample ID: CCR-5

Lab Sample ID: 400-119310-2

Date Collected: 03/21/16 10:30

Matrix: Water

Date Received: 03/24/16 08:17

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	299640	03/30/16 17:16	TAJ	TAL PEN
Total Recoverable	Prep	3005A			299408	03/30/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	299812	03/31/16 18:18	RJB	TAL PEN
Total/NA	Analysis	325.2		2	299077	03/25/16 17:53	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	298980	03/25/16 12:28	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Nelson CCR Wells- CCR (Detection)

TestAmerica Job ID: 400-119047-1

Client Sample ID: CCR-6

Date Collected: 03/21/16 13:15

Date Received: 03/24/16 08:17

Lab Sample ID: 400-119310-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	299640	03/30/16 17:39	TAJ	TAL PEN
Total Recoverable	Prep	3005A			299408	03/30/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	299812	03/31/16 18:23	RJB	TAL PEN
Total/NA	Analysis	325.2		5	299113	03/26/16 10:52	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	298980	03/25/16 12:28	TET	TAL PEN

Client Sample ID: CCR-7

Date Collected: 03/21/16 15:15

Date Received: 03/24/16 08:17

Lab Sample ID: 400-119310-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	299640	03/30/16 18:02	TAJ	TAL PEN
Total Recoverable	Prep	3005A			299408	03/30/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	299812	03/31/16 18:27	RJB	TAL PEN
Total/NA	Analysis	325.2		5	299113	03/26/16 11:08	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	298980	03/25/16 12:28	TET	TAL PEN

Client Sample ID: CCR-9

Date Collected: 03/21/16 17:30

Date Received: 03/24/16 08:17

Lab Sample ID: 400-119310-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	299640	03/30/16 18:24	TAJ	TAL PEN
Total Recoverable	Prep	3005A			299410	03/30/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300336	04/04/16 17:24	RJB	TAL PEN
Total/NA	Analysis	325.2		2	299113	03/26/16 10:49	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	298980	03/25/16 12:28	TET	TAL PEN

Client Sample ID: DUPLICATE

Date Collected: 03/21/16 00:00

Date Received: 03/24/16 08:17

Lab Sample ID: 400-119310-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	299640	03/30/16 20:18	TAJ	TAL PEN
Total Recoverable	Prep	3005A			299410	03/30/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300336	04/04/16 17:28	RJB	TAL PEN
Total/NA	Analysis	325.2		2	299113	03/26/16 10:49	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	298980	03/25/16 12:28	TET	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Pensacola

TestAmerica Pensacola

3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Chain of Custody Record

Client Information Client Contact: Terry Elmaggar Company: Pivotal Engineering LLC Address: 1515 Poydras Street Suite 1875 City: New Orleans State, Zip: LA, 70112 Phone: _____ Email: telmaggar@pivotaleng.com Project Name: Nelson CCR Wells - CCR Parameters (Detection) Site: CADL		Lab Pk: Wilson, Jason A E-Mail: jason.wilson@testamericainc.com Phone: _____		Carrier Tracking No(s): _____ Page: Page 1 of 2 Job #: _____	
Due Date Requested: _____ TAT Requested (days): _____ PO #: _____ Pre-Payment by CC Required WO #: _____ Project #: 40005346 SOW#: _____		Analysis Requested  400-119047 COC			
Sample Identification Sample ID: CCR-1 Sample ID: CCR-2 Sample ID: CCR-3 Sample ID: CCR-4 Sample ID: CCR-5 Sample ID: CCR-6 Sample ID: CCR-7 Sample ID: CCR-8 Sample ID: CCR-9 Sample ID: CCR-10 Sample ID: CCR-11		Sample Date: 3/16/16 Sample Time: 1015 Sample Type (C=Comp, G=Grab): G Matrix (Visuol, Smell, Olfact, etc.): Water		Field Filtered Sample (Yes or No): ☒ Yes Field Filtered Sample (Yes or No): ☒ Yes Field Filtered Sample (Yes or No): ☒ Yes Field Filtered Sample (Yes or No): ☒ Yes Field Filtered Sample (Yes or No): ☒ Yes Field Filtered Sample (Yes or No): ☒ Yes Field Filtered Sample (Yes or No): ☒ Yes Field Filtered Sample (Yes or No): ☒ Yes Field Filtered Sample (Yes or No): ☒ Yes Field Filtered Sample (Yes or No): ☒ Yes Field Filtered Sample (Yes or No): ☒ Yes	
Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Arctidol H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: _____		Special Instructions/Note: Please Prot. Fluoride on Ass. Prot. also		Total Number of Containers: _____	
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab Special Instructions/CC Requirements: _____			
Empty Kit Relinquished by: _____ Relinquished by: _____ Relinquished by: _____ Relinquished by: _____		Date/Time: 3/16/16 1500 Date/Time: _____ Date/Time: _____ Date/Time: _____		Date/Time: 3/16/16 1500 Date/Time: _____ Date/Time: _____ Date/Time: _____	
Custody Seals Intact: _____ A Yes Δ No		Cooler Temperature(s) °C and Other Remarks: 4.8°C 4.5°C IP-6			

TestAmerica Pensacola
3355 McLenore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information Client Contact: Terry Elmaggar Company: Pivotal Engineering LLC Address: 1515 Poydras Street Suite 1875 City: New Orleans State, Zip: LA, 70112 Phone: Email: telmaggar@pivotaleng.com Project Name: Nelson CCR Wells - CCR Parameters (Detection) Site: CADL		Sender: <i>GLM</i> Phone: E-Mail: jason.wilson@testamerica.com Lab P/N: Wilson, Jason A		(Carrier Tracking Note): Page 2 of 2 Job #:																																																																																																																	
Analysis Requested Due Date Requested: TAT Requested (days): PO #: Pre-Payment by CC Required WC #: Project #: 14-00053-46 ISSDN#:																																																																																																																					
Sample Identification <table border="1"> <thead> <tr> <th>Sample ID</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=Comp, G=Grab)</th> <th>Matrix (Inorganic, Organic, Other)</th> <th>Preservation Code:</th> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>2540C - TDS</th> <th>300 ORGFM, 28D - Fluoride, Sulfate</th> <th>325.2 - Chloride</th> <th>6020 - Boron, Calcium</th> <th>Total Number of Containers</th> <th>Special Instructions/Note:</th> </tr> </thead> <tbody> <tr> <td>CCR-12</td> <td></td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CCR-13</td> <td></td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CCR-14</td> <td></td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Duplicate</td> <td></td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>MS</td> <td>3/16/16</td> <td>1345</td> <td>G</td> <td>Water</td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>MSD</td> <td>3/16/16</td> <td>1345</td> <td>G</td> <td>Water</td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>Field Blank</td> <td></td> <td></td> <td></td> <td>Water</td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td></td> </tr> </tbody> </table>						Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Inorganic, Organic, Other)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C - TDS	300 ORGFM, 28D - Fluoride, Sulfate	325.2 - Chloride	6020 - Boron, Calcium	Total Number of Containers	Special Instructions/Note:	CCR-12				Water										CCR-13				Water										CCR-14				Water										Duplicate				Water										MS	3/16/16	1345	G	Water				X	X	X	X			MSD	3/16/16	1345	G	Water				X	X	X	X			Field Blank				Water				X	X	X	X		
Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Inorganic, Organic, Other)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	2540C - TDS	300 ORGFM, 28D - Fluoride, Sulfate	325.2 - Chloride	6020 - Boron, Calcium	Total Number of Containers	Special Instructions/Note:																																																																																																								
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Duplicate				Water																																																																																																																	
MS	3/16/16	1345	G	Water				X	X	X	X																																																																																																										
MSD	3/16/16	1345	G	Water				X	X	X	X																																																																																																										
Field Blank				Water				X	X	X	X																																																																																																										
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)																																																																																																																					
Empty Kit Relinquished by: Relinquished by: <i>[Signature]</i> Date/Time: 3/16/16 1500 Relinquished by: Date/Time: Relinquished by: Date/Time:																																																																																																																					
Custody Seal No.: A Yes Δ No																																																																																																																					
Sample Disposal (4 yrs may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☒ Archive For <i>1</i> Months Special Instructions/OC Requirements:																																																																																																																					
Method of Shipment: Date/Time: 3-17-16 903 Company: Date/Time: 4.8.16 4.50e Company:																																																																																																																					

Chain of Custody Record

Client Information		Sampler: <i>GLM</i>		Lab PM: <i>Wilson, Jason A</i>		Carrier Tracking No(s):		COC No:	
Client Contact: <i>Terry Einaggar</i>		Phone:		E-Mail: <i>jason.wilson@testamericainc.com</i>		Page: <i>Page 1 of 2</i>		Job #:	
Company: <i>Pivotal Engineering LLC</i>		Address: <i>1515 Poydras Street Suite 1875</i>		City: <i>New Orleans</i>		State: <i>LA</i>		Zip: <i>70112</i>	
Phone: <i>504-581-1111</i>		PO #:		Pre-Payment by CC Required		WO #:		Project #:	
Email: <i>tehnaggar@pivotaleng.com</i>		Project Name: <i>Nelson CCR Wells - CCR Parameters (Detection)</i>		SSOW#: <i>CADL</i>		Site:		Preservation Codes:	
Matrix (Water, Seawater, Oil, etc.)		Sample Type (C=Comp, G=grab)		Sample Time		Sample Date		Sample ID	
CCR-1		G		1015		3/16/16		6020 - Boron, Calcium	
CCR-2		G		1145		3/17/16		325.2 - Chloride	
CCR-3		G		1030		3/17/16		300_ORGFM_28D - Fluoride, Sulfate	
CCR-4		G		1845		3/15/16		2540C - TDS	
CCR-5		G		1500		3/14/16		Field Filtered Sample (Yes or No)	
CCR-6		G		1730		3/14/16		Performance/MSD (Resonance)	
CCR-7		G		1315		3/15/16		Preservation Code:	
CCR-8		G		1330		3/16/16		Total Number of Containers	
CCR-9		G		1610		3/15/16		Special Instructions/Note:	
CCR-10		G		1645		3/16/16		Please Ret. Fluoride on Ass. Rpt also	
CCR-11		G		1645		3/16/16			
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)									
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☒ Archive For <i>1</i> Months									
Special Instructions/QC Requirements:									
Empty Kit Relinquished by: <i>Jason Wilson</i> Date: <i>3/16/16</i> Time: <i>1500</i> Company: <i>PE</i>									
Relinquished by: <i>Jason Wilson</i> Date: <i>3/16/16</i> Time: <i>1440</i> Company: <i>PE</i>									
Relinquished by: <i>Jason Wilson</i> Date: <i>3/16/16</i> Time: <i>1440</i> Company: <i>PE</i>									
Custody Seals Intact: ☒ Yes ☐ No Custody Seal No.: <i>24 C, 18°C JRS</i>									

Chain of Custody Record

Client Information		Sampler: <u>GLM</u>		Lab PM: <u>Wilson, Jason A</u>		Carrier Tracking No(s):	
Client Contact: <u>Terry Elhaggar</u>		Phone:		E-Mail: <u>jason.wilson@testamericainc.com</u>		COC No:	
Company: <u>Pivotal Engineering LLC</u>		Due Date Requested:		Analysis Requested			
Address: <u>1515 Poydras Street Suite 1875</u>		TAT Requested (days):		Total Number of containers			
City: <u>New Orleans</u>		PO #:		Preservation Codes:			
State, Zip: <u>LA, 70112</u>		Pre-Payment by CC Required		M - Hexane			
Phone:		WO #:		N - None			
Email: <u>telhaggar@pivotaleng.com</u>		Project #:		O - AsNaO2			
Project Name: <u>Nelson CCR Wells - CCR Parameters (Detection)</u>		SSOW#:		P - Na2O4S			
Site: <u>CADL</u>		Sample Date		Sample Time		Q - Na2SO3	
Sample Identification		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		R - Na2S2O3	
CCR-12		G		Water		S - H2SO4	
CCR-13		G		Water		T - TSP Dodecahydrate	
CCR-14		G		Water		U - Acetone	
Duplicate		G		Water		V - MCAA	
MS		G		Water		W - ph 4-5	
MSD		G		Water		Z - other (specify)	
Field Blank		G		Water		Other:	
Possible Hazard Identification		Sample Date		Sample Time		Special Instructions/Note:	
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological		3/17/16		1645		Please Apt Fluide	
Deliverable Requested: I, II, III, IV, Other (specify)		3/17/16		1515		on Ass. Report Also	
Empty Kit Relinquished by:		3/17/16		1330		Take @ CCR-8	
Relinquished by: <u>Terry Elhaggar</u>		3/16/16		1345		Taken @ CCR-8	
Relinquished by: <u>Terry Elhaggar</u>		3/16/16		1345		Taken @ CCR-8	
Relinquished by: <u>Terry Elhaggar</u>		3/17/16		1100		Taken @ CCR-2	
Custody Seals Intact: <u>Yes</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>	
Custody Seal No.: <u>1500</u>		Time: <u>1500</u>		Time: <u>1500</u>		Time: <u>1500</u>	
Relinquished by: <u>Terry Elhaggar</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>	
Relinquished by: <u>Terry Elhaggar</u>		Time: <u>1500</u>		Time: <u>1500</u>		Time: <u>1500</u>	
Relinquished by: <u>Terry Elhaggar</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>	
Relinquished by: <u>Terry Elhaggar</u>		Time: <u>1500</u>		Time: <u>1500</u>		Time: <u>1500</u>	
Relinquished by: <u>Terry Elhaggar</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>	
Relinquished by: <u>Terry Elhaggar</u>		Time: <u>1500</u>		Time: <u>1500</u>		Time: <u>1500</u>	
Relinquished by: <u>Terry Elhaggar</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>	
Relinquished by: <u>Terry Elhaggar</u>		Time: <u>1500</u>		Time: <u>1500</u>		Time: <u>1500</u>	
Relinquished by: <u>Terry Elhaggar</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>	
Relinquished by: <u>Terry Elhaggar</u>		Time: <u>1500</u>		Time: <u>1500</u>		Time: <u>1500</u>	
Relinquished by: <u>Terry Elhaggar</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>	
Relinquished by: <u>Terry Elhaggar</u>		Time: <u>1500</u>		Time: <u>1500</u>		Time: <u>1500</u>	
Relinquished by: <u>Terry Elhaggar</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>	
Relinquished by: <u>Terry Elhaggar</u>		Time: <u>1500</u>		Time: <u>1500</u>		Time: <u>1500</u>	
Relinquished by: <u>Terry Elhaggar</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>	
Relinquished by: <u>Terry Elhaggar</u>		Time: <u>1500</u>		Time: <u>1500</u>		Time: <u>1500</u>	
Relinquished by: <u>Terry Elhaggar</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>	
Relinquished by: <u>Terry Elhaggar</u>		Time: <u>1500</u>		Time: <u>1500</u>		Time: <u>1500</u>	
Relinquished by: <u>Terry Elhaggar</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>	
Relinquished by: <u>Terry Elhaggar</u>		Time: <u>1500</u>		Time: <u>1500</u>		Time: <u>1500</u>	
Relinquished by: <u>Terry Elhaggar</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>	
Relinquished by: <u>Terry Elhaggar</u>		Time: <u>1500</u>		Time: <u>1500</u>		Time: <u>1500</u>	
Relinquished by: <u>Terry Elhaggar</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>	
Relinquished by: <u>Terry Elhaggar</u>		Time: <u>1500</u>		Time: <u>1500</u>		Time: <u>1500</u>	
Relinquished by: <u>Terry Elhaggar</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>	
Relinquished by: <u>Terry Elhaggar</u>		Time: <u>1500</u>		Time: <u>1500</u>		Time: <u>1500</u>	
Relinquished by: <u>Terry Elhaggar</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>		Date: <u>3/16/16</u>	
Relinquished by: <u>Terry Elhaggar</u>		Time: <u>1500</u>		Time: <u>1500</u>		Time: <u>1500</u>	
Relinquished by:							

TestAmerica Pensacola

3355 McLemore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record



Client Information Company: Pivotal Engineering LLC Address: 1515 Poydras Street Suite 1875 City: New Orleans State, Zip: LA, 70112 Phone: _____ Email: teinaggar@pivotaleng.com Project Name: Nelson CCR Wells - CCR Parameters (Detection) Site: CADL		Lab Pdt: Wilson, Jason A E-Mail: jason.wilson@testamericainc.com Phone: _____	Sampler: CLM Carrier Tracking No(s): _____ COC No: 400-119310 COC Page: Page 1 of 1
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Company/ Pivotal Engineering LLC				Analysis Requested										Job #: 15-125					
Address: 1515 Poydras Street Suite 1875 City: New Orleans State, Zip: LA, 70112 Phone: Email: tehnaggar@pivotaleng.com Project Name: Nelson CCR Wells - CCR Parameters (Detection) Site: CADL				Due Date Requested:		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify) Other:													
				TAT Requested (days):		Total Number of containers													
PO #: Pre-Payment by CC Required WO #: Project #: 40005346 SSOW#:				Field Filtered Sample (Yes or No)		300_ORGFM_28D - Fluoride, Sulfate		325.2 - Chloride		6020 - Boron, Calcium		Total Number of containers		Special Instructions/Note:					
				Performance/MSD (Yes or No)		2640C - TDS		N		N		N		N		Please Report Fluoride Results on Aspart, Rpt also.			
Sample Identification				Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastefluid, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)		300_ORGFM_28D - Fluoride, Sulfate		325.2 - Chloride		6020 - Boron, Calcium		Total Number of containers		Special Instructions/Note:	
CCR-4				3/21/16	0830	G	Water	N	X	X	X	X	X	X	X	X	X	X	
CCR-5					1030		Water	N	X	X	X	X	X	X	X	X	X	X	
CCR-6					1315		Water	N	X	X	X	X	X	X	X	X	X	X	
CCR-7					1515		Water	N	X	X	X	X	X	X	X	X	X	X	
CCR-9					1730		Water	N	X	X	X	X	X	X	X	X	X	X	
Duplicate							Water	N	X	X	X	X	X	X	X	X	X	X	
															</				

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months	
Empty Kit Relinquished by: _____ Date/Time: 3/23/16 1:30 Company: PE		Relinquished by: _____ Date/Time: 3/23/16 1:30 Company: PE	
Relinquished by: _____ Date/Time: 3/23/16 1:30 Company: PE		Relinquished by: _____ Date/Time: 3/23/16 1:30 Company: PE	
Relinquished by: _____ Date/Time: 3/23/16 1:30 Company: PE		Relinquished by: _____ Date/Time: 3/23/16 1:30 Company: PE	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.: 42-1.28C, 0.20C, 4.50C, 2.60C, 0.20C	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

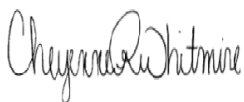
TestAmerica Job ID: 400-122229-1

TestAmerica Sample Delivery Group: Detection Monitoring
Client Project/Site: CCR - Entergy Nelson

For:

Pivotal Engineering LLC
1515 Poydras Street
Suite 1875
New Orleans, Louisiana 70112

Attn: Terry Elnaggar



Authorized for release by:
6/13/2016 4:05:46 PM

Cheyenne Whitmire, Project Manager II
(850)474-1001
cheyenne.whitmire@testamericainc.com

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Method Summary	4
Sample Summary	5
Client Sample Results	6
Definitions	22
Chronicle	23
QC Association	27
QC Sample Results	30
Chain of Custody	34
Receipt Checklists	36
Certification Summary	37



Case Narrative

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Job ID: 400-122229-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-122229-1

Receipt

The samples were received on 5/27/2016 8:47 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.8° C and 1.2° C.

HPLC/IC

Method(s) 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-308629 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

General Chemistry

Method(s) 325.2: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-308241 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Method Summary

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL PEN
325.2	Chloride	MCAWW	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN

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 PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-122229-1	CCR-1	Water	05/23/16 17:45	05/27/16 08:47
400-122229-2	CCR-2	Water	05/23/16 16:35	05/27/16 08:47
400-122229-3	CCR-3	Water	05/23/16 15:35	05/27/16 08:47
400-122229-4	CCR-4	Water	05/25/16 11:35	05/27/16 08:47
400-122229-5	CCR-5	Water	05/25/16 14:40	05/27/16 08:47
400-122229-6	CCR-6	Water	05/25/16 13:40	05/27/16 08:47
400-122229-7	CCR-7	Water	05/25/16 11:55	05/27/16 08:47
400-122229-8	CCR-8	Water	05/24/16 18:15	05/27/16 08:47
400-122229-9	CCR-9	Water	05/24/16 17:00	05/27/16 08:47
400-122229-10	CCR-10	Water	05/24/16 16:00	05/27/16 08:47
400-122229-11	CCR-11	Water	05/24/16 15:05	05/27/16 08:47
400-122229-12	CCR-12	Water	05/24/16 14:05	05/27/16 08:47
400-122229-13	CCR-13	Water	05/24/16 13:10	05/27/16 08:47
400-122229-14	CCR-14	Water	05/24/16 12:00	05/27/16 08:47
400-122229-15	DUPLICATE	Water	05/25/16 00:00	05/27/16 08:47
400-122229-16	FIELD BLANK	Water	05/25/16 11:00	05/27/16 08:47

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: CCR-1

Date Collected: 05/23/16 17:45

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.47		0.20		mg/L			06/03/16 14:17	1
Sulfate	3.3		1.0		mg/L			06/03/16 14:17	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	82		50		ug/L		05/27/16 10:58	06/03/16 15:45	5
Calcium	23000		250		ug/L		05/27/16 10:58	06/03/16 15:45	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	46		4.0		mg/L			06/01/16 14:33	2
Total Dissolved Solids	320		5.0		mg/L			05/27/16 15:45	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: CCR-2

Date Collected: 05/23/16 16:35

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-2

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.47		0.20		mg/L			06/03/16 14:40	1
Sulfate	ND		1.0		mg/L			06/03/16 14:40	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	63		50		ug/L		05/27/16 10:58	06/03/16 15:49	5
Calcium	19000		250		ug/L		05/27/16 10:58	06/03/16 15:49	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	59		4.0		mg/L			06/01/16 14:33	2
Total Dissolved Solids	270		5.0		mg/L			05/27/16 15:45	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: CCR-3

Date Collected: 05/23/16 15:35

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.52		0.20		mg/L			06/03/16 15:03	1
Sulfate	20		1.0		mg/L			06/03/16 15:03	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	77		50		ug/L		05/27/16 10:58	06/03/16 16:07	5
Calcium	25000		250		ug/L		05/27/16 10:58	06/03/16 16:07	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		10		mg/L			06/01/16 14:36	5
Total Dissolved Solids	400		5.0		mg/L			05/27/16 15:45	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: CCR-4

Date Collected: 05/25/16 11:35

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.29		0.20		mg/L			06/03/16 15:25	1
Sulfate	6.8		1.0		mg/L			06/03/16 15:25	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	100		50		ug/L		05/27/16 10:58	06/03/16 16:12	5
Calcium	19000		250		ug/L		05/27/16 10:58	06/03/16 16:12	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51		4.0		mg/L			06/01/16 14:33	2
Total Dissolved Solids	270		5.0		mg/L			05/27/16 15:45	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: CCR-5

Date Collected: 05/25/16 14:40

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-5

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.31		0.20		mg/L			06/03/16 13:09	1
Sulfate	ND	F1	1.0		mg/L			06/03/16 13:09	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	98		50		ug/L		05/27/16 10:58	06/03/16 16:25	5
Calcium	36000		250		ug/L		05/27/16 10:58	06/03/16 16:25	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58	F1	4.0		mg/L			06/01/16 14:36	2
Total Dissolved Solids	410		5.0		mg/L			05/27/16 15:45	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: CCR-6

Date Collected: 05/25/16 13:40

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-6

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.31		0.20		mg/L			06/03/16 16:34	1
Sulfate	ND		1.0		mg/L			06/03/16 16:34	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	99		50		ug/L		05/27/16 10:58	06/03/16 16:47	5
Calcium	31000		250		ug/L		05/27/16 10:58	06/03/16 16:47	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	91		10		mg/L			06/01/16 14:44	5
Total Dissolved Solids	310		5.0		mg/L			05/27/16 15:45	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: CCR-7

Date Collected: 05/25/16 11:55

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-7

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.35		0.20		mg/L			06/03/16 16:57	1
Sulfate	1.1		1.0		mg/L			06/03/16 16:57	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	83		50		ug/L		05/27/16 10:58	06/03/16 16:52	5
Calcium	44000		250		ug/L		05/27/16 10:58	06/03/16 16:52	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	69		4.0		mg/L			06/01/16 14:36	2
Total Dissolved Solids	310		5.0		mg/L			05/27/16 15:45	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: CCR-8

Date Collected: 05/24/16 18:15

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-8

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			06/03/16 17:19	1
Sulfate	1.3		1.0		mg/L			06/03/16 17:19	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	64		50		ug/L		05/27/16 10:58	06/03/16 16:56	5
Calcium	12000		250		ug/L		05/27/16 10:58	06/03/16 16:56	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95		10		mg/L			06/01/16 14:44	5
Total Dissolved Solids	300		5.0		mg/L			05/27/16 15:45	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: CCR-9

Date Collected: 05/24/16 17:00

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-9

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.67		0.20		mg/L			06/03/16 17:42	1
Sulfate	5.7		1.0		mg/L			06/03/16 17:42	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	66		50		ug/L		05/27/16 10:58	06/03/16 17:15	5
Calcium	28000		250		ug/L		05/27/16 10:58	06/03/16 17:15	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55		4.0		mg/L			06/01/16 14:37	2
Total Dissolved Solids	290		5.0		mg/L			05/27/16 15:45	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: CCR-10

Date Collected: 05/24/16 16:00

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-10

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.79		0.20		mg/L			06/03/16 18:05	1
Sulfate	2.9		1.0		mg/L			06/03/16 18:05	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	62		50		ug/L		05/27/16 10:58	06/03/16 17:19	5
Calcium	28000		250		ug/L		05/27/16 10:58	06/03/16 17:19	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43		4.0		mg/L			06/01/16 14:37	2
Total Dissolved Solids	260		5.0		mg/L			05/27/16 15:45	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: CCR-11

Date Collected: 05/24/16 15:05

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-11

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.84		0.20		mg/L			06/03/16 18:28	1
Sulfate	2.9	F1	1.0		mg/L			06/03/16 18:28	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	60		50		ug/L		05/27/16 10:58	06/03/16 17:24	5
Calcium	27000		250		ug/L		05/27/16 10:58	06/03/16 17:24	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29		2.0		mg/L			06/01/16 13:57	1
Total Dissolved Solids	220		5.0		mg/L			05/27/16 15:45	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: CCR-12

Date Collected: 05/24/16 14:05

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-12

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			06/03/16 19:14	1
Sulfate	26		1.0		mg/L			06/03/16 19:14	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		50		ug/L		05/27/16 10:58	06/03/16 17:28	5
Calcium	19000		250		ug/L		05/27/16 10:58	06/03/16 17:28	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19		2.0		mg/L			06/01/16 13:57	1
Total Dissolved Solids	190		5.0		mg/L			05/27/16 15:45	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: CCR-13

Date Collected: 05/24/16 13:10

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-13

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.29		0.20		mg/L			06/03/16 19:36	1
Sulfate	42		1.0		mg/L			06/03/16 19:36	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	55		50		ug/L		05/27/16 10:58	06/03/16 17:33	5
Calcium	21000		250		ug/L		05/27/16 10:58	06/03/16 17:33	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		2.0		mg/L			06/01/16 13:57	1
Total Dissolved Solids	270		5.0		mg/L			05/27/16 15:45	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: CCR-14

Date Collected: 05/24/16 12:00

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-14

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.24		0.20		mg/L			06/03/16 19:59	1
Sulfate	ND		1.0		mg/L			06/03/16 19:59	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		50		ug/L		05/27/16 10:58	06/03/16 17:37	5
Calcium	18000		250		ug/L		05/27/16 10:58	06/03/16 17:37	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0		mg/L			06/01/16 13:57	1
Total Dissolved Solids	140		5.0		mg/L			05/27/16 15:45	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: DUPLICATE

Lab Sample ID: 400-122229-15

Date Collected: 05/25/16 00:00

Matrix: Water

Date Received: 05/27/16 08:47

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			06/03/16 21:08	1
Sulfate	ND		1.0		mg/L			06/03/16 21:08	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	60		50		ug/L		05/27/16 10:58	06/03/16 17:42	5
Calcium	12000		250		ug/L		05/27/16 10:58	06/03/16 17:42	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	94		10		mg/L			06/01/16 14:44	5
Total Dissolved Solids	280		5.0		mg/L			05/27/16 15:45	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: FIELD BLANK

Lab Sample ID: 400-122229-16

Date Collected: 05/25/16 11:00

Matrix: Water

Date Received: 05/27/16 08:47

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			06/03/16 21:30	1
Sulfate	ND		1.0		mg/L			06/03/16 21:30	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		50		ug/L		05/27/16 10:58	06/03/16 17:46	5
Calcium	ND		250		ug/L		05/27/16 10:58	06/03/16 17:46	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			06/02/16 08:45	1
Total Dissolved Solids	ND		5.0		mg/L			05/27/16 15:45	1

Definitions/Glossary

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
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.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: CCR-1

Date Collected: 05/23/16 17:45

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 14:17	TAJ	TAL PEN
Total Recoverable	Prep	3005A			307790	05/27/16 10:58	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	308708	06/03/16 15:45	GKP	TAL PEN
Total/NA	Analysis	325.2		2	308241	06/01/16 14:33	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	307833	05/27/16 15:45	CAC	TAL PEN

Client Sample ID: CCR-2

Date Collected: 05/23/16 16:35

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 14:40	TAJ	TAL PEN
Total Recoverable	Prep	3005A			307790	05/27/16 10:58	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	308708	06/03/16 15:49	GKP	TAL PEN
Total/NA	Analysis	325.2		2	308241	06/01/16 14:33	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	307833	05/27/16 15:45	CAC	TAL PEN

Client Sample ID: CCR-3

Date Collected: 05/23/16 15:35

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 15:03	TAJ	TAL PEN
Total Recoverable	Prep	3005A			307790	05/27/16 10:58	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	308708	06/03/16 16:07	GKP	TAL PEN
Total/NA	Analysis	325.2		5	308241	06/01/16 14:36	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	307833	05/27/16 15:45	CAC	TAL PEN

Client Sample ID: CCR-4

Date Collected: 05/25/16 11:35

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 15:25	TAJ	TAL PEN
Total Recoverable	Prep	3005A			307790	05/27/16 10:58	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	308708	06/03/16 16:12	GKP	TAL PEN
Total/NA	Analysis	325.2		2	308241	06/01/16 14:33	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	307833	05/27/16 15:45	CAC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: CCR-5

Date Collected: 05/25/16 14:40

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 13:09	TAJ	TAL PEN
Total Recoverable	Prep	3005A			307790	05/27/16 10:58	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	308708	06/03/16 16:25	GKP	TAL PEN
Total/NA	Analysis	325.2		2	308241	06/01/16 14:36	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	307833	05/27/16 15:45	CAC	TAL PEN

Client Sample ID: CCR-6

Date Collected: 05/25/16 13:40

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 16:34	TAJ	TAL PEN
Total Recoverable	Prep	3005A			307790	05/27/16 10:58	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	308708	06/03/16 16:47	GKP	TAL PEN
Total/NA	Analysis	325.2		5	308241	06/01/16 14:44	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	307833	05/27/16 15:45	CAC	TAL PEN

Client Sample ID: CCR-7

Date Collected: 05/25/16 11:55

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 16:57	TAJ	TAL PEN
Total Recoverable	Prep	3005A			307790	05/27/16 10:58	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	308708	06/03/16 16:52	GKP	TAL PEN
Total/NA	Analysis	325.2		2	308241	06/01/16 14:36	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	307833	05/27/16 15:45	CAC	TAL PEN

Client Sample ID: CCR-8

Date Collected: 05/24/16 18:15

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 17:19	TAJ	TAL PEN
Total Recoverable	Prep	3005A			307790	05/27/16 10:58	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	308708	06/03/16 16:56	GKP	TAL PEN
Total/NA	Analysis	325.2		5	308241	06/01/16 14:44	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	307833	05/27/16 15:45	CAC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: CCR-9

Date Collected: 05/24/16 17:00

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 17:42	TAJ	TAL PEN
Total Recoverable	Prep	3005A			307790	05/27/16 10:58	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	308708	06/03/16 17:15	GKP	TAL PEN
Total/NA	Analysis	325.2		2	308241	06/01/16 14:37	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	307833	05/27/16 15:45	CAC	TAL PEN

Client Sample ID: CCR-10

Date Collected: 05/24/16 16:00

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 18:05	TAJ	TAL PEN
Total Recoverable	Prep	3005A			307790	05/27/16 10:58	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	308708	06/03/16 17:19	GKP	TAL PEN
Total/NA	Analysis	325.2		2	308241	06/01/16 14:37	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	307833	05/27/16 15:45	CAC	TAL PEN

Client Sample ID: CCR-11

Date Collected: 05/24/16 15:05

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 18:28	TAJ	TAL PEN
Total Recoverable	Prep	3005A			307790	05/27/16 10:58	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	308708	06/03/16 17:24	GKP	TAL PEN
Total/NA	Analysis	325.2		1	308241	06/01/16 13:57	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	307833	05/27/16 15:45	CAC	TAL PEN

Client Sample ID: CCR-12

Date Collected: 05/24/16 14:05

Date Received: 05/27/16 08:47

Lab Sample ID: 400-122229-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 19:14	TAJ	TAL PEN
Total Recoverable	Prep	3005A			307790	05/27/16 10:58	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	308708	06/03/16 17:28	GKP	TAL PEN
Total/NA	Analysis	325.2		1	308241	06/01/16 13:57	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	307833	05/27/16 15:45	CAC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Client Sample ID: CCR-13

Lab Sample ID: 400-122229-13

Date Collected: 05/24/16 13:10

Matrix: Water

Date Received: 05/27/16 08:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 19:36	TAJ	TAL PEN
Total Recoverable	Prep	3005A			307790	05/27/16 10:58	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	308708	06/03/16 17:33	GKP	TAL PEN
Total/NA	Analysis	325.2		1	308241	06/01/16 13:57	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	307833	05/27/16 15:45	CAC	TAL PEN

Client Sample ID: CCR-14

Lab Sample ID: 400-122229-14

Date Collected: 05/24/16 12:00

Matrix: Water

Date Received: 05/27/16 08:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 19:59	TAJ	TAL PEN
Total Recoverable	Prep	3005A			307790	05/27/16 10:58	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	308708	06/03/16 17:37	GKP	TAL PEN
Total/NA	Analysis	325.2		1	308241	06/01/16 13:57	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	307833	05/27/16 15:45	CAC	TAL PEN

Client Sample ID: DUPLICATE

Lab Sample ID: 400-122229-15

Date Collected: 05/25/16 00:00

Matrix: Water

Date Received: 05/27/16 08:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 21:08	TAJ	TAL PEN
Total Recoverable	Prep	3005A			307790	05/27/16 10:58	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	308708	06/03/16 17:42	GKP	TAL PEN
Total/NA	Analysis	325.2		5	308241	06/01/16 14:44	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	307833	05/27/16 15:45	CAC	TAL PEN

Client Sample ID: FIELD BLANK

Lab Sample ID: 400-122229-16

Date Collected: 05/25/16 11:00

Matrix: Water

Date Received: 05/27/16 08:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	308629	06/03/16 21:30	TAJ	TAL PEN
Total Recoverable	Prep	3005A			307790	05/27/16 10:58	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	308708	06/03/16 17:46	GKP	TAL PEN
Total/NA	Analysis	325.2		1	308455	06/02/16 08:45	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	307833	05/27/16 15:45	CAC	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

HPLC/IC

Analysis Batch: 308629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122229-1	CCR-1	Total/NA	Water	300.0	
400-122229-2	CCR-2	Total/NA	Water	300.0	
400-122229-3	CCR-3	Total/NA	Water	300.0	
400-122229-4	CCR-4	Total/NA	Water	300.0	
400-122229-5	CCR-5	Total/NA	Water	300.0	
400-122229-5 MS	CCR-5	Total/NA	Water	300.0	
400-122229-5 MSD	CCR-5	Total/NA	Water	300.0	
400-122229-6	CCR-6	Total/NA	Water	300.0	
400-122229-7	CCR-7	Total/NA	Water	300.0	
400-122229-8	CCR-8	Total/NA	Water	300.0	
400-122229-9	CCR-9	Total/NA	Water	300.0	
400-122229-10	CCR-10	Total/NA	Water	300.0	
400-122229-11	CCR-11	Total/NA	Water	300.0	
400-122229-11 MS	CCR-11	Total/NA	Water	300.0	
400-122229-12	CCR-12	Total/NA	Water	300.0	
400-122229-13	CCR-13	Total/NA	Water	300.0	
400-122229-14	CCR-14	Total/NA	Water	300.0	
400-122229-15	DUPLICATE	Total/NA	Water	300.0	
400-122229-16	FIELD BLANK	Total/NA	Water	300.0	
LCS 400-308629/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-308629/6	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 400-308629/4	Method Blank	Total/NA	Water	300.0	

Metals

Prep Batch: 307790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122229-1	CCR-1	Total Recoverable	Water	3005A	
400-122229-2	CCR-2	Total Recoverable	Water	3005A	
400-122229-3	CCR-3	Total Recoverable	Water	3005A	
400-122229-4	CCR-4	Total Recoverable	Water	3005A	
400-122229-5	CCR-5	Total Recoverable	Water	3005A	
400-122229-5 MS	CCR-5	Total Recoverable	Water	3005A	
400-122229-5 MSD	CCR-5	Total Recoverable	Water	3005A	
400-122229-6	CCR-6	Total Recoverable	Water	3005A	
400-122229-7	CCR-7	Total Recoverable	Water	3005A	
400-122229-8	CCR-8	Total Recoverable	Water	3005A	
400-122229-9	CCR-9	Total Recoverable	Water	3005A	
400-122229-10	CCR-10	Total Recoverable	Water	3005A	
400-122229-11	CCR-11	Total Recoverable	Water	3005A	
400-122229-12	CCR-12	Total Recoverable	Water	3005A	
400-122229-13	CCR-13	Total Recoverable	Water	3005A	
400-122229-14	CCR-14	Total Recoverable	Water	3005A	
400-122229-15	DUPLICATE	Total Recoverable	Water	3005A	
400-122229-16	FIELD BLANK	Total Recoverable	Water	3005A	
LCS 400-307790/2-A ^1	Lab Control Sample	Total Recoverable	Water	3005A	
MB 400-307790/1-A ^5	Method Blank	Total Recoverable	Water	3005A	

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Metals (Continued)

Analysis Batch: 308708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122229-1	CCR-1	Total Recoverable	Water	6020	307790
400-122229-2	CCR-2	Total Recoverable	Water	6020	307790
400-122229-3	CCR-3	Total Recoverable	Water	6020	307790
400-122229-4	CCR-4	Total Recoverable	Water	6020	307790
400-122229-5	CCR-5	Total Recoverable	Water	6020	307790
400-122229-5 MS	CCR-5	Total Recoverable	Water	6020	307790
400-122229-5 MSD	CCR-5	Total Recoverable	Water	6020	307790
400-122229-6	CCR-6	Total Recoverable	Water	6020	307790
400-122229-7	CCR-7	Total Recoverable	Water	6020	307790
400-122229-8	CCR-8	Total Recoverable	Water	6020	307790
400-122229-9	CCR-9	Total Recoverable	Water	6020	307790
400-122229-10	CCR-10	Total Recoverable	Water	6020	307790
400-122229-11	CCR-11	Total Recoverable	Water	6020	307790
400-122229-12	CCR-12	Total Recoverable	Water	6020	307790
400-122229-13	CCR-13	Total Recoverable	Water	6020	307790
400-122229-14	CCR-14	Total Recoverable	Water	6020	307790
400-122229-15	DUPLICATE	Total Recoverable	Water	6020	307790
400-122229-16	FIELD BLANK	Total Recoverable	Water	6020	307790
LCS 400-307790/2-A ^1	Lab Control Sample	Total Recoverable	Water	6020	307790
MB 400-307790/1-A ^5	Method Blank	Total Recoverable	Water	6020	307790
MRL 400-308708/19	Lab Control Sample	Total/NA	Water	6020	

General Chemistry

Analysis Batch: 308733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122229-1	CCR-1	Total/NA	Water	SM 2540C	
400-122229-2	CCR-2	Total/NA	Water	SM 2540C	
400-122229-3	CCR-3	Total/NA	Water	SM 2540C	
400-122229-4	CCR-4	Total/NA	Water	SM 2540C	
400-122229-5	CCR-5	Total/NA	Water	SM 2540C	
400-122229-6	CCR-6	Total/NA	Water	SM 2540C	
400-122229-7	CCR-7	Total/NA	Water	SM 2540C	
400-122229-8	CCR-8	Total/NA	Water	SM 2540C	
400-122229-8 DU	CCR-8	Total/NA	Water	SM 2540C	
400-122229-9	CCR-9	Total/NA	Water	SM 2540C	
400-122229-10	CCR-10	Total/NA	Water	SM 2540C	
400-122229-11	CCR-11	Total/NA	Water	SM 2540C	
400-122229-12	CCR-12	Total/NA	Water	SM 2540C	
400-122229-13	CCR-13	Total/NA	Water	SM 2540C	
400-122229-14	CCR-14	Total/NA	Water	SM 2540C	
400-122229-15	DUPLICATE	Total/NA	Water	SM 2540C	
400-122229-16	FIELD BLANK	Total/NA	Water	SM 2540C	
LCS 400-307833/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 400-307833/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 308241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122229-1	CCR-1	Total/NA	Water	325.2	
400-122229-2	CCR-2	Total/NA	Water	325.2	

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

General Chemistry (Continued)

Analysis Batch: 308241 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122229-3	CCR-3	Total/NA	Water	325.2	
400-122229-4	CCR-4	Total/NA	Water	325.2	
400-122229-5	CCR-5	Total/NA	Water	325.2	
400-122229-5 MS	CCR-5	Total/NA	Water	325.2	
400-122229-5 MSD	CCR-5	Total/NA	Water	325.2	
400-122229-6	CCR-6	Total/NA	Water	325.2	
400-122229-6 DU	CCR-6	Total/NA	Water	325.2	
400-122229-7	CCR-7	Total/NA	Water	325.2	
400-122229-8	CCR-8	Total/NA	Water	325.2	
400-122229-9	CCR-9	Total/NA	Water	325.2	
400-122229-10	CCR-10	Total/NA	Water	325.2	
400-122229-11	CCR-11	Total/NA	Water	325.2	
400-122229-12	CCR-12	Total/NA	Water	325.2	
400-122229-13	CCR-13	Total/NA	Water	325.2	
400-122229-14	CCR-14	Total/NA	Water	325.2	
400-122229-15	DUPLICATE	Total/NA	Water	325.2	
LCS 400-308241/7	Lab Control Sample	Total/NA	Water	325.2	
MB 400-308241/6	Method Blank	Total/NA	Water	325.2	
MRL 400-308241/3	Lab Control Sample	Total/NA	Water	325.2	

Analysis Batch: 308455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122229-16	FIELD BLANK	Total/NA	Water	325.2	
400-122256-D-3 MS	Matrix Spike	Total/NA	Water	325.2	
400-122256-D-3 MSD	Matrix Spike Duplicate	Total/NA	Water	325.2	
400-122346-A-3 DU	Duplicate	Total/NA	Water	325.2	
LCS 400-308455/7	Lab Control Sample	Total/NA	Water	325.2	
MB 400-308455/6	Method Blank	Total/NA	Water	325.2	

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-308629/4

Matrix: Water

Analysis Batch: 308629

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			06/03/16 12:00	1
Sulfate	ND		1.0		mg/L			06/03/16 12:00	1

Lab Sample ID: LCS 400-308629/5

Matrix: Water

Analysis Batch: 308629

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.1		mg/L		101	90 - 110
Sulfate	10.0	10.8		mg/L		108	90 - 110

Lab Sample ID: LCSD 400-308629/6

Matrix: Water

Analysis Batch: 308629

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	10.1		mg/L		101	90 - 110	0	15
Sulfate	10.0	10.8		mg/L		108	90 - 110	0	15

Lab Sample ID: 400-122229-5 MS

Matrix: Water

Analysis Batch: 308629

Client Sample ID: CCR-5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.31		10.0	11.0		mg/L		106	80 - 120
Sulfate	ND	F1	10.0	12.3	F1	mg/L		123	80 - 120

Lab Sample ID: 400-122229-5 MSD

Matrix: Water

Analysis Batch: 308629

Client Sample ID: CCR-5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.31		10.0	11.0		mg/L		107	80 - 120	1	20
Sulfate	ND	F1	10.0	12.3	F1	mg/L		123	80 - 120	0	20

Lab Sample ID: 400-122229-11 MS

Matrix: Water

Analysis Batch: 308629

Client Sample ID: CCR-11

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.84		10.0	11.6		mg/L		108	80 - 120
Sulfate	2.9	F1	10.0	15.4	F1	mg/L		124	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MRL 400-308708/19
Matrix: Water
Analysis Batch: 308708

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	5.00	ND		ug/L		56	50 - 150
Calcium	50.0	ND		ug/L		70	50 - 150

Lab Sample ID: MB 400-307790/1-A ^5
Matrix: Water
Analysis Batch: 308708

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 307790

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		50		ug/L		05/27/16 10:58	06/03/16 15:36	5
Calcium	ND		250		ug/L		05/27/16 10:58	06/03/16 15:36	5

Lab Sample ID: LCS 400-307790/2-A ^1
Matrix: Water
Analysis Batch: 308708

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 307790

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	100	97.6		ug/L		98	80 - 120
Calcium	5000	5000		ug/L		100	80 - 120

Lab Sample ID: 400-122229-5 MS
Matrix: Water
Analysis Batch: 308708

Client Sample ID: CCR-5
Prep Type: Total Recoverable
Prep Batch: 307790

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	98		100	210		ug/L		111	75 - 125
Calcium	36000		5000	40900	4	ug/L		108	75 - 125

Lab Sample ID: 400-122229-5 MSD
Matrix: Water
Analysis Batch: 308708

Client Sample ID: CCR-5
Prep Type: Total Recoverable
Prep Batch: 307790

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	98		100	205		ug/L		107	75 - 125	2	20
Calcium	36000		5000	40500	4	ug/L		100	75 - 125	1	20

Method: 325.2 - Chloride

Lab Sample ID: MB 400-308241/6
Matrix: Water
Analysis Batch: 308241

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			06/01/16 08:58	1

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Method: 325.2 - Chloride (Continued)

Lab Sample ID: LCS 400-308241/7

Matrix: Water

Analysis Batch: 308241

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	32.0		mg/L		107	90 - 110

Lab Sample ID: MRL 400-308241/3

Matrix: Water

Analysis Batch: 308241

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	2.32		mg/L		116	50 - 150

Lab Sample ID: 400-122229-5 MS

Matrix: Water

Analysis Batch: 308241

Client Sample ID: CCR-5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	58	F1	20.0	66.0	F1	mg/L		42	73 - 120

Lab Sample ID: 400-122229-5 MSD

Matrix: Water

Analysis Batch: 308241

Client Sample ID: CCR-5

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	F1	20.0	65.6	F1	mg/L		41	73 - 120	1	8

Lab Sample ID: 400-122229-6 DU

Matrix: Water

Analysis Batch: 308241

Client Sample ID: CCR-6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	91		91.1		mg/L		0.3	8

Lab Sample ID: MB 400-308455/6

Matrix: Water

Analysis Batch: 308455

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			06/02/16 08:06	1

Lab Sample ID: LCS 400-308455/7

Matrix: Water

Analysis Batch: 308455

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.1		mg/L		104	90 - 110

Lab Sample ID: 400-122256-D-3 MS

Matrix: Water

Analysis Batch: 308455

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	ND		10.0	11.9		mg/L		113	73 - 120

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Lab Sample ID: 400-122256-D-3 MSD
Matrix: Water
Analysis Batch: 308455

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	ND		10.0	11.8		mg/L		112	73 - 120	1	8

Lab Sample ID: 400-122346-A-3 DU
Matrix: Water
Analysis Batch: 308455

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	340		331		mg/L		3	8

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

Lab Sample ID: MB 400-307833/1
Matrix: Water
Analysis Batch: 307833

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			05/27/16 15:45	1

Lab Sample ID: LCS 400-307833/2
Matrix: Water
Analysis Batch: 307833

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	293	254		mg/L		87	78 - 122

Lab Sample ID: 400-122229-8 DU
Matrix: Water
Analysis Batch: 307833

Client Sample ID: CCR-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	300		296		mg/L		2	5

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Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information Client Contact: Terry Elhaggar Company: Pivotal Engineering LLC Address: 1515 Poydras Street Suite 1875 City: New Orleans State, Zip: LA, 70112 Phone: _____ Email: telhaggar@pivotaleng.com Project Name: Entergy Nelson - CCR Deflection Monitoring Site: _____		Lab POC: Whitmore, Cheyenne R E-Mail: cheyenne.whitmore@testamericainc.com Phone: 225-505-5124 Due Date Requested: _____ TAT Requested (days): _____ PO #: _____ Purchase Order not required WO #: _____ Project #: 40006993 SSOW#: _____		Carrier Tracking No(s): _____ COC No: 400-55839-24300.1 Pages: Page 1 of 2 Job #: 15-125	
Analysis Requested 400-122229 COC 		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - H2SO4 H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: _____ Special Instructions/Note: _____			
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=Soil, O=Other)	Analysis Results
CCR-1	5/23	1745	Water	Water	XX
CCR-2	5/23	1635	Water	Water	
CCR-3	5/23	1535	Water	Water	
CCR-4	5/25	1135	Water	Water	
CCR-5	5/25	1440	Water	Water	
CCR-6	5/25	1340	Water	Water	
CCR-7	5/25	1155	Water	Water	
CCR-8	5/24	1815	Water	Water	
CCR-9	5/24	1700	Water	Water	
CCR-10	5/24	1400	Water	Water	
CCR-11	5/24	1305	Water	Water	
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify) _____					
Empty Kit Relinquished by: _____ Relinquished by: C. Elhaggar Relinquished by: _____ Relinquished by: _____		Date: 5/26/2016 12:00 Date: 5/26/2016 12:00 Date: 5/26/2016 12:00 Date: 5/26/2016 12:00			
Custody Seal Intact: Yes ☒ No ☐ Custody Seal No.: _____		Cooler Temperature(s) to Unit Other Remarks: 120-082			

TestAmerica Pensacola
 3355 McLeure Drive
 Pensacola, FL 32514
 Phone (850) 474-1001 Fax (850) 478-2871

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information Client Contact: Terry Elnaggar Company: Pivotal Engineering LLC Address: 1515 Poydras Street Suite 1875 City: New Orleans State, Zip: LA, 70112 Phone: _____ Email: telnaggar@pivotaleng.com Project Name: Entergy Nelson - CCR Detection Monitoring Site: _____		Lab POC: Whitmore, Cheyenne R E-Mail: cheyenne.whitmore@testamericainc.com Phone: 805-505-5124 Due Date Requested: _____ TAT Requested (days): _____ PO #: _____ Purchase Order not required WO #: _____ Project #: 40006993 SOW#: _____		Carrier Tracking No(s): _____ Page: Page 2 of 2 Job #: 15-125		COC No: 400-55839-24300.2 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 Z - other (specify) Other: _____	
Sample Identification Sample ID: CCR-12 Sample ID: CCR-13 Sample ID: CCR-14 Sample ID: Duplicate Sample ID: MS Sample ID: MSD Sample ID: Field Blank		Sample Date: 5/24 Sample Date: 5/24 Sample Date: 5/24 Sample Date: 5/25 Sample Date: 5/25 Sample Date: 5/25		Sample Time: 1405 Sample Time: 1310 Sample Time: 1200 Sample Time: 1450 Sample Time: 1450 Sample Time: 1100		Matrix: Water Matrix: Water Matrix: Water Matrix: Water Matrix: Water Matrix: Water	
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological		Deliverable Requested: I, II, III, IV, Other (specify) _____		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab Archive For: 1 Months		Special Instructions/Note: *MS/MSD CCR-5	
Empty Kit Relinquished by: _____ Relinquished by: _____ Relinquished by: C. N. [Signature] Relinquished by: _____		Date: 5/26/16 Date: 5/26/16 Date: 5/26/16 Date: 5/26/16		Time: 1220 Time: 3:45 Time: 3:45 Time: 1100		Company: _____ Company: _____ Company: _____ Company: _____	
Custody Seal No: _____ Custody Seal No: _____ Custody Seal No: _____ Custody Seal No: _____		Custody Seal No: _____ Custody Seal No: _____ Custody Seal No: _____ Custody Seal No: _____		Custody Seal No: _____ Custody Seal No: _____ Custody Seal No: _____ Custody Seal No: _____		Custody Seal No: _____ Custody Seal No: _____ Custody Seal No: _____ Custody Seal No: _____	

Login Sample Receipt Checklist

Client: Pivotal Engineering LLC

Job Number: 400-122229-1
SDG Number: Detection Monitoring

Login Number: 122229

List Number: 1

Creator: Crawford, Lauren E

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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	1.2°C, 0.8°C IR-5
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Pivotal Engineering LLC
Project/Site: CCR - Entergy Nelson

TestAmerica Job ID: 400-122229-1
SDG: Detection Monitoring

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-16
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	07-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-17 *
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16
Tennessee	State Program	4	TN02907	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-16

* Certification renewal pending - certification considered valid.

TestAmerica Pensacola

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-123859-1

TestAmerica Sample Delivery Group: CADL

Client Project/Site: Entergy Nelson - CCR Detection

For:

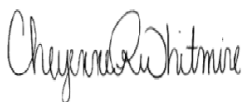
Pivotal Engineering LLC

1515 Poydras Street

Suite 1875

New Orleans, Louisiana 70112

Attn: Terry Elnaggar



Authorized for release by:

7/28/2016 5:34:31 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Method Summary	4
Sample Summary	5
Client Sample Results	6
Definitions	22
Chronicle	23
QC Association	28
QC Sample Results	31
Chain of Custody	36
Receipt Checklists	38
Certification Summary	39

Case Narrative

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Job ID: 400-123859-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-123859-1

Receipt

The samples were received on 7/1/2016 9:41 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.8° C, 1.0° C, 1.6° C and 2.4° C.

HPLC/IC

Method(s) 300.0: The matrix spike (MS) recoveries for analytical batch 315051 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Metals

Method(s) 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 312808 and analytical batch 313364 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 6020: The continuing calibration verification (CCV) associated with batch 313364 recovered above the upper control limit for Boron. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: CCR-14 (400-123859-14) and FIELD BLANK (400-123859-16).

General Chemistry

Method(s) 325.2: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 312645 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL PEN
325.2	Chloride	MCAWW	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN

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 PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-123859-1	CCR-1	Water	06/29/16 17:40	07/01/16 09:41
400-123859-2	CCR-2	Water	06/30/16 10:00	07/01/16 09:41
400-123859-3	CCR-3	Water	06/30/16 08:45	07/01/16 09:41
400-123859-4	CCR-4	Water	06/28/16 15:10	07/01/16 09:41
400-123859-5	CCR-5	Water	06/28/16 13:45	07/01/16 09:41
400-123859-6	CCR-6	Water	06/28/16 12:05	07/01/16 09:41
400-123859-7	CCR-7	Water	06/28/16 10:30	07/01/16 09:41
400-123859-8	CCR-8	Water	06/28/16 17:50	07/01/16 09:41
400-123859-9	CCR-9	Water	06/29/16 13:40	07/01/16 09:41
400-123859-10	CCR-10	Water	06/29/16 16:20	07/01/16 09:41
400-123859-11	CCR-11	Water	06/29/16 15:00	07/01/16 09:41
400-123859-12	CCR-12	Water	06/29/16 12:10	07/01/16 09:41
400-123859-13	CCR-13	Water	06/29/16 10:45	07/01/16 09:41
400-123859-14	CCR-14	Water	06/29/16 09:10	07/01/16 09:41
400-123859-15	DUPLICATE	Water	06/29/16 00:00	07/01/16 09:41
400-123859-16	FIELD BLANK	Water	06/29/16 17:00	07/01/16 09:41

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: CCR-1

Date Collected: 06/29/16 17:40

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.48		0.20		mg/L			07/20/16 19:52	1
Sulfate	3.1		1.0		mg/L			07/20/16 19:52	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	24		0.25		mg/L		07/05/16 11:55	07/07/16 18:58	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.065		0.050		mg/L		07/05/16 11:55	07/08/16 14:39	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	46		4.0		mg/L			07/01/16 14:15	2
Total Dissolved Solids	310		5.0		mg/L			07/01/16 16:46	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: CCR-2

Date Collected: 06/30/16 10:00

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-2

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.50		0.20		mg/L			07/20/16 20:15	1
Sulfate	1.4		1.0		mg/L			07/20/16 20:15	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	20		0.25		mg/L		07/05/16 11:55	07/07/16 19:02	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.054		0.050		mg/L		07/05/16 11:55	07/08/16 14:44	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	59		4.0		mg/L			07/01/16 14:15	2
Total Dissolved Solids	260		5.0		mg/L			07/01/16 16:46	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: CCR-3

Date Collected: 06/30/16 08:45

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.56		0.20		mg/L			07/20/16 21:24	1
Sulfate	17		1.0		mg/L			07/20/16 21:24	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	25		0.25		mg/L		07/05/16 11:55	07/07/16 19:07	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.061		0.050		mg/L		07/05/16 11:55	07/08/16 14:48	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		10		mg/L			07/01/16 14:18	5
Total Dissolved Solids	380		5.0		mg/L			07/01/16 16:46	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: CCR-4

Date Collected: 06/28/16 15:10

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.32		0.20		mg/L			07/21/16 11:28	1
Sulfate	4.9		1.0		mg/L			07/21/16 11:28	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.12	F1	0.050		mg/L		07/05/16 11:55	07/07/16 19:25	5
Calcium	20		0.25		mg/L		07/05/16 11:55	07/07/16 19:25	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51	F1	4.0		mg/L			07/01/16 14:15	2
Total Dissolved Solids	250		5.0		mg/L			07/01/16 16:46	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: CCR-5

Date Collected: 06/28/16 13:45

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-5

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.34	F1	0.20		mg/L			07/20/16 21:47	1
Sulfate	1.0		1.0		mg/L			07/20/16 21:47	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.13		0.050		mg/L		07/05/16 11:55	07/07/16 19:47	5
Calcium	36		0.25		mg/L		07/05/16 11:55	07/07/16 19:47	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56		4.0		mg/L			07/01/16 14:15	2
Total Dissolved Solids	380		5.0		mg/L			07/01/16 16:46	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: CCR-6

Date Collected: 06/28/16 12:05

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-6

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.34		0.20		mg/L			07/20/16 22:32	1
Sulfate	ND		1.0		mg/L			07/20/16 22:32	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.11		0.050		mg/L		07/05/16 11:55	07/07/16 19:52	5
Calcium	31		0.25		mg/L		07/05/16 11:55	07/07/16 19:52	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	89		10		mg/L			07/01/16 14:18	5
Total Dissolved Solids	290		5.0		mg/L			07/01/16 16:46	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: CCR-7

Date Collected: 06/28/16 10:30

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-7

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.37		0.20		mg/L			07/20/16 22:55	1
Sulfate	1.1		1.0		mg/L			07/20/16 22:55	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.094		0.050		mg/L		07/05/16 11:55	07/07/16 19:56	5
Calcium	45		0.25		mg/L		07/05/16 11:55	07/07/16 19:56	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71		10		mg/L			07/01/16 14:18	5
Total Dissolved Solids	250		5.0		mg/L			07/01/16 16:46	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: CCR-8

Date Collected: 06/28/16 17:50

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-8

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			07/20/16 23:18	1
Sulfate	1.1		1.0		mg/L			07/20/16 23:18	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.074		0.050		mg/L		07/05/16 11:55	07/07/16 20:01	5
Calcium	12		0.25		mg/L		07/05/16 11:55	07/07/16 20:01	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	94		10		mg/L			07/01/16 14:18	5
Total Dissolved Solids	270		5.0		mg/L			07/01/16 16:46	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: CCR-9

Date Collected: 06/29/16 13:40

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-9

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.74		0.20		mg/L			07/20/16 23:41	1
Sulfate	4.8		1.0		mg/L			07/20/16 23:41	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.076		0.050		mg/L		07/05/16 11:55	07/07/16 20:05	5
Calcium	28		0.25		mg/L		07/05/16 11:55	07/07/16 20:05	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	54		4.0		mg/L			07/01/16 14:18	2
Total Dissolved Solids	300		5.0		mg/L			07/01/16 16:46	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: CCR-10

Date Collected: 06/29/16 16:20

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-10

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.87		0.20		mg/L			07/21/16 00:03	1
Sulfate	1.3		1.0		mg/L			07/21/16 00:03	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	27		0.25		mg/L		07/05/16 11:55	07/07/16 20:23	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		07/05/16 11:55	07/08/16 14:53	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44		4.0		mg/L			07/01/16 14:25	2
Total Dissolved Solids	260		5.0		mg/L			07/01/16 16:46	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: CCR-11

Date Collected: 06/29/16 15:00

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-11

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.90		0.20		mg/L			07/21/16 00:26	1
Sulfate	3.0		1.0		mg/L			07/21/16 00:26	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	27		0.25		mg/L		07/05/16 11:55	07/07/16 20:28	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		07/05/16 11:55	07/08/16 14:57	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28		2.0		mg/L			07/01/16 13:41	1
Total Dissolved Solids	220		5.0		mg/L			07/05/16 09:23	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: CCR-12

Date Collected: 06/29/16 12:10

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-12

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.20		0.20		mg/L			07/21/16 01:35	1
Sulfate	26		1.0		mg/L			07/21/16 01:35	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	20		0.25		mg/L		07/05/16 11:55	07/07/16 20:32	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		07/05/16 11:55	07/08/16 15:02	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19		2.0		mg/L			07/01/16 13:41	1
Total Dissolved Solids	180		5.0		mg/L			07/05/16 09:23	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: CCR-13

Date Collected: 06/29/16 10:45

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-13

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.30		0.20		mg/L			07/21/16 01:57	1
Sulfate	37		1.0		mg/L			07/21/16 01:57	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	19		0.25		mg/L		07/05/16 11:55	07/07/16 20:37	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		07/05/16 11:55	07/08/16 15:06	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		2.0		mg/L			07/01/16 13:41	1
Total Dissolved Solids	240		5.0		mg/L			07/05/16 09:23	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: CCR-14

Date Collected: 06/29/16 09:10

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-14

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.27		0.20		mg/L			07/21/16 02:20	1
Sulfate	ND		1.0		mg/L			07/21/16 02:20	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND	^	0.050		mg/L		07/05/16 11:55	07/07/16 20:41	5
Calcium	18		0.25		mg/L		07/05/16 11:55	07/07/16 20:41	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		2.0		mg/L			07/01/16 13:41	1
Total Dissolved Solids	150		5.0		mg/L			07/05/16 09:23	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: DUPLICATE

Lab Sample ID: 400-123859-15

Date Collected: 06/29/16 00:00

Matrix: Water

Date Received: 07/01/16 09:41

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.34		0.20		mg/L			07/21/16 03:52	1
Sulfate	ND		1.0		mg/L			07/21/16 03:52	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	36		0.25		mg/L		07/05/16 11:55	07/07/16 20:46	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.021		0.010		mg/L		07/05/16 11:55	07/08/16 15:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57		4.0		mg/L			07/01/16 14:25	2
Total Dissolved Solids	380		5.0		mg/L			07/05/16 09:23	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: FIELD BLANK

Lab Sample ID: 400-123859-16

Date Collected: 06/29/16 17:00

Matrix: Water

Date Received: 07/01/16 09:41

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			07/21/16 05:00	1
Sulfate	ND		1.0		mg/L			07/21/16 05:00	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND	^	0.050		mg/L		07/05/16 11:55	07/07/16 20:50	5
Calcium	ND		0.25		mg/L		07/05/16 11:55	07/07/16 20:50	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			07/01/16 13:46	1
Total Dissolved Solids	ND		5.0		mg/L			07/05/16 09:23	1

Definitions/Glossary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
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.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: CCR-1

Date Collected: 06/29/16 17:40

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	315051	07/20/16 19:52	TAJ	TAL PEN
Total Recoverable	Prep	3005A			312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	313364	07/07/16 18:58	GKP	TAL PEN
Total Recoverable	Prep	3005A	RA		312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	313677	07/08/16 14:39	RJB	TAL PEN
Total/NA	Analysis	325.2		2	312645	07/01/16 14:15	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	312643	07/01/16 16:46	CAC	TAL PEN

Client Sample ID: CCR-2

Date Collected: 06/30/16 10:00

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	315051	07/20/16 20:15	TAJ	TAL PEN
Total Recoverable	Prep	3005A			312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	313364	07/07/16 19:02	GKP	TAL PEN
Total Recoverable	Prep	3005A	RA		312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	313677	07/08/16 14:44	RJB	TAL PEN
Total/NA	Analysis	325.2		2	312645	07/01/16 14:15	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	312643	07/01/16 16:46	CAC	TAL PEN

Client Sample ID: CCR-3

Date Collected: 06/30/16 08:45

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	315051	07/20/16 21:24	TAJ	TAL PEN
Total Recoverable	Prep	3005A			312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	313364	07/07/16 19:07	GKP	TAL PEN
Total Recoverable	Prep	3005A	RA		312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	313677	07/08/16 14:48	RJB	TAL PEN
Total/NA	Analysis	325.2		5	312645	07/01/16 14:18	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	312643	07/01/16 16:46	CAC	TAL PEN

Client Sample ID: CCR-4

Date Collected: 06/28/16 15:10

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	315170	07/21/16 11:28	TAJ	TAL PEN
Total Recoverable	Prep	3005A			312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	313364	07/07/16 19:25	GKP	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: CCR-4

Date Collected: 06/28/16 15:10

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	325.2		2	312645	07/01/16 14:15	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	312643	07/01/16 16:46	CAC	TAL PEN

Client Sample ID: CCR-5

Date Collected: 06/28/16 13:45

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	315051	07/20/16 21:47	TAJ	TAL PEN
Total Recoverable	Prep	3005A			312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	313364	07/07/16 19:47	GKP	TAL PEN
Total/NA	Analysis	325.2		2	312645	07/01/16 14:15	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	312643	07/01/16 16:46	CAC	TAL PEN

Client Sample ID: CCR-6

Date Collected: 06/28/16 12:05

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	315051	07/20/16 22:32	TAJ	TAL PEN
Total Recoverable	Prep	3005A			312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	313364	07/07/16 19:52	GKP	TAL PEN
Total/NA	Analysis	325.2		5	312645	07/01/16 14:18	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	312643	07/01/16 16:46	CAC	TAL PEN

Client Sample ID: CCR-7

Date Collected: 06/28/16 10:30

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	315051	07/20/16 22:55	TAJ	TAL PEN
Total Recoverable	Prep	3005A			312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	313364	07/07/16 19:56	GKP	TAL PEN
Total/NA	Analysis	325.2		5	312645	07/01/16 14:18	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	312643	07/01/16 16:46	CAC	TAL PEN

Client Sample ID: CCR-8

Date Collected: 06/28/16 17:50

Date Received: 07/01/16 09:41

Lab Sample ID: 400-123859-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	315051	07/20/16 23:18	TAJ	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	313364	07/07/16 20:01	GKP	TAL PEN
Total/NA	Analysis	325.2		5	312645	07/01/16 14:18	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	312643	07/01/16 16:46	CAC	TAL PEN

Client Sample ID: CCR-9

Lab Sample ID: 400-123859-9

Date Collected: 06/29/16 13:40

Matrix: Water

Date Received: 07/01/16 09:41

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	315051	07/20/16 23:41	TAJ	TAL PEN
Total Recoverable	Prep	3005A			312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	313364	07/07/16 20:05	GKP	TAL PEN
Total/NA	Analysis	325.2		2	312645	07/01/16 14:18	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	312643	07/01/16 16:46	CAC	TAL PEN

Client Sample ID: CCR-10

Lab Sample ID: 400-123859-10

Date Collected: 06/29/16 16:20

Matrix: Water

Date Received: 07/01/16 09:41

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	315051	07/21/16 00:03	TAJ	TAL PEN
Total Recoverable	Prep	3005A			312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	313364	07/07/16 20:23	GKP	TAL PEN
Total Recoverable	Prep	3005A	RA		312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	313677	07/08/16 14:53	RJB	TAL PEN
Total/NA	Analysis	325.2		2	312645	07/01/16 14:25	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	312643	07/01/16 16:46	CAC	TAL PEN

Client Sample ID: CCR-11

Lab Sample ID: 400-123859-11

Date Collected: 06/29/16 15:00

Matrix: Water

Date Received: 07/01/16 09:41

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	315051	07/21/16 00:26	TAJ	TAL PEN
Total Recoverable	Prep	3005A			312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	313364	07/07/16 20:28	GKP	TAL PEN
Total Recoverable	Prep	3005A	RA		312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	313677	07/08/16 14:57	RJB	TAL PEN
Total/NA	Analysis	325.2		1	312645	07/01/16 13:41	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	312748	07/05/16 09:23	CAC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: CCR-12

Lab Sample ID: 400-123859-12

Date Collected: 06/29/16 12:10

Matrix: Water

Date Received: 07/01/16 09:41

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	315051	07/21/16 01:35	TAJ	TAL PEN
Total Recoverable	Prep	3005A			312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	313364	07/07/16 20:32	GKP	TAL PEN
Total Recoverable	Prep	3005A	RA		312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	313677	07/08/16 15:02	RJB	TAL PEN
Total/NA	Analysis	325.2		1	312645	07/01/16 13:41	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	312748	07/05/16 09:23	CAC	TAL PEN

Client Sample ID: CCR-13

Lab Sample ID: 400-123859-13

Date Collected: 06/29/16 10:45

Matrix: Water

Date Received: 07/01/16 09:41

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	315051	07/21/16 01:57	TAJ	TAL PEN
Total Recoverable	Prep	3005A			312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	313364	07/07/16 20:37	GKP	TAL PEN
Total Recoverable	Prep	3005A	RA		312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	313677	07/08/16 15:06	RJB	TAL PEN
Total/NA	Analysis	325.2		1	312645	07/01/16 13:41	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	312748	07/05/16 09:23	CAC	TAL PEN

Client Sample ID: CCR-14

Lab Sample ID: 400-123859-14

Date Collected: 06/29/16 09:10

Matrix: Water

Date Received: 07/01/16 09:41

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	315051	07/21/16 02:20	TAJ	TAL PEN
Total Recoverable	Prep	3005A			312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	313364	07/07/16 20:41	GKP	TAL PEN
Total/NA	Analysis	325.2		1	312645	07/01/16 13:41	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	312748	07/05/16 09:23	CAC	TAL PEN

Client Sample ID: DUPLICATE

Lab Sample ID: 400-123859-15

Date Collected: 06/29/16 00:00

Matrix: Water

Date Received: 07/01/16 09:41

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	315170	07/21/16 03:52	TAJ	TAL PEN
Total Recoverable	Prep	3005A			312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	313364	07/07/16 20:46	GKP	TAL PEN
Total Recoverable	Prep	3005A	RA		312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	1	313677	07/08/16 15:42	RJB	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Client Sample ID: DUPLICATE

Lab Sample ID: 400-123859-15

Date Collected: 06/29/16 00:00

Matrix: Water

Date Received: 07/01/16 09:41

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	325.2		2	312645	07/01/16 14:25	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	312748	07/05/16 09:23	CAC	TAL PEN

Client Sample ID: FIELD BLANK

Lab Sample ID: 400-123859-16

Date Collected: 06/29/16 17:00

Matrix: Water

Date Received: 07/01/16 09:41

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	315170	07/21/16 05:00	TAJ	TAL PEN
Total Recoverable	Prep	3005A			312808	07/05/16 11:55	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	313364	07/07/16 20:50	GKP	TAL PEN
Total/NA	Analysis	325.2		1	312645	07/01/16 13:46	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	312748	07/05/16 09:23	CAC	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

HPLC/IC

Analysis Batch: 315051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123859-1	CCR-1	Total/NA	Water	300.0	
400-123859-2	CCR-2	Total/NA	Water	300.0	
400-123859-3	CCR-3	Total/NA	Water	300.0	
400-123859-5	CCR-5	Total/NA	Water	300.0	
400-123859-6	CCR-6	Total/NA	Water	300.0	
400-123859-7	CCR-7	Total/NA	Water	300.0	
400-123859-8	CCR-8	Total/NA	Water	300.0	
400-123859-9	CCR-9	Total/NA	Water	300.0	
400-123859-10	CCR-10	Total/NA	Water	300.0	
400-123859-11	CCR-11	Total/NA	Water	300.0	
400-123859-12	CCR-12	Total/NA	Water	300.0	
400-123859-13	CCR-13	Total/NA	Water	300.0	
400-123859-14	CCR-14	Total/NA	Water	300.0	
MB 400-315051/11	Method Blank	Total/NA	Water	300.0	
LCS 400-315051/12	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-315051/13	Lab Control Sample Dup	Total/NA	Water	300.0	
400-123859-5 MS	CCR-5	Total/NA	Water	300.0	
400-124458-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 315170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123859-4	CCR-4	Total/NA	Water	300.0	
400-123859-15	DUPLICATE	Total/NA	Water	300.0	
400-123859-16	FIELD BLANK	Total/NA	Water	300.0	
MB 400-315170/42	Method Blank	Total/NA	Water	300.0	
LCS 400-315170/43	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-315170/44	Lab Control Sample Dup	Total/NA	Water	300.0	
400-123859-4 MS	CCR-4	Total/NA	Water	300.0	
400-123859-4 MSD	CCR-4	Total/NA	Water	300.0	
400-123859-15 MS	DUPLICATE	Total/NA	Water	300.0	
400-123859-15 MSD	DUPLICATE	Total/NA	Water	300.0	

Metals

Prep Batch: 312808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123859-1	CCR-1	Total Recoverable	Water	3005A	
400-123859-1 - RA	CCR-1	Total Recoverable	Water	3005A	
400-123859-2 - RA	CCR-2	Total Recoverable	Water	3005A	
400-123859-2	CCR-2	Total Recoverable	Water	3005A	
400-123859-3 - RA	CCR-3	Total Recoverable	Water	3005A	
400-123859-3	CCR-3	Total Recoverable	Water	3005A	
400-123859-4	CCR-4	Total Recoverable	Water	3005A	
400-123859-5	CCR-5	Total Recoverable	Water	3005A	
400-123859-6	CCR-6	Total Recoverable	Water	3005A	
400-123859-7	CCR-7	Total Recoverable	Water	3005A	
400-123859-8	CCR-8	Total Recoverable	Water	3005A	
400-123859-9	CCR-9	Total Recoverable	Water	3005A	
400-123859-10 - RA	CCR-10	Total Recoverable	Water	3005A	
400-123859-10	CCR-10	Total Recoverable	Water	3005A	

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Metals (Continued)

Prep Batch: 312808 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123859-11	CCR-11	Total Recoverable	Water	3005A	
400-123859-11 - RA	CCR-11	Total Recoverable	Water	3005A	
400-123859-12	CCR-12	Total Recoverable	Water	3005A	
400-123859-12 - RA	CCR-12	Total Recoverable	Water	3005A	
400-123859-13 - RA	CCR-13	Total Recoverable	Water	3005A	
400-123859-13	CCR-13	Total Recoverable	Water	3005A	
400-123859-14	CCR-14	Total Recoverable	Water	3005A	
400-123859-15	DUPLICATE	Total Recoverable	Water	3005A	
400-123859-15 - RA	DUPLICATE	Total Recoverable	Water	3005A	
400-123859-16	FIELD BLANK	Total Recoverable	Water	3005A	
MB 400-312808/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-312808/2-A ^1	Lab Control Sample	Total Recoverable	Water	3005A	
400-123859-4 MS	CCR-4	Total Recoverable	Water	3005A	
400-123859-4 MSD	CCR-4	Total Recoverable	Water	3005A	

Analysis Batch: 313364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123859-1	CCR-1	Total Recoverable	Water	6020	312808
400-123859-2	CCR-2	Total Recoverable	Water	6020	312808
400-123859-3	CCR-3	Total Recoverable	Water	6020	312808
400-123859-4	CCR-4	Total Recoverable	Water	6020	312808
400-123859-5	CCR-5	Total Recoverable	Water	6020	312808
400-123859-6	CCR-6	Total Recoverable	Water	6020	312808
400-123859-7	CCR-7	Total Recoverable	Water	6020	312808
400-123859-8	CCR-8	Total Recoverable	Water	6020	312808
400-123859-9	CCR-9	Total Recoverable	Water	6020	312808
400-123859-10	CCR-10	Total Recoverable	Water	6020	312808
400-123859-11	CCR-11	Total Recoverable	Water	6020	312808
400-123859-12	CCR-12	Total Recoverable	Water	6020	312808
400-123859-13	CCR-13	Total Recoverable	Water	6020	312808
400-123859-14	CCR-14	Total Recoverable	Water	6020	312808
400-123859-15	DUPLICATE	Total Recoverable	Water	6020	312808
400-123859-16	FIELD BLANK	Total Recoverable	Water	6020	312808
MB 400-312808/1-A ^5	Method Blank	Total Recoverable	Water	6020	312808
LCS 400-312808/2-A ^1	Lab Control Sample	Total Recoverable	Water	6020	312808
400-123859-4 MS	CCR-4	Total Recoverable	Water	6020	312808
400-123859-4 MSD	CCR-4	Total Recoverable	Water	6020	312808

Analysis Batch: 313677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123859-1 - RA	CCR-1	Total Recoverable	Water	6020	312808
400-123859-2 - RA	CCR-2	Total Recoverable	Water	6020	312808
400-123859-3 - RA	CCR-3	Total Recoverable	Water	6020	312808
400-123859-10 - RA	CCR-10	Total Recoverable	Water	6020	312808
400-123859-11 - RA	CCR-11	Total Recoverable	Water	6020	312808
400-123859-12 - RA	CCR-12	Total Recoverable	Water	6020	312808
400-123859-13 - RA	CCR-13	Total Recoverable	Water	6020	312808
400-123859-15 - RA	DUPLICATE	Total Recoverable	Water	6020	312808

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

General Chemistry

Analysis Batch: 312643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123859-1	CCR-1	Total/NA	Water	SM 2540C	
400-123859-2	CCR-2	Total/NA	Water	SM 2540C	
400-123859-3	CCR-3	Total/NA	Water	SM 2540C	
400-123859-4	CCR-4	Total/NA	Water	SM 2540C	
400-123859-5	CCR-5	Total/NA	Water	SM 2540C	
400-123859-6	CCR-6	Total/NA	Water	SM 2540C	
400-123859-7	CCR-7	Total/NA	Water	SM 2540C	
400-123859-8	CCR-8	Total/NA	Water	SM 2540C	
400-123859-9	CCR-9	Total/NA	Water	SM 2540C	
400-123859-10	CCR-10	Total/NA	Water	SM 2540C	
MB 400-312643/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-312643/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-123859-1 DU	CCR-1	Total/NA	Water	SM 2540C	

Analysis Batch: 312645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123859-1	CCR-1	Total/NA	Water	325.2	
400-123859-2	CCR-2	Total/NA	Water	325.2	
400-123859-3	CCR-3	Total/NA	Water	325.2	
400-123859-4	CCR-4	Total/NA	Water	325.2	
400-123859-5	CCR-5	Total/NA	Water	325.2	
400-123859-6	CCR-6	Total/NA	Water	325.2	
400-123859-7	CCR-7	Total/NA	Water	325.2	
400-123859-8	CCR-8	Total/NA	Water	325.2	
400-123859-9	CCR-9	Total/NA	Water	325.2	
400-123859-10	CCR-10	Total/NA	Water	325.2	
400-123859-11	CCR-11	Total/NA	Water	325.2	
400-123859-12	CCR-12	Total/NA	Water	325.2	
400-123859-13	CCR-13	Total/NA	Water	325.2	
400-123859-14	CCR-14	Total/NA	Water	325.2	
400-123859-15	DUPLICATE	Total/NA	Water	325.2	
400-123859-16	FIELD BLANK	Total/NA	Water	325.2	
MB 400-312645/6	Method Blank	Total/NA	Water	325.2	
LCS 400-312645/7	Lab Control Sample	Total/NA	Water	325.2	
400-123859-4 MS	CCR-4	Total/NA	Water	325.2	
400-123859-4 MSD	CCR-4	Total/NA	Water	325.2	
400-123859-6 DU	CCR-6	Total/NA	Water	325.2	

Analysis Batch: 312748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123859-11	CCR-11	Total/NA	Water	SM 2540C	
400-123859-12	CCR-12	Total/NA	Water	SM 2540C	
400-123859-13	CCR-13	Total/NA	Water	SM 2540C	
400-123859-14	CCR-14	Total/NA	Water	SM 2540C	
400-123859-15	DUPLICATE	Total/NA	Water	SM 2540C	
400-123859-16	FIELD BLANK	Total/NA	Water	SM 2540C	
MB 400-312748/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-312748/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-123859-11 DU	CCR-11	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-315051/11

Matrix: Water

Analysis Batch: 315051

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			07/20/16 14:15	1
Sulfate	ND		1.0		mg/L			07/20/16 14:15	1

Lab Sample ID: LCS 400-315051/12

Matrix: Water

Analysis Batch: 315051

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.3		mg/L		103	90 - 110
Sulfate	10.0	9.84		mg/L		98	90 - 110

Lab Sample ID: LCSD 400-315051/13

Matrix: Water

Analysis Batch: 315051

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	10.2		mg/L		102	90 - 110	1	15
Sulfate	10.0	10.1		mg/L		101	90 - 110	2	15

Lab Sample ID: 400-123859-5 MS

Matrix: Water

Analysis Batch: 315051

Client Sample ID: CCR-5

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.34	F1	10.0	12.4	F1	mg/L		121	80 - 120
Sulfate	1.0		10.0	13.0		mg/L		120	80 - 120

Lab Sample ID: 400-124458-D-1 MSD

Matrix: Water

Analysis Batch: 315051

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
Fluoride	0.23		10.0	11.4		mg/L		112	80 - 120	2	20
Sulfate	51	E	10.0	63.2	E 4	mg/L		118	80 - 120	1	20

Lab Sample ID: MB 400-315170/42

Matrix: Water

Analysis Batch: 315170

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			07/21/16 02:43	1
Sulfate	ND		1.0		mg/L			07/21/16 02:43	1

Lab Sample ID: LCS 400-315170/43

Matrix: Water

Analysis Batch: 315170

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.4		mg/L		104	90 - 110

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-315170/43

Matrix: Water

Analysis Batch: 315170

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	9.51		mg/L		95	90 - 110

Lab Sample ID: LCSD 400-315170/44

Matrix: Water

Analysis Batch: 315170

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	10.4		mg/L		104	90 - 110	0	15
Sulfate	10.0	9.49		mg/L		95	90 - 110	0	15

Lab Sample ID: 400-123859-4 MS

Matrix: Water

Analysis Batch: 315170

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.32		10.0	11.9		mg/L		115	80 - 120
Sulfate	4.9		10.0	16.0		mg/L		111	80 - 120

Lab Sample ID: 400-123859-4 MSD

Matrix: Water

Analysis Batch: 315170

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.32		10.0	11.9		mg/L		116	80 - 120	1	20
Sulfate	4.9		10.0	16.1		mg/L		112	80 - 120	1	20

Lab Sample ID: 400-123859-15 MS

Matrix: Water

Analysis Batch: 315170

Client Sample ID: DUPLICATE

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.34		10.0	11.9		mg/L		116	80 - 120
Sulfate	ND		10.0	12.0		mg/L		110	80 - 120

Lab Sample ID: 400-123859-15 MSD

Matrix: Water

Analysis Batch: 315170

Client Sample ID: DUPLICATE

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.34		10.0	12.0		mg/L		116	80 - 120	0	20
Sulfate	ND		10.0	12.0		mg/L		110	80 - 120	0	20

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-312808/1-A ^5

Matrix: Water

Analysis Batch: 313364

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 312808

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND	^	0.050		mg/L		07/05/16 11:55	07/07/16 18:49	5
Calcium	ND		0.25		mg/L		07/05/16 11:55	07/07/16 18:49	5

Lab Sample ID: LCS 400-312808/2-A ^1

Matrix: Water

Analysis Batch: 313364

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 312808

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.100	0.116	^	mg/L		116	80 - 120
Calcium	5.00	5.19		mg/L		104	80 - 120

Lab Sample ID: 400-123859-4 MS

Matrix: Water

Analysis Batch: 313364

Client Sample ID: CCR-4

Prep Type: Total Recoverable

Prep Batch: 312808

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.12	F1	0.100	0.249	F1	mg/L		134	75 - 125
Calcium	20		5.00	24.8		mg/L		103	75 - 125

Lab Sample ID: 400-123859-4 MSD

Matrix: Water

Analysis Batch: 313364

Client Sample ID: CCR-4

Prep Type: Total Recoverable

Prep Batch: 312808

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	0.12	F1	0.100	0.243	F1	mg/L		128	75 - 125	2	20
Calcium	20		5.00	24.6		mg/L		99	75 - 125	1	20

Method: 325.2 - Chloride

Lab Sample ID: MB 400-312645/6

Matrix: Water

Analysis Batch: 312645

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			07/01/16 07:31	1

Lab Sample ID: LCS 400-312645/7

Matrix: Water

Analysis Batch: 312645

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	30.8		mg/L		103	90 - 110

Lab Sample ID: 400-123859-4 MS

Matrix: Water

Analysis Batch: 312645

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	51	F1	20.0	59.6	F1	mg/L		44	73 - 120

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Method: 325.2 - Chloride (Continued)

Lab Sample ID: 400-123859-4 MSD

Matrix: Water

Analysis Batch: 312645

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	51	F1	20.0	59.5	F1	mg/L		44	73 - 120	0	8

Lab Sample ID: 400-123859-6 DU

Matrix: Water

Analysis Batch: 312645

Client Sample ID: CCR-6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	89		90.9		mg/L		2	8

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

Lab Sample ID: MB 400-312643/1

Matrix: Water

Analysis Batch: 312643

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			07/01/16 16:46	1

Lab Sample ID: LCS 400-312643/2

Matrix: Water

Analysis Batch: 312643

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	293	292		mg/L		100	78 - 122

Lab Sample ID: 400-123859-1 DU

Matrix: Water

Analysis Batch: 312643

Client Sample ID: CCR-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	310		306		mg/L		0	5

Lab Sample ID: MB 400-312748/1

Matrix: Water

Analysis Batch: 312748

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			07/05/16 09:23	1

Lab Sample ID: LCS 400-312748/2

Matrix: Water

Analysis Batch: 312748

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	293	310		mg/L		106	78 - 122

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

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

Lab Sample ID: 400-123859-11 DU
Matrix: Water
Analysis Batch: 312748

Client Sample ID: CCR-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	220		218		mg/L	—	0	5

Chain of Custody Record

Client Information Client Contact: Terry Elnaggar Company: Pivotal Engineering LLC Address: 1515 Poydras Street Suite 1875 City: New Orleans State, Zip: LA, 70112 Phone: [blank] Email: telnaggar@pivotaleng.com Project Name: Entergy Nelson - CCR Detection Monitoring Site: CADL		Lab PM: Whitney, Cheyenne R E-Mail: cheyenne.whitire@testamericainc.com Due Date Requested: [blank] TAT Requested (days): [blank] PO #: [blank] Purchase Order not required WO #: [blank] Project #: 40006993 SSOW#: [blank]		Sampler: GCM Phone: 225-585-5124 Carrier Tracking No(s): [blank]		COC No: 400-55839-24300.1 Page: Page 1 of 2 Job #: 15-125	
Sample Identification				Analysis Requested			
Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, BT=tissue, A=air)	Field Filtered Sample (Yes or No)	Performance/MSD (Yes or No)	Preservation Code
CCR-1	6/29	1746	G	Water	N	+	6020 - Boron and Calcium
CCR-2	6/30	1000		Water		+	2540C - TDS, 325.1 - Chloride, 300.0 - Fluoride, Sulfate
CCR-3	6/30	0845		Water		+	
CCR-4	6/28	1510		Water		+	
CCR-5	6/28	1345		Water		+	
CCR-6	6/28	1205		Water		+	
CCR-7	6/28	1030		Water		+	
CCR-8	6/28	1750		Water		+	
CCR-9	6/29	1340		Water		+	
CCR-10	6/29	1620		Water		+	
CCR-11	6/29	1500		Water		+	
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify) [blank]				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☒ Archive For 1 Months			
Empty Kit Relinquished by: [Signature] Date: 6/30/16 1440 Relinquished by: [Signature] Date: 6/30/16 1440 Relinquished by: [Signature] Date: 6/30/16 1440 Relinquished by: [Signature] Date: 6/30/16 1440				Method of Shipment: [blank]			
Custody Seal Intact: ☒ Yes ☐ No Custody Seal No.: [blank]				Cooler Temperature(s) °C and Other Remarks: [blank]			

Chain of Custody Record

Client Information Client Contact: Terry Elnaggar Company: Pivotal Engineering LLC Address: 1515 Poydras Street Suite 1875 City: New Orleans State, Zip: LA, 70112 Phone: _____ Email: telhaggar@pivotaleng.com Project Name: Entergy Nelson - COR Detection Monitoring Site: CADL		Sampler: <u>GLM</u> Lab P#: Whitire, Cheyenne R Phone: <u>285-505-5124</u> E-Mail: cheyenne.whitire@testamericainc.com		COC No: 400-55839-24300.2 Page: Page 2 of 2 Job #: <u>15-125</u>		Carrier Tracking No(s): _____	
Due Date Requested: _____ TAT Requested (days): _____ PO #: _____ Purchase Order not required WO #: _____ Project #: 40006993 SSOW #: _____		Analysis Requested Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acalone J - DI Water V - MCAA K - EDTA W - ph 4-5 L - EDA Z - other (specify) Other: _____					
Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (Water, Sealed, On-wastefoil, STA-Tissue, AVAL)		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 620 - Boron and Calcium 2540C - TDS, 325.1 - Chloride, 300.0 - Fluoride, Sulfate					
CCR-12	6/29	1210	G	Water	M	X	
CCR-13	6/29	1045		Water			
CCR-14	6/29	0910		Water			
Duplicate				Water			
MS	6/28	1520		Water			
MSD	6/28	1520		Water			
Field Blank	6/29	1700		Water			
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☒ Archive For 1 Months					
Deliverable Requested: I, II, III, IV, Other (specify) _____		Special Instructions/QC Requirements: _____					
Empty Kit Relinquished by: _____ Relinquished by: _____ Relinquished by: _____		Method of Shipment: _____ Date: _____ Date/Time: 6/30/16 1440 Date/Time: 7-1-16 0:41 Date/Time: _____					
Custody Seals Intact: ☒ Yes ☐ No		Cooler Temperature(s) °C and Other Remarks: _____					

Login Sample Receipt Checklist

Client: Pivotal Engineering LLC

Job Number: 400-123859-1

SDG Number: CADL

Login Number: 123859

List Number: 1

Creator: Crawford, Lauren E

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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	2.4°C, 1.6°C, 1.0°C, 0.8°C IR-6
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-123859-1
SDG: CADL

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	10-31-16
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-16 *
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16 *
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	08-31-16

* Certification renewal pending - certification considered valid.

TestAmerica Pensacola

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-125225-1

TestAmerica Sample Delivery Group: CADL

Client Project/Site: Entergy Nelson - CCR Detection

For:

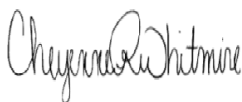
Pivotal Engineering LLC

1515 Poydras Street

Suite 1875

New Orleans, Louisiana 70112

Attn: Terry Elnaggar



Authorized for release by:

8/14/2016 9:27:39 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Method Summary	4
Sample Summary	5
Client Sample Results	6
Definitions	22
Chronicle	23
QC Association	27
QC Sample Results	30
Chain of Custody	35
Receipt Checklists	37
Certification Summary	38

Case Narrative

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Job ID: 400-125225-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-125225-1

General Chemistry

Method(s) 325.2: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 317261 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL PEN
325.2	Chloride	MCAWW	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN

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 PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-125225-1	CCR-1	Water	07/28/16 10:00	07/29/16 10:12
400-125225-2	CCR-2	Water	07/28/16 08:25	07/29/16 10:12
400-125225-3	CCR-3	Water	07/27/16 17:10	07/29/16 10:12
400-125225-4	CCR-4	Water	07/26/16 09:45	07/29/16 10:12
400-125225-5	CCR-5	Water	07/26/16 11:35	07/29/16 10:12
400-125225-6	CCR-6	Water	07/26/16 16:50	07/29/16 10:12
400-125225-7	CCR-7	Water	07/26/16 15:15	07/29/16 10:12
400-125225-8	CCR-8	Water	07/26/16 13:15	07/29/16 10:12
400-125225-9	CCR-9	Water	07/26/16 18:35	07/29/16 10:12
400-125225-10	CCR-10	Water	07/27/16 10:35	07/29/16 10:12
400-125225-11	CCR-11	Water	07/27/16 09:20	07/29/16 10:12
400-125225-12	CCR-12	Water	07/27/16 15:10	07/29/16 10:12
400-125225-13	CCR-13	Water	07/27/16 13:35	07/29/16 10:12
400-125225-14	CCR-14	Water	07/27/16 12:05	07/29/16 10:12
400-125225-15	DUPLICATE	Water	07/26/16 00:00	07/29/16 10:12
400-125225-16	FIELD BLANK	Water	07/26/16 17:45	07/29/16 10:12

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: CCR-1

Date Collected: 07/28/16 10:00

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.38		0.20		mg/L			08/02/16 19:44	1
Sulfate	ND		1.0		mg/L			08/02/16 19:44	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.085		0.050		mg/L		08/03/16 08:50	08/03/16 17:43	5
Calcium	24		0.25		mg/L		08/03/16 08:50	08/03/16 17:43	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43		4.0		mg/L			08/03/16 08:39	2
Total Dissolved Solids	250		5.0		mg/L			08/02/16 16:57	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: CCR-2

Date Collected: 07/28/16 08:25

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-2

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.43		0.20		mg/L			08/02/16 20:07	1
Sulfate	ND		1.0		mg/L			08/02/16 20:07	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.076		0.050		mg/L		08/03/16 08:50	08/03/16 17:48	5
Calcium	19		0.25		mg/L		08/03/16 08:50	08/03/16 17:48	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57		4.0		mg/L			08/03/16 08:39	2
Total Dissolved Solids	310		5.0		mg/L			08/02/16 16:57	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: CCR-3

Date Collected: 07/27/16 17:10

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.59		0.20		mg/L			08/02/16 21:15	1
Sulfate	9.8		1.0		mg/L			08/02/16 21:15	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.074		0.050		mg/L		08/03/16 08:50	08/03/16 17:52	5
Calcium	23		0.25		mg/L		08/03/16 08:50	08/03/16 17:52	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	83		10		mg/L			08/03/16 08:42	5
Total Dissolved Solids	360		5.0		mg/L			07/30/16 16:10	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: CCR-4

Date Collected: 07/26/16 09:45

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.29		0.20		mg/L			08/02/16 18:36	1
Sulfate	6.0		1.0		mg/L			08/02/16 18:36	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.10		0.050		mg/L		08/03/16 08:50	08/03/16 17:21	5
Calcium	18		0.25		mg/L		08/03/16 08:50	08/03/16 17:21	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49	F1	4.0		mg/L			08/03/16 08:39	2
Total Dissolved Solids	270		5.0		mg/L			07/30/16 15:07	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: CCR-5

Date Collected: 07/26/16 11:35

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-5

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.26		0.20		mg/L			08/02/16 21:38	1
Sulfate	ND		1.0		mg/L			08/02/16 21:38	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.11		0.050		mg/L		08/03/16 08:50	08/03/16 17:57	5
Calcium	34		0.25		mg/L		08/03/16 08:50	08/03/16 17:57	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55		4.0		mg/L			08/03/16 08:39	2
Total Dissolved Solids	360		5.0		mg/L			07/30/16 15:07	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: CCR-6

Date Collected: 07/26/16 16:50

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-6

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.27		0.20		mg/L			08/02/16 22:01	1
Sulfate	ND		1.0		mg/L			08/02/16 22:01	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.095		0.050		mg/L		08/03/16 08:50	08/03/16 18:15	5
Calcium	30		0.25		mg/L		08/03/16 08:50	08/03/16 18:15	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86		10		mg/L			08/03/16 08:49	5
Total Dissolved Solids	290		5.0		mg/L			07/30/16 15:07	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: CCR-7

Date Collected: 07/26/16 15:15

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-7

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.29		0.20		mg/L			08/02/16 22:24	1
Sulfate	ND		1.0		mg/L			08/02/16 22:24	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.080		0.050		mg/L		08/03/16 08:50	08/03/16 18:20	5
Calcium	41		0.25		mg/L		08/03/16 08:50	08/03/16 18:20	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	67		4.0		mg/L			08/03/16 08:39	2
Total Dissolved Solids	310		5.0		mg/L			07/30/16 15:07	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: CCR-8

Date Collected: 07/26/16 13:15

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-8

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			08/02/16 22:47	1
Sulfate	ND		1.0		mg/L			08/02/16 22:47	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.062		0.050		mg/L		08/03/16 08:50	08/03/16 18:24	5
Calcium	12		0.25		mg/L		08/03/16 08:50	08/03/16 18:24	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	92		10		mg/L			08/03/16 08:49	5
Total Dissolved Solids	300		5.0		mg/L			07/30/16 15:07	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: CCR-9

Date Collected: 07/26/16 18:35

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-9

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.80		0.20		mg/L			08/02/16 23:10	1
Sulfate	4.7		1.0		mg/L			08/02/16 23:10	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.070		0.050		mg/L		08/03/16 08:50	08/03/16 18:28	5
Calcium	27		0.25		mg/L		08/03/16 08:50	08/03/16 18:28	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	50		4.0		mg/L			08/03/16 08:39	2
Total Dissolved Solids	310		5.0		mg/L			07/30/16 15:07	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: CCR-10

Date Collected: 07/27/16 10:35

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-10

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.90		0.20		mg/L			08/02/16 23:32	1
Sulfate	ND		1.0		mg/L			08/02/16 23:32	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.064		0.050		mg/L		08/03/16 08:50	08/03/16 18:33	5
Calcium	26		0.25		mg/L		08/03/16 08:50	08/03/16 18:33	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	42		4.0		mg/L			08/03/16 08:42	2
Total Dissolved Solids	280		5.0		mg/L			07/30/16 16:10	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: CCR-11

Date Collected: 07/27/16 09:20

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-11

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.93		0.20		mg/L			08/03/16 01:49	1
Sulfate	2.9		1.0		mg/L			08/03/16 01:49	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.059		0.050		mg/L		08/03/16 08:50	08/03/16 18:37	5
Calcium	26		0.25		mg/L		08/03/16 08:50	08/03/16 18:37	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		2.0		mg/L			08/03/16 08:24	1
Total Dissolved Solids	250		5.0		mg/L			07/30/16 16:10	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: CCR-12

Date Collected: 07/27/16 15:10

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-12

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			08/03/16 03:01	1
Sulfate	26		1.0		mg/L			08/03/16 03:01	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		08/03/16 08:50	08/03/16 18:42	5
Calcium	20		0.25		mg/L		08/03/16 08:50	08/03/16 18:42	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19		2.0		mg/L			08/03/16 08:24	1
Total Dissolved Solids	220		5.0		mg/L			07/30/16 16:10	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: CCR-13

Date Collected: 07/27/16 13:35

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-13

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.27		0.20		mg/L			08/03/16 03:26	1
Sulfate	39		1.0		mg/L			08/03/16 03:26	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.058		0.050		mg/L		08/03/16 08:50	08/03/16 18:46	5
Calcium	20		0.25		mg/L		08/03/16 08:50	08/03/16 18:46	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		2.0		mg/L			08/03/16 08:24	1
Total Dissolved Solids	290		5.0		mg/L			07/30/16 16:10	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: CCR-14

Date Collected: 07/27/16 12:05

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-14

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.23		0.20		mg/L			08/03/16 03:51	1
Sulfate	ND		1.0		mg/L			08/03/16 03:51	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		08/03/16 08:50	08/03/16 18:51	5
Calcium	17		0.25		mg/L		08/03/16 08:50	08/03/16 18:51	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		2.0		mg/L			08/03/16 08:24	1
Total Dissolved Solids	150		5.0		mg/L			07/30/16 16:10	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: DUPLICATE

Date Collected: 07/26/16 00:00

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-15

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.27		0.20		mg/L			08/03/16 04:16	1
Sulfate	ND		1.0		mg/L			08/03/16 04:16	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.10		0.050		mg/L		08/03/16 08:50	08/03/16 18:55	5
Calcium	35		0.25		mg/L		08/03/16 08:50	08/03/16 18:55	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55		4.0		mg/L			08/03/16 08:42	2
Total Dissolved Solids	390		5.0		mg/L			07/30/16 15:07	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: FIELD BLANK

Lab Sample ID: 400-125225-16

Date Collected: 07/26/16 17:45

Matrix: Water

Date Received: 07/29/16 10:12

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			08/03/16 04:39	1
Sulfate	ND		1.0		mg/L			08/03/16 04:39	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		08/03/16 08:50	08/03/16 19:13	5
Calcium	ND		0.25		mg/L		08/03/16 08:50	08/03/16 19:13	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			08/03/16 08:24	1
Total Dissolved Solids	ND		5.0		mg/L			07/30/16 15:07	1

Definitions/Glossary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Qualifiers

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: CCR-1

Date Collected: 07/28/16 10:00

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	317163	08/02/16 19:44	TAJ	TAL PEN
Total Recoverable	Prep	3005A			317000	08/03/16 08:50	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	317432	08/03/16 17:43	RJB	TAL PEN
Total/NA	Analysis	325.2		2	317261	08/03/16 08:39	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	317013	08/02/16 16:57	TET	TAL PEN

Client Sample ID: CCR-2

Date Collected: 07/28/16 08:25

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	317163	08/02/16 20:07	TAJ	TAL PEN
Total Recoverable	Prep	3005A			317000	08/03/16 08:50	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	317432	08/03/16 17:48	RJB	TAL PEN
Total/NA	Analysis	325.2		2	317261	08/03/16 08:39	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	317013	08/02/16 16:57	TET	TAL PEN

Client Sample ID: CCR-3

Date Collected: 07/27/16 17:10

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	317163	08/02/16 21:15	TAJ	TAL PEN
Total Recoverable	Prep	3005A			317000	08/03/16 08:50	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	317432	08/03/16 17:52	RJB	TAL PEN
Total/NA	Analysis	325.2		5	317261	08/03/16 08:42	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	316542	07/30/16 16:10	TET	TAL PEN

Client Sample ID: CCR-4

Date Collected: 07/26/16 09:45

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	317163	08/02/16 18:36	TAJ	TAL PEN
Total Recoverable	Prep	3005A			317000	08/03/16 08:50	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	317432	08/03/16 17:21	RJB	TAL PEN
Total/NA	Analysis	325.2		2	317261	08/03/16 08:39	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	316539	07/30/16 15:07	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: CCR-5

Date Collected: 07/26/16 11:35

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	317163	08/02/16 21:38	TAJ	TAL PEN
Total Recoverable	Prep	3005A			317000	08/03/16 08:50	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	317432	08/03/16 17:57	RJB	TAL PEN
Total/NA	Analysis	325.2		2	317261	08/03/16 08:39	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	316539	07/30/16 15:07	TET	TAL PEN

Client Sample ID: CCR-6

Date Collected: 07/26/16 16:50

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	317163	08/02/16 22:01	TAJ	TAL PEN
Total Recoverable	Prep	3005A			317000	08/03/16 08:50	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	317432	08/03/16 18:15	RJB	TAL PEN
Total/NA	Analysis	325.2		5	317261	08/03/16 08:49	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	316539	07/30/16 15:07	TET	TAL PEN

Client Sample ID: CCR-7

Date Collected: 07/26/16 15:15

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	317163	08/02/16 22:24	TAJ	TAL PEN
Total Recoverable	Prep	3005A			317000	08/03/16 08:50	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	317432	08/03/16 18:20	RJB	TAL PEN
Total/NA	Analysis	325.2		2	317261	08/03/16 08:39	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	316539	07/30/16 15:07	TET	TAL PEN

Client Sample ID: CCR-8

Date Collected: 07/26/16 13:15

Date Received: 07/29/16 10:12

Lab Sample ID: 400-125225-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	317163	08/02/16 22:47	TAJ	TAL PEN
Total Recoverable	Prep	3005A			317000	08/03/16 08:50	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	317432	08/03/16 18:24	RJB	TAL PEN
Total/NA	Analysis	325.2		5	317261	08/03/16 08:49	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	316539	07/30/16 15:07	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: CCR-9

Lab Sample ID: 400-125225-9

Date Collected: 07/26/16 18:35

Matrix: Water

Date Received: 07/29/16 10:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	317163	08/02/16 23:10	TAJ	TAL PEN
Total Recoverable	Prep	3005A			317000	08/03/16 08:50	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	317432	08/03/16 18:28	RJB	TAL PEN
Total/NA	Analysis	325.2		2	317261	08/03/16 08:39	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	316539	07/30/16 15:07	TET	TAL PEN

Client Sample ID: CCR-10

Lab Sample ID: 400-125225-10

Date Collected: 07/27/16 10:35

Matrix: Water

Date Received: 07/29/16 10:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	317163	08/02/16 23:32	TAJ	TAL PEN
Total Recoverable	Prep	3005A			317000	08/03/16 08:50	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	317432	08/03/16 18:33	RJB	TAL PEN
Total/NA	Analysis	325.2		2	317261	08/03/16 08:42	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	316542	07/30/16 16:10	TET	TAL PEN

Client Sample ID: CCR-11

Lab Sample ID: 400-125225-11

Date Collected: 07/27/16 09:20

Matrix: Water

Date Received: 07/29/16 10:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	317166	08/03/16 01:49	TAJ	TAL PEN
Total Recoverable	Prep	3005A			317000	08/03/16 08:50	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	317432	08/03/16 18:37	RJB	TAL PEN
Total/NA	Analysis	325.2		1	317261	08/03/16 08:24	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	316542	07/30/16 16:10	TET	TAL PEN

Client Sample ID: CCR-12

Lab Sample ID: 400-125225-12

Date Collected: 07/27/16 15:10

Matrix: Water

Date Received: 07/29/16 10:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	317166	08/03/16 03:01	TAJ	TAL PEN
Total Recoverable	Prep	3005A			317000	08/03/16 08:50	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	317432	08/03/16 18:42	RJB	TAL PEN
Total/NA	Analysis	325.2		1	317261	08/03/16 08:24	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	316542	07/30/16 16:10	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Client Sample ID: CCR-13

Lab Sample ID: 400-125225-13

Date Collected: 07/27/16 13:35

Matrix: Water

Date Received: 07/29/16 10:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	317166	08/03/16 03:26	TAJ	TAL PEN
Total Recoverable	Prep	3005A			317000	08/03/16 08:50	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	317432	08/03/16 18:46	RJB	TAL PEN
Total/NA	Analysis	325.2		1	317261	08/03/16 08:24	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	316542	07/30/16 16:10	TET	TAL PEN

Client Sample ID: CCR-14

Lab Sample ID: 400-125225-14

Date Collected: 07/27/16 12:05

Matrix: Water

Date Received: 07/29/16 10:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	317166	08/03/16 03:51	TAJ	TAL PEN
Total Recoverable	Prep	3005A			317000	08/03/16 08:50	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	317432	08/03/16 18:51	RJB	TAL PEN
Total/NA	Analysis	325.2		1	317261	08/03/16 08:24	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	316542	07/30/16 16:10	TET	TAL PEN

Client Sample ID: DUPLICATE

Lab Sample ID: 400-125225-15

Date Collected: 07/26/16 00:00

Matrix: Water

Date Received: 07/29/16 10:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	317166	08/03/16 04:16	TAJ	TAL PEN
Total Recoverable	Prep	3005A			317000	08/03/16 08:50	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	317432	08/03/16 18:55	RJB	TAL PEN
Total/NA	Analysis	325.2		2	317261	08/03/16 08:42	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	316539	07/30/16 15:07	TET	TAL PEN

Client Sample ID: FIELD BLANK

Lab Sample ID: 400-125225-16

Date Collected: 07/26/16 17:45

Matrix: Water

Date Received: 07/29/16 10:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	317166	08/03/16 04:39	TAJ	TAL PEN
Total Recoverable	Prep	3005A			317000	08/03/16 08:50	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	317432	08/03/16 19:13	RJB	TAL PEN
Total/NA	Analysis	325.2		1	317261	08/03/16 08:24	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	316539	07/30/16 15:07	TET	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

HPLC/IC

Analysis Batch: 317163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-125225-1	CCR-1	Total/NA	Water	300.0	
400-125225-2	CCR-2	Total/NA	Water	300.0	
400-125225-3	CCR-3	Total/NA	Water	300.0	
400-125225-4	CCR-4	Total/NA	Water	300.0	
400-125225-5	CCR-5	Total/NA	Water	300.0	
400-125225-6	CCR-6	Total/NA	Water	300.0	
400-125225-7	CCR-7	Total/NA	Water	300.0	
400-125225-8	CCR-8	Total/NA	Water	300.0	
400-125225-9	CCR-9	Total/NA	Water	300.0	
400-125225-10	CCR-10	Total/NA	Water	300.0	
MB 400-317163/4	Method Blank	Total/NA	Water	300.0	
LCS 400-317163/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-317163/6	Lab Control Sample Dup	Total/NA	Water	300.0	
400-125225-4 MS	CCR-4	Total/NA	Water	300.0	
400-125225-4 MSD	CCR-4	Total/NA	Water	300.0	

Analysis Batch: 317166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-125225-11	CCR-11	Total/NA	Water	300.0	
400-125225-12	CCR-12	Total/NA	Water	300.0	
400-125225-13	CCR-13	Total/NA	Water	300.0	
400-125225-14	CCR-14	Total/NA	Water	300.0	
400-125225-15	DUPLICATE	Total/NA	Water	300.0	
400-125225-16	FIELD BLANK	Total/NA	Water	300.0	
MB 400-317166/35	Method Blank	Total/NA	Water	300.0	
LCS 400-317166/36	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-317166/37	Lab Control Sample Dup	Total/NA	Water	300.0	
400-125225-11 MS	CCR-11	Total/NA	Water	300.0	
400-125225-11 MSD	CCR-11	Total/NA	Water	300.0	

Metals

Prep Batch: 317000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-125225-1	CCR-1	Total Recoverable	Water	3005A	
400-125225-2	CCR-2	Total Recoverable	Water	3005A	
400-125225-3	CCR-3	Total Recoverable	Water	3005A	
400-125225-4	CCR-4	Total Recoverable	Water	3005A	
400-125225-5	CCR-5	Total Recoverable	Water	3005A	
400-125225-6	CCR-6	Total Recoverable	Water	3005A	
400-125225-7	CCR-7	Total Recoverable	Water	3005A	
400-125225-8	CCR-8	Total Recoverable	Water	3005A	
400-125225-9	CCR-9	Total Recoverable	Water	3005A	
400-125225-10	CCR-10	Total Recoverable	Water	3005A	
400-125225-11	CCR-11	Total Recoverable	Water	3005A	
400-125225-12	CCR-12	Total Recoverable	Water	3005A	
400-125225-13	CCR-13	Total Recoverable	Water	3005A	
400-125225-14	CCR-14	Total Recoverable	Water	3005A	
400-125225-15	DUPLICATE	Total Recoverable	Water	3005A	
400-125225-16	FIELD BLANK	Total Recoverable	Water	3005A	

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Metals (Continued)

Prep Batch: 317000 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-317000/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-317000/2-A ^1	Lab Control Sample	Total Recoverable	Water	3005A	
400-125225-4 MS	CCR-4	Total Recoverable	Water	3005A	
400-125225-4 MSD	CCR-4	Total Recoverable	Water	3005A	

Analysis Batch: 317432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-125225-1	CCR-1	Total Recoverable	Water	6020	317000
400-125225-2	CCR-2	Total Recoverable	Water	6020	317000
400-125225-3	CCR-3	Total Recoverable	Water	6020	317000
400-125225-4	CCR-4	Total Recoverable	Water	6020	317000
400-125225-5	CCR-5	Total Recoverable	Water	6020	317000
400-125225-6	CCR-6	Total Recoverable	Water	6020	317000
400-125225-7	CCR-7	Total Recoverable	Water	6020	317000
400-125225-8	CCR-8	Total Recoverable	Water	6020	317000
400-125225-9	CCR-9	Total Recoverable	Water	6020	317000
400-125225-10	CCR-10	Total Recoverable	Water	6020	317000
400-125225-11	CCR-11	Total Recoverable	Water	6020	317000
400-125225-12	CCR-12	Total Recoverable	Water	6020	317000
400-125225-13	CCR-13	Total Recoverable	Water	6020	317000
400-125225-14	CCR-14	Total Recoverable	Water	6020	317000
400-125225-15	DUPLICATE	Total Recoverable	Water	6020	317000
400-125225-16	FIELD BLANK	Total Recoverable	Water	6020	317000
MB 400-317000/1-A ^5	Method Blank	Total Recoverable	Water	6020	317000
LCS 400-317000/2-A ^1	Lab Control Sample	Total Recoverable	Water	6020	317000
400-125225-4 MS	CCR-4	Total Recoverable	Water	6020	317000
400-125225-4 MSD	CCR-4	Total Recoverable	Water	6020	317000

General Chemistry

Analysis Batch: 316539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-125225-4	CCR-4	Total/NA	Water	SM 2540C	
400-125225-5	CCR-5	Total/NA	Water	SM 2540C	
400-125225-6	CCR-6	Total/NA	Water	SM 2540C	
400-125225-7	CCR-7	Total/NA	Water	SM 2540C	
400-125225-8	CCR-8	Total/NA	Water	SM 2540C	
400-125225-9	CCR-9	Total/NA	Water	SM 2540C	
400-125225-15	DUPLICATE	Total/NA	Water	SM 2540C	
400-125225-16	FIELD BLANK	Total/NA	Water	SM 2540C	
MB 400-316539/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-316539/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-125052-A-14 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 316542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-125225-3	CCR-3	Total/NA	Water	SM 2540C	
400-125225-10	CCR-10	Total/NA	Water	SM 2540C	
400-125225-11	CCR-11	Total/NA	Water	SM 2540C	
400-125225-12	CCR-12	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

General Chemistry (Continued)

Analysis Batch: 316542 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-125225-13	CCR-13	Total/NA	Water	SM 2540C	
400-125225-14	CCR-14	Total/NA	Water	SM 2540C	
MB 400-316542/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-316542/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-125225-3 DU	CCR-3	Total/NA	Water	SM 2540C	

Analysis Batch: 317013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-125225-1	CCR-1	Total/NA	Water	SM 2540C	
400-125225-2	CCR-2	Total/NA	Water	SM 2540C	
MB 400-317013/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-317013/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-124944-G-4 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 317261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-125225-1	CCR-1	Total/NA	Water	325.2	
400-125225-2	CCR-2	Total/NA	Water	325.2	
400-125225-3	CCR-3	Total/NA	Water	325.2	
400-125225-4	CCR-4	Total/NA	Water	325.2	
400-125225-5	CCR-5	Total/NA	Water	325.2	
400-125225-6	CCR-6	Total/NA	Water	325.2	
400-125225-7	CCR-7	Total/NA	Water	325.2	
400-125225-8	CCR-8	Total/NA	Water	325.2	
400-125225-9	CCR-9	Total/NA	Water	325.2	
400-125225-10	CCR-10	Total/NA	Water	325.2	
400-125225-11	CCR-11	Total/NA	Water	325.2	
400-125225-12	CCR-12	Total/NA	Water	325.2	
400-125225-13	CCR-13	Total/NA	Water	325.2	
400-125225-14	CCR-14	Total/NA	Water	325.2	
400-125225-15	DUPLICATE	Total/NA	Water	325.2	
400-125225-16	FIELD BLANK	Total/NA	Water	325.2	
MB 400-317261/6	Method Blank	Total/NA	Water	325.2	
LCS 400-317261/7	Lab Control Sample	Total/NA	Water	325.2	
MRL 400-317261/23	Lab Control Sample	Total/NA	Water	325.2	
400-125225-4 MS	CCR-4	Total/NA	Water	325.2	
400-125225-4 MSD	CCR-4	Total/NA	Water	325.2	
400-125225-10 DU	CCR-10	Total/NA	Water	325.2	

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-317163/4

Matrix: Water

Analysis Batch: 317163

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			08/02/16 12:08	1
Sulfate	ND		1.0		mg/L			08/02/16 12:08	1

Lab Sample ID: LCS 400-317163/5

Matrix: Water

Analysis Batch: 317163

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.5		mg/L		105	90 - 110
Sulfate	10.0	10.6		mg/L		106	90 - 110

Lab Sample ID: LCSD 400-317163/6

Matrix: Water

Analysis Batch: 317163

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	10.5		mg/L		105	90 - 110	0	15
Sulfate	10.0	10.7		mg/L		107	90 - 110	1	15

Lab Sample ID: 400-125225-4 MS

Matrix: Water

Analysis Batch: 317163

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.29		10.0	12.2		mg/L		119	80 - 120
Sulfate	6.0		10.0	17.5		mg/L		115	80 - 120

Lab Sample ID: 400-125225-4 MSD

Matrix: Water

Analysis Batch: 317163

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.29		10.0	12.2		mg/L		119	80 - 120	0	20
Sulfate	6.0		10.0	17.5		mg/L		115	80 - 120	0	20

Lab Sample ID: MB 400-317166/35

Matrix: Water

Analysis Batch: 317166

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			08/02/16 23:55	1
Sulfate	ND		1.0		mg/L			08/02/16 23:55	1

Lab Sample ID: LCS 400-317166/36

Matrix: Water

Analysis Batch: 317166

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.4		mg/L		104	90 - 110

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-317166/36

Matrix: Water

Analysis Batch: 317166

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	9.95		mg/L		100	90 - 110

Lab Sample ID: LCSD 400-317166/37

Matrix: Water

Analysis Batch: 317166

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	10.5		mg/L		105	90 - 110	1	15
Sulfate	10.0	10.1		mg/L		101	90 - 110	1	15

Lab Sample ID: 400-125225-11 MS

Matrix: Water

Analysis Batch: 317166

Client Sample ID: CCR-11

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.93		10.0	12.2		mg/L		113	80 - 120
Sulfate	2.9		10.0	13.8		mg/L		109	80 - 120

Lab Sample ID: 400-125225-11 MSD

Matrix: Water

Analysis Batch: 317166

Client Sample ID: CCR-11

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.93		10.0	12.3		mg/L		113	80 - 120	0	20
Sulfate	2.9		10.0	13.8		mg/L		109	80 - 120	0	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-317000/1-A ^5

Matrix: Water

Analysis Batch: 317432

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 317000

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		08/03/16 08:50	08/03/16 15:10	5
Calcium	ND		0.25		mg/L		08/03/16 08:50	08/03/16 15:10	5

Lab Sample ID: LCS 400-317000/2-A ^1

Matrix: Water

Analysis Batch: 317432

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 317000

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.100	0.0960		mg/L		96	80 - 120
Calcium	5.00	4.95		mg/L		99	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-125225-4 MS

Matrix: Water

Analysis Batch: 317432

Client Sample ID: CCR-4
Prep Type: Total Recoverable
Prep Batch: 317000

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.10		0.100	0.205		mg/L		102	75 - 125
Calcium	18		5.00	23.1		mg/L		99	75 - 125

Lab Sample ID: 400-125225-4 MSD

Matrix: Water

Analysis Batch: 317432

Client Sample ID: CCR-4
Prep Type: Total Recoverable
Prep Batch: 317000

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	0.10		0.100	0.205		mg/L		101	75 - 125	0	20
Calcium	18		5.00	23.1		mg/L		98	75 - 125	0	20

Method: 325.2 - Chloride

Lab Sample ID: MB 400-317261/6

Matrix: Water

Analysis Batch: 317261

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			08/03/16 07:56	1

Lab Sample ID: LCS 400-317261/7

Matrix: Water

Analysis Batch: 317261

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	29.9		mg/L		100	90 - 110

Lab Sample ID: MRL 400-317261/23

Matrix: Water

Analysis Batch: 317261

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	ND		mg/L		83	50 - 150

Lab Sample ID: 400-125225-4 MS

Matrix: Water

Analysis Batch: 317261

Client Sample ID: CCR-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	49	F1	20.0	56.7	F1	mg/L		39	73 - 120

Lab Sample ID: 400-125225-4 MSD

Matrix: Water

Analysis Batch: 317261

Client Sample ID: CCR-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	49	F1	20.0	56.2	F1	mg/L		37	73 - 120	1	8

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Method: 325.2 - Chloride (Continued)

Lab Sample ID: 400-125225-10 DU
Matrix: Water
Analysis Batch: 317261

Client Sample ID: CCR-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	42		42.2		mg/L		0.1	8

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

Lab Sample ID: MB 400-316539/1
Matrix: Water
Analysis Batch: 316539

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			07/30/16 15:07	1

Lab Sample ID: LCS 400-316539/2
Matrix: Water
Analysis Batch: 316539

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	293	268		mg/L		91	78 - 122

Lab Sample ID: 400-125052-A-14 DU
Matrix: Water
Analysis Batch: 316539

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	160		160		mg/L		0	5

Lab Sample ID: MB 400-316542/1
Matrix: Water
Analysis Batch: 316542

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			07/30/16 16:10	1

Lab Sample ID: LCS 400-316542/2
Matrix: Water
Analysis Batch: 316542

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	293	276		mg/L		94	78 - 122

Lab Sample ID: 400-125225-3 DU
Matrix: Water
Analysis Batch: 316542

Client Sample ID: CCR-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	360		356		mg/L		0.6	5

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

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

Lab Sample ID: MB 400-317013/1

Matrix: Water

Analysis Batch: 317013

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L	-		08/02/16 16:57	1

Lab Sample ID: LCS 400-317013/2

Matrix: Water

Analysis Batch: 317013

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	293	260		mg/L	-	89	78 - 122

Lab Sample ID: 400-124944-G-4 DU

Matrix: Water

Analysis Batch: 317013

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	64		62.0		mg/L	-	3	5

Custody Seal No.:	Custody Seals Intact: Δ Yes Δ No	Cooler Temperature(s) °C and Other Remarks:

8/14/2016

Chain of Custody Record

Client Information		Lab POC: Whitmire, Cheyenne R		Carrier Tracking No(s):		COC No: 400-55839-24300.2						
Client Contact: Terry Elnaggar		E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 2 of 2		Job #:						
Company: Pivotal Engineering LLC		Address: 1515 Poydras Street Suite 1875		City: New Orleans		State, Zip: LA, 70112						
Phone: 504-799-3653		PO #: Purchase Order not required		WO #:		Project #:						
Email: telnaggar@pivotaleng.com		Project Name: Entergy Nelson - CCR Detection Monitoring		Site:		SSOW#:						
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	2540C - TDS; 325.1 - Chloride; 300.0 - Fluoride, Sulfate	620 - Boron and Calcium	D	N	Analysis Requested	Preservation Codes:	Special Instructions/Note:
CCR-12	7/27/16	1510	G	Water	✓	✓	✓	✓	✓		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 Other:	
CCR-13	↓	1335	↓	Water	✓	✓	✓	✓	✓		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)	
CCR-14	↓	1205	↓	Water	✓	✓	✓	✓	✓			
Duplicate	7/26/16	1000	↓	Water	✓	✓	✓	✓	✓			
MS	↓	1000	↓	Water	✓	✓	✓	✓	✓			
MSD	↓	1000	↓	Water	✓	✓	✓	✓	✓			
Field Blank	7/27/16	1745	↓	Water	✓	✓	✓	✓	✓			
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)												
☐ Return To Client ☐ Disposal By Lab ☒ Archive For 1 Months												
Special Instructions/QC Requirements:												
Empty Kit Relinquished by: Date: Time: Method of Shipment:												
Relinquished by: C. A. G. Date: 7/28/16 Time: 1510 Company: PE												
Relinquished by: Date: 7/28/16 Time: 1510 Company: PE												
Relinquished by: Date: 7/28/16 Time: 1510 Company: PE												
Relinquished by: Date: 7/28/16 Time: 1510 Company: PE												
Custody Seals Intact: Δ Yes Δ No												
Custody Seal No.:												
Cooler Temperature(s) °C and Other Remarks:												

Login Sample Receipt Checklist

Client: Pivotal Engineering LLC

Job Number: 400-125225-1

SDG Number: CADL

Login Number: 125225

List Number: 1

Creator: Benforado, Jessica L

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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	3.4°C, 2.4°C, 1.2°C, 2.7°C IR-5
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-125225-1
SDG: CADL

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16 *
Kansas	NELAP	7	E-10253	10-31-16
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16 *
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	08-31-16

* Certification renewal pending - certification considered valid.

TestAmerica Pensacola

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-126706-1

TestAmerica Sample Delivery Group: CADL

Client Project/Site: Entergy Nelson - CCR Detection

For:

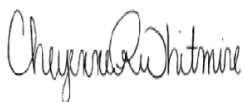
Pivotal Engineering LLC

1515 Poydras Street

Suite 1875

New Orleans, Louisiana 70112

Attn: Terry Elnaggar



Authorized for release by:

10/10/2016 4:45:05 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

5

6

7

8

9

10

11

12



Table of Contents

Cover Page	1
Table of Contents	2
Method Summary	3
Sample Summary	4
Client Sample Results	5
Definitions	21
Chronicle	22
QC Association	27
QC Sample Results	31
Chain of Custody	37
Receipt Checklists	39
Certification Summary	40

Method Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL PEN
325.2	Chloride	MCAWW	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN

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 PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-126706-1	CCR-1	Water	09/01/16 12:15	09/03/16 09:32
400-126706-2	CCR-2	Water	09/01/16 11:00	09/03/16 09:32
400-126706-3	CCR-3	Water	09/01/16 09:50	09/03/16 09:32
400-126706-4	CCR-4	Water	08/31/16 10:45	09/03/16 09:32
400-126706-5	CCR-5	Water	08/30/16 15:35	09/03/16 09:32
400-126706-6	CCR-6	Water	08/30/16 17:20	09/03/16 09:32
400-126706-7	CCR-7	Water	08/31/16 08:00	09/03/16 09:32
400-126706-8	CCR-8	Water	08/31/16 09:30	09/03/16 09:32
400-126706-9	CCR-9	Water	08/31/16 15:35	09/03/16 09:32
400-126706-10	CCR-10	Water	09/01/16 13:55	09/03/16 09:32
400-126706-11	CCR-11	Water	09/01/16 15:10	09/03/16 09:32
400-126706-12	CCR-12	Water	08/31/16 15:00	09/03/16 09:32
400-126706-13	CCR-13	Water	09/01/16 18:00	09/03/16 09:32
400-126706-14	CCR-14	Water	09/01/16 16:35	09/03/16 09:32
400-126706-15	DUPLICATE	Water	08/30/16 00:00	09/03/16 09:32
400-126706-17	FIELD BLANK	Water	09/01/16 17:30	09/03/16 09:32

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-1

Date Collected: 09/01/16 12:15

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.40		0.20		mg/L			09/23/16 12:19	1
Sulfate	2.2		1.0		mg/L			09/23/16 12:19	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	24		1.3		mg/L		09/07/16 10:27	09/19/16 19:59	25

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		09/07/16 10:27	09/23/16 19:54	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45		4.0		mg/L			09/07/16 16:32	2
Total Dissolved Solids	340		5.0		mg/L			09/08/16 16:23	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-2

Date Collected: 09/01/16 11:00

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-2

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.50	F2 F1	0.20		mg/L			09/23/16 12:42	1
Sulfate	ND	F1 F2	1.0		mg/L			09/23/16 12:42	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	20		1.3		mg/L		09/07/16 10:27	09/19/16 20:04	25

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		09/07/16 10:27	09/23/16 19:58	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62	F1	4.0		mg/L			09/07/16 16:39	2
Total Dissolved Solids	340		5.0		mg/L			09/08/16 16:23	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-3

Date Collected: 09/01/16 09:50

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.50		0.20		mg/L			09/23/16 13:50	1
Sulfate	21		1.0		mg/L			09/23/16 13:50	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	25		1.3		mg/L		09/07/16 10:27	09/19/16 20:26	25

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		09/07/16 10:27	09/23/16 20:20	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		10		mg/L			09/07/16 16:42	5
Total Dissolved Solids	450		5.0		mg/L			09/08/16 17:26	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-4

Date Collected: 08/31/16 10:45

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.27		0.20		mg/L			09/23/16 14:13	1
Sulfate	5.0		1.0		mg/L			09/23/16 14:13	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	19		1.3		mg/L		09/07/16 10:27	09/19/16 20:49	25

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.11		0.050		mg/L		09/07/16 10:27	09/23/16 20:38	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51		4.0		mg/L			09/07/16 16:39	2
Total Dissolved Solids	260		5.0		mg/L			09/07/16 13:28	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-5

Date Collected: 08/30/16 15:35

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-5

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.28		0.20		mg/L			09/23/16 14:36	1
Sulfate	ND		1.0		mg/L			09/23/16 14:36	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	33		1.3		mg/L		09/07/16 10:27	09/19/16 20:53	25

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.098		0.050		mg/L		09/07/16 10:27	09/23/16 20:42	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58		4.0		mg/L			09/07/16 16:39	2
Total Dissolved Solids	360	H	5.0		mg/L			09/07/16 11:48	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-6

Date Collected: 08/30/16 17:20

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-6

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.30		0.20		mg/L			09/23/16 15:44	1
Sulfate	ND		1.0		mg/L			09/23/16 15:44	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	32		1.3		mg/L		09/07/16 10:27	09/19/16 20:58	25

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.091		0.050		mg/L		09/07/16 10:27	09/23/16 20:47	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	90		10		mg/L			09/07/16 16:39	5
Total Dissolved Solids	310	H	5.0		mg/L			09/07/16 11:48	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-7

Date Collected: 08/31/16 08:00

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-7

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.34		0.20		mg/L			09/23/16 16:07	1
Sulfate	ND		1.0		mg/L			09/23/16 16:07	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	44		1.3		mg/L		09/07/16 10:27	09/19/16 21:02	25

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.075		0.050		mg/L		09/07/16 10:27	09/23/16 20:51	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	71		10		mg/L			09/08/16 10:50	5
Total Dissolved Solids	330		5.0		mg/L			09/07/16 13:21	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-8

Date Collected: 08/31/16 09:30

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-8

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			09/23/16 16:30	1
Sulfate	ND		1.0		mg/L			09/23/16 16:30	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	13		1.3		mg/L		09/07/16 10:27	09/19/16 21:07	25

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.057		0.050		mg/L		09/07/16 10:27	09/23/16 20:56	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	94		10		mg/L			09/07/16 16:42	5
Total Dissolved Solids	320		5.0		mg/L			09/07/16 13:28	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-9

Date Collected: 08/31/16 15:35

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-9

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.67		0.20		mg/L			09/23/16 16:53	1
Sulfate	4.6		1.0		mg/L			09/23/16 16:53	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	29		1.3		mg/L		09/07/16 10:27	09/19/16 21:11	25

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.063		0.050		mg/L		09/07/16 10:27	09/23/16 21:00	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	53		4.0		mg/L			09/08/16 10:50	2
Total Dissolved Solids	340		5.0		mg/L			09/07/16 13:21	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-10

Date Collected: 09/01/16 13:55

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-10

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.78		0.20		mg/L			09/23/16 17:16	1
Sulfate	ND		1.0		mg/L			09/23/16 17:16	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	28		1.3		mg/L		09/07/16 10:27	09/19/16 21:16	25

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.057		0.050		mg/L		09/07/16 10:27	09/23/16 21:05	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43		4.0		mg/L			09/07/16 16:32	2
Total Dissolved Solids	290		5.0		mg/L			09/08/16 17:26	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-11

Date Collected: 09/01/16 15:10

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-11

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.81		0.20		mg/L			09/23/16 17:38	1
Sulfate	2.2		1.0		mg/L			09/23/16 17:38	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	27		1.3		mg/L		09/07/16 10:27	09/19/16 21:20	25

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.053		0.050		mg/L		09/07/16 10:27	09/23/16 21:09	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29		2.0		mg/L			09/07/16 16:28	1
Total Dissolved Solids	250		5.0		mg/L			09/08/16 17:26	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-12

Date Collected: 08/31/16 15:00

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-12

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			09/23/16 18:24	1
Sulfate	21		1.0		mg/L			09/23/16 18:24	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	20		1.3		mg/L		09/07/16 10:27	09/19/16 21:25	25

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		09/07/16 10:27	09/23/16 21:14	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19		2.0		mg/L			09/08/16 10:23	1
Total Dissolved Solids	180		5.0		mg/L			09/07/16 13:21	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-13

Date Collected: 09/01/16 18:00

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-13

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.26		0.20		mg/L			09/23/16 18:47	1
Sulfate	30		1.0		mg/L			09/23/16 18:47	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	20		1.3		mg/L		09/07/16 10:27	09/19/16 21:29	25

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		09/07/16 10:27	09/23/16 21:18	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16		2.0		mg/L			09/07/16 16:28	1
Total Dissolved Solids	250		5.0		mg/L			09/08/16 17:26	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-14

Date Collected: 09/01/16 16:35

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-14

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.24		0.20		mg/L			09/23/16 19:10	1
Sulfate	ND		1.0		mg/L			09/23/16 19:10	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	18		1.3		mg/L		09/07/16 10:27	09/19/16 21:52	25

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		09/07/16 10:27	09/23/16 21:36	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0		mg/L			09/07/16 16:28	1
Total Dissolved Solids	160		5.0		mg/L			09/08/16 17:26	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: DUPLICATE

Lab Sample ID: 400-126706-15

Date Collected: 08/30/16 00:00

Matrix: Water

Date Received: 09/03/16 09:32

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.29		0.20		mg/L			09/23/16 20:18	1
Sulfate	ND		1.0		mg/L			09/23/16 20:18	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	35		1.3		mg/L		09/07/16 10:27	09/19/16 21:56	25

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.10		0.050		mg/L		09/07/16 10:27	09/23/16 21:40	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58		4.0		mg/L			09/07/16 16:32	2
Total Dissolved Solids	390	H	5.0		mg/L			09/07/16 11:48	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: FIELD BLANK

Lab Sample ID: 400-126706-17

Date Collected: 09/01/16 17:30

Matrix: Water

Date Received: 09/03/16 09:32

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			09/23/16 20:41	1
Fluoride	ND		0.20		mg/L			09/23/16 20:41	1
Sulfate	ND		1.0		mg/L			09/23/16 20:41	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		09/07/16 10:27	09/19/16 19:55	5
Calcium	ND		0.25		mg/L		09/07/16 10:27	09/19/16 19:55	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			09/07/16 16:28	1
Total Dissolved Solids	ND		5.0		mg/L			09/08/16 17:26	1

Definitions/Glossary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

Metals

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-1

Date Collected: 09/01/16 12:15

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	324052	09/23/16 12:19	KH1	TAL PEN
Total Recoverable	Prep	3005A	DL		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	DL	25	323279	09/19/16 19:59	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	RA	5	324029	09/23/16 19:54	RJB	TAL PEN
Total/NA	Analysis	325.2		2	321726	09/07/16 16:32	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	321855	09/08/16 16:23	JLB	TAL PEN

Client Sample ID: CCR-2

Date Collected: 09/01/16 11:00

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	324052	09/23/16 12:42	KH1	TAL PEN
Total Recoverable	Prep	3005A	DL		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	DL	25	323279	09/19/16 20:04	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	RA	5	324029	09/23/16 19:58	RJB	TAL PEN
Total/NA	Analysis	325.2		2	321726	09/07/16 16:39	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	321855	09/08/16 16:23	JLB	TAL PEN

Client Sample ID: CCR-3

Date Collected: 09/01/16 09:50

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	324052	09/23/16 13:50	KH1	TAL PEN
Total Recoverable	Prep	3005A	DL		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	DL	25	323279	09/19/16 20:26	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	RA	5	324029	09/23/16 20:20	RJB	TAL PEN
Total/NA	Analysis	325.2		5	321726	09/07/16 16:42	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	321859	09/08/16 17:26	JLB	TAL PEN

Client Sample ID: CCR-4

Date Collected: 08/31/16 10:45

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	324052	09/23/16 14:13	KH1	TAL PEN
Total Recoverable	Prep	3005A	DL		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	DL	25	323279	09/19/16 20:49	RJB	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-4

Date Collected: 08/31/16 10:45

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A	RA		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	RA	5	324029	09/23/16 20:38	RJB	TAL PEN
Total/NA	Analysis	325.2		2	321726	09/07/16 16:39	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	321596	09/07/16 13:28	JLB	TAL PEN

Client Sample ID: CCR-5

Date Collected: 08/30/16 15:35

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	324052	09/23/16 14:36	KH1	TAL PEN
Total Recoverable	Prep	3005A	DL		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	DL	25	323279	09/19/16 20:53	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	RA	5	324029	09/23/16 20:42	RJB	TAL PEN
Total/NA	Analysis	325.2		2	321726	09/07/16 16:39	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	321595	09/07/16 11:48	JLB	TAL PEN

Client Sample ID: CCR-6

Date Collected: 08/30/16 17:20

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	324052	09/23/16 15:44	KH1	TAL PEN
Total Recoverable	Prep	3005A	DL		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	DL	25	323279	09/19/16 20:58	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	RA	5	324029	09/23/16 20:47	RJB	TAL PEN
Total/NA	Analysis	325.2		5	321726	09/07/16 16:39	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	321595	09/07/16 11:48	JLB	TAL PEN

Client Sample ID: CCR-7

Date Collected: 08/31/16 08:00

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	324052	09/23/16 16:07	KH1	TAL PEN
Total Recoverable	Prep	3005A	DL		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	DL	25	323279	09/19/16 21:02	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	RA	5	324029	09/23/16 20:51	RJB	TAL PEN
Total/NA	Analysis	325.2		5	321897	09/08/16 10:50	LSS	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-7

Date Collected: 08/31/16 08:00

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	321650	09/07/16 13:21	JLB	TAL PEN

Client Sample ID: CCR-8

Date Collected: 08/31/16 09:30

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	324052	09/23/16 16:30	KH1	TAL PEN
Total Recoverable	Prep	3005A	DL		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	DL	25	323279	09/19/16 21:07	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	RA	5	324029	09/23/16 20:56	RJB	TAL PEN
Total/NA	Analysis	325.2		5	321726	09/07/16 16:42	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	321596	09/07/16 13:28	JLB	TAL PEN

Client Sample ID: CCR-9

Date Collected: 08/31/16 15:35

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	324052	09/23/16 16:53	KH1	TAL PEN
Total Recoverable	Prep	3005A	DL		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	DL	25	323279	09/19/16 21:11	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	RA	5	324029	09/23/16 21:00	RJB	TAL PEN
Total/NA	Analysis	325.2		2	321897	09/08/16 10:50	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	321650	09/07/16 13:21	JLB	TAL PEN

Client Sample ID: CCR-10

Date Collected: 09/01/16 13:55

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	324052	09/23/16 17:16	KH1	TAL PEN
Total Recoverable	Prep	3005A	DL		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	DL	25	323279	09/19/16 21:16	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	RA	5	324029	09/23/16 21:05	RJB	TAL PEN
Total/NA	Analysis	325.2		2	321726	09/07/16 16:32	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	321859	09/08/16 17:26	JLB	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-11

Date Collected: 09/01/16 15:10

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	324052	09/23/16 17:38	KH1	TAL PEN
Total Recoverable	Prep	3005A	DL		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	DL	25	323279	09/19/16 21:20	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	RA	5	324029	09/23/16 21:09	RJB	TAL PEN
Total/NA	Analysis	325.2		1	321726	09/07/16 16:28	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	321859	09/08/16 17:26	JLB	TAL PEN

Client Sample ID: CCR-12

Date Collected: 08/31/16 15:00

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	324052	09/23/16 18:24	KH1	TAL PEN
Total Recoverable	Prep	3005A	DL		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	DL	25	323279	09/19/16 21:25	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	RA	5	324029	09/23/16 21:14	RJB	TAL PEN
Total/NA	Analysis	325.2		1	321897	09/08/16 10:23	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	321650	09/07/16 13:21	JLB	TAL PEN

Client Sample ID: CCR-13

Date Collected: 09/01/16 18:00

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	324052	09/23/16 18:47	KH1	TAL PEN
Total Recoverable	Prep	3005A	DL		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	DL	25	323279	09/19/16 21:29	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	RA	5	324029	09/23/16 21:18	RJB	TAL PEN
Total/NA	Analysis	325.2		1	321726	09/07/16 16:28	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	321859	09/08/16 17:26	JLB	TAL PEN

Client Sample ID: CCR-14

Date Collected: 09/01/16 16:35

Date Received: 09/03/16 09:32

Lab Sample ID: 400-126706-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	324052	09/23/16 19:10	KH1	TAL PEN
Total Recoverable	Prep	3005A	DL		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	DL	25	323279	09/19/16 21:52	RJB	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Client Sample ID: CCR-14

Lab Sample ID: 400-126706-14

Date Collected: 09/01/16 16:35

Matrix: Water

Date Received: 09/03/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A	RA		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	RA	5	324029	09/23/16 21:36	RJB	TAL PEN
Total/NA	Analysis	325.2		1	321726	09/07/16 16:28	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	321859	09/08/16 17:26	JLB	TAL PEN

Client Sample ID: DUPLICATE

Lab Sample ID: 400-126706-15

Date Collected: 08/30/16 00:00

Matrix: Water

Date Received: 09/03/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	324052	09/23/16 20:18	KH1	TAL PEN
Total Recoverable	Prep	3005A	DL		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	DL	25	323279	09/19/16 21:56	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020	RA	5	324029	09/23/16 21:40	RJB	TAL PEN
Total/NA	Analysis	325.2		2	321726	09/07/16 16:32	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	321595	09/07/16 11:48	JLB	TAL PEN

Client Sample ID: FIELD BLANK

Lab Sample ID: 400-126706-17

Date Collected: 09/01/16 17:30

Matrix: Water

Date Received: 09/03/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	324052	09/23/16 20:41	KH1	TAL PEN
Total Recoverable	Prep	3005A			321605	09/07/16 10:27	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	323279	09/19/16 19:55	RJB	TAL PEN
Total/NA	Analysis	325.2		1	321726	09/07/16 16:28	LSS	TAL PEN
Total/NA	Analysis	SM 2540C		1	321859	09/08/16 17:26	JLB	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

HPLC/IC

Analysis Batch: 324052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126706-1	CCR-1	Total/NA	Water	300.0	
400-126706-2	CCR-2	Total/NA	Water	300.0	
400-126706-3	CCR-3	Total/NA	Water	300.0	
400-126706-4	CCR-4	Total/NA	Water	300.0	
400-126706-5	CCR-5	Total/NA	Water	300.0	
400-126706-6	CCR-6	Total/NA	Water	300.0	
400-126706-7	CCR-7	Total/NA	Water	300.0	
400-126706-8	CCR-8	Total/NA	Water	300.0	
400-126706-9	CCR-9	Total/NA	Water	300.0	
400-126706-10	CCR-10	Total/NA	Water	300.0	
400-126706-11	CCR-11	Total/NA	Water	300.0	
400-126706-12	CCR-12	Total/NA	Water	300.0	
400-126706-13	CCR-13	Total/NA	Water	300.0	
400-126706-14	CCR-14	Total/NA	Water	300.0	
400-126706-15	DUPLICATE	Total/NA	Water	300.0	
400-126706-17	FIELD BLANK	Total/NA	Water	300.0	
MB 400-324052/4	Method Blank	Total/NA	Water	300.0	
LCS 400-324052/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-324052/6	Lab Control Sample Dup	Total/NA	Water	300.0	
400-126706-2 MS	CCR-2	Total/NA	Water	300.0	
400-126706-2 MSD	CCR-2	Total/NA	Water	300.0	
400-126706-11 MS	CCR-11	Total/NA	Water	300.0	

Metals

Prep Batch: 321605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126706-1 - RA	CCR-1	Total Recoverable	Water	3005A	
400-126706-1 - DL	CCR-1	Total Recoverable	Water	3005A	
400-126706-2 - RA	CCR-2	Total Recoverable	Water	3005A	
400-126706-2 - DL	CCR-2	Total Recoverable	Water	3005A	
400-126706-3 - RA	CCR-3	Total Recoverable	Water	3005A	
400-126706-3 - DL	CCR-3	Total Recoverable	Water	3005A	
400-126706-4 - RA	CCR-4	Total Recoverable	Water	3005A	
400-126706-4 - DL	CCR-4	Total Recoverable	Water	3005A	
400-126706-5 - DL	CCR-5	Total Recoverable	Water	3005A	
400-126706-5 - RA	CCR-5	Total Recoverable	Water	3005A	
400-126706-6 - DL	CCR-6	Total Recoverable	Water	3005A	
400-126706-6 - RA	CCR-6	Total Recoverable	Water	3005A	
400-126706-7 - RA	CCR-7	Total Recoverable	Water	3005A	
400-126706-7 - DL	CCR-7	Total Recoverable	Water	3005A	
400-126706-8 - DL	CCR-8	Total Recoverable	Water	3005A	
400-126706-8 - RA	CCR-8	Total Recoverable	Water	3005A	
400-126706-9 - RA	CCR-9	Total Recoverable	Water	3005A	
400-126706-9 - DL	CCR-9	Total Recoverable	Water	3005A	
400-126706-10 - DL	CCR-10	Total Recoverable	Water	3005A	
400-126706-10 - RA	CCR-10	Total Recoverable	Water	3005A	
400-126706-11 - DL	CCR-11	Total Recoverable	Water	3005A	
400-126706-11 - RA	CCR-11	Total Recoverable	Water	3005A	
400-126706-12 - DL	CCR-12	Total Recoverable	Water	3005A	

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Metals (Continued)

Prep Batch: 321605 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126706-12 - RA	CCR-12	Total Recoverable	Water	3005A	
400-126706-13 - DL	CCR-13	Total Recoverable	Water	3005A	
400-126706-13 - RA	CCR-13	Total Recoverable	Water	3005A	
400-126706-14 - RA	CCR-14	Total Recoverable	Water	3005A	
400-126706-14 - DL	CCR-14	Total Recoverable	Water	3005A	
400-126706-15 - DL	DUPLICATE	Total Recoverable	Water	3005A	
400-126706-15 - RA	DUPLICATE	Total Recoverable	Water	3005A	
400-126706-17	FIELD BLANK	Total Recoverable	Water	3005A	
MB 400-321605/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-321605/2-A ^1	Lab Control Sample	Total Recoverable	Water	3005A	
400-126706-2 MS	CCR-2	Total Recoverable	Water	3005A	
400-126706-2 MSD	CCR-2	Total Recoverable	Water	3005A	

Analysis Batch: 323279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126706-1 - DL	CCR-1	Total Recoverable	Water	6020	321605
400-126706-2 - DL	CCR-2	Total Recoverable	Water	6020	321605
400-126706-3 - DL	CCR-3	Total Recoverable	Water	6020	321605
400-126706-4 - DL	CCR-4	Total Recoverable	Water	6020	321605
400-126706-5 - DL	CCR-5	Total Recoverable	Water	6020	321605
400-126706-6 - DL	CCR-6	Total Recoverable	Water	6020	321605
400-126706-7 - DL	CCR-7	Total Recoverable	Water	6020	321605
400-126706-8 - DL	CCR-8	Total Recoverable	Water	6020	321605
400-126706-9 - DL	CCR-9	Total Recoverable	Water	6020	321605
400-126706-10 - DL	CCR-10	Total Recoverable	Water	6020	321605
400-126706-11 - DL	CCR-11	Total Recoverable	Water	6020	321605
400-126706-12 - DL	CCR-12	Total Recoverable	Water	6020	321605
400-126706-13 - DL	CCR-13	Total Recoverable	Water	6020	321605
400-126706-14 - DL	CCR-14	Total Recoverable	Water	6020	321605
400-126706-15 - DL	DUPLICATE	Total Recoverable	Water	6020	321605
400-126706-17	FIELD BLANK	Total Recoverable	Water	6020	321605
MB 400-321605/1-A ^5	Method Blank	Total Recoverable	Water	6020	321605
LCS 400-321605/2-A ^1	Lab Control Sample	Total Recoverable	Water	6020	321605
400-126706-2 MS	CCR-2	Total Recoverable	Water	6020	321605
400-126706-2 MSD	CCR-2	Total Recoverable	Water	6020	321605

Analysis Batch: 324029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126706-1 - RA	CCR-1	Total Recoverable	Water	6020	321605
400-126706-2 - RA	CCR-2	Total Recoverable	Water	6020	321605
400-126706-3 - RA	CCR-3	Total Recoverable	Water	6020	321605
400-126706-4 - RA	CCR-4	Total Recoverable	Water	6020	321605
400-126706-5 - RA	CCR-5	Total Recoverable	Water	6020	321605
400-126706-6 - RA	CCR-6	Total Recoverable	Water	6020	321605
400-126706-7 - RA	CCR-7	Total Recoverable	Water	6020	321605
400-126706-8 - RA	CCR-8	Total Recoverable	Water	6020	321605
400-126706-9 - RA	CCR-9	Total Recoverable	Water	6020	321605
400-126706-10 - RA	CCR-10	Total Recoverable	Water	6020	321605
400-126706-11 - RA	CCR-11	Total Recoverable	Water	6020	321605
400-126706-12 - RA	CCR-12	Total Recoverable	Water	6020	321605
400-126706-13 - RA	CCR-13	Total Recoverable	Water	6020	321605

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Metals (Continued)

Analysis Batch: 324029 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126706-14 - RA	CCR-14	Total Recoverable	Water	6020	321605
400-126706-15 - RA	DUPLICATE	Total Recoverable	Water	6020	321605
MB 400-321605/1-A ^5	Method Blank	Total Recoverable	Water	6020	321605
LCS 400-321605/2-A ^1	Lab Control Sample	Total Recoverable	Water	6020	321605

General Chemistry

Analysis Batch: 321595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126706-5	CCR-5	Total/NA	Water	SM 2540C	
400-126706-6	CCR-6	Total/NA	Water	SM 2540C	
400-126706-15	DUPLICATE	Total/NA	Water	SM 2540C	
MB 400-321595/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-321595/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-126621-A-11 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 321596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126706-4	CCR-4	Total/NA	Water	SM 2540C	
400-126706-8	CCR-8	Total/NA	Water	SM 2540C	
MB 400-321596/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-321596/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-126631-G-10 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 321650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126706-7	CCR-7	Total/NA	Water	SM 2540C	
400-126706-9	CCR-9	Total/NA	Water	SM 2540C	
400-126706-12	CCR-12	Total/NA	Water	SM 2540C	
MB 400-321650/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-321650/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-126512-B-13 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 321726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126706-1	CCR-1	Total/NA	Water	325.2	
400-126706-2	CCR-2	Total/NA	Water	325.2	
400-126706-3	CCR-3	Total/NA	Water	325.2	
400-126706-4	CCR-4	Total/NA	Water	325.2	
400-126706-5	CCR-5	Total/NA	Water	325.2	
400-126706-6	CCR-6	Total/NA	Water	325.2	
400-126706-8	CCR-8	Total/NA	Water	325.2	
400-126706-10	CCR-10	Total/NA	Water	325.2	
400-126706-11	CCR-11	Total/NA	Water	325.2	
400-126706-13	CCR-13	Total/NA	Water	325.2	
400-126706-14	CCR-14	Total/NA	Water	325.2	
400-126706-15	DUPLICATE	Total/NA	Water	325.2	
400-126706-17	FIELD BLANK	Total/NA	Water	325.2	
MB 400-321726/6	Method Blank	Total/NA	Water	325.2	
LCS 400-321726/7	Lab Control Sample	Total/NA	Water	325.2	

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

General Chemistry (Continued)

Analysis Batch: 321726 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 400-321726/3	Lab Control Sample	Total/NA	Water	325.2	
400-126706-2 MS	CCR-2	Total/NA	Water	325.2	
400-126706-2 MSD	CCR-2	Total/NA	Water	325.2	
400-126706-1 DU	CCR-1	Total/NA	Water	325.2	

Analysis Batch: 321855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126706-1	CCR-1	Total/NA	Water	SM 2540C	
400-126706-2	CCR-2	Total/NA	Water	SM 2540C	
MB 400-321855/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-321855/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-126621-A-14 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 321859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126706-3	CCR-3	Total/NA	Water	SM 2540C	
400-126706-10	CCR-10	Total/NA	Water	SM 2540C	
400-126706-11	CCR-11	Total/NA	Water	SM 2540C	
400-126706-13	CCR-13	Total/NA	Water	SM 2540C	
400-126706-14	CCR-14	Total/NA	Water	SM 2540C	
400-126706-17	FIELD BLANK	Total/NA	Water	SM 2540C	
MB 400-321859/1	Method Blank	Total/NA	Water	SM 2540C	
400-126706-3 DU	CCR-3	Total/NA	Water	SM 2540C	

Analysis Batch: 321897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126706-7	CCR-7	Total/NA	Water	325.2	
400-126706-9	CCR-9	Total/NA	Water	325.2	
400-126706-12	CCR-12	Total/NA	Water	325.2	
MB 400-321897/6	Method Blank	Total/NA	Water	325.2	
LCS 400-321897/7	Lab Control Sample	Total/NA	Water	325.2	
MRL 400-321897/3	Lab Control Sample	Total/NA	Water	325.2	
400-126757-A-4 MS	Matrix Spike	Total/NA	Water	325.2	
400-126757-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	325.2	
400-126706-12 DU	CCR-12	Total/NA	Water	325.2	

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-324052/4

Matrix: Water

Analysis Batch: 324052

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			09/23/16 11:11	1
Sulfate	ND		1.0		mg/L			09/23/16 11:11	1

Lab Sample ID: LCS 400-324052/5

Matrix: Water

Analysis Batch: 324052

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	9.78		mg/L		98	90 - 110
Sulfate	10.0	9.78		mg/L		98	90 - 110

Lab Sample ID: LCSD 400-324052/6

Matrix: Water

Analysis Batch: 324052

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	9.77		mg/L		98	90 - 110	0	15
Sulfate	10.0	9.87		mg/L		99	90 - 110	1	15

Lab Sample ID: 400-126706-2 MS

Matrix: Water

Analysis Batch: 324052

Client Sample ID: CCR-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.50	F2 F1	10.0	11.2		mg/L		107	80 - 120
Fluoride	0.50	F2 F1	10.0	11.2		mg/L		107	80 - 120
Sulfate	ND	F1 F2	10.0	16.1	F1	mg/L		152	80 - 120

Lab Sample ID: 400-126706-2 MSD

Matrix: Water

Analysis Batch: 324052

Client Sample ID: CCR-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.50	F2 F1	10.0	11.2		mg/L		107	80 - 120	0	20
Fluoride	0.50	F2 F1	10.0	11.2		mg/L		107	80 - 120	0	20
Sulfate	ND	F1 F2	10.0	16.1	F1	mg/L		153	80 - 120	0	20

Lab Sample ID: 400-126706-11 MS

Matrix: Water

Analysis Batch: 324052

Client Sample ID: CCR-11

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.81		10.0	11.3		mg/L		105	80 - 120
Sulfate	2.2		10.0	13.2		mg/L		110	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-321605/1-A ^5
Matrix: Water
Analysis Batch: 323279

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 321605

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		09/07/16 10:26	09/19/16 19:46	5
Calcium	ND		0.25		mg/L		09/07/16 10:26	09/19/16 19:46	5

Lab Sample ID: MB 400-321605/1-A ^5
Matrix: Water
Analysis Batch: 324029

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 321605

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		09/07/16 10:26	09/23/16 19:41	5
Calcium	ND		0.25		mg/L		09/07/16 10:26	09/23/16 19:41	5

Lab Sample ID: LCS 400-321605/2-A ^1
Matrix: Water
Analysis Batch: 323279

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 321605

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.100	0.0991		mg/L		99	80 - 120
Calcium	5.00	5.10		mg/L		102	80 - 120

Lab Sample ID: LCS 400-321605/2-A ^1
Matrix: Water
Analysis Batch: 324029

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 321605

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.100	0.0895		mg/L		90	80 - 120
Calcium	5.00	5.06		mg/L		101	80 - 120

Lab Sample ID: 400-126706-2 MS
Matrix: Water
Analysis Batch: 323279

Client Sample ID: CCR-2
Prep Type: Total Recoverable
Prep Batch: 321605

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	ND	F2	0.100	ND		mg/L		NC	75 - 125
Calcium	20		5.00	24.2		mg/L		91	75 - 125

Lab Sample ID: 400-126706-2 MSD
Matrix: Water
Analysis Batch: 323279

Client Sample ID: CCR-2
Prep Type: Total Recoverable
Prep Batch: 321605

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	ND	F2	0.100	ND	F2	mg/L		NC	75 - 125	31	20
Calcium	20		5.00	25.1		mg/L		108	75 - 125	3	20

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Method: 325.2 - Chloride

Lab Sample ID: MB 400-321726/6
Matrix: Water
Analysis Batch: 321726

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			09/07/16 09:44	1

Lab Sample ID: LCS 400-321726/7
Matrix: Water
Analysis Batch: 321726

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	29.5		mg/L		98	90 - 110

Lab Sample ID: MRL 400-321726/3
Matrix: Water
Analysis Batch: 321726

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	ND		mg/L		66	50 - 150

Lab Sample ID: 400-126706-2 MS
Matrix: Water
Analysis Batch: 321726

Client Sample ID: CCR-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	62	F1	20.0	69.8	F1	mg/L		41	73 - 120

Lab Sample ID: 400-126706-2 MSD
Matrix: Water
Analysis Batch: 321726

Client Sample ID: CCR-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	62	F1	20.0	70.0	F1	mg/L		41	73 - 120	0	8

Lab Sample ID: 400-126706-1 DU
Matrix: Water
Analysis Batch: 321726

Client Sample ID: CCR-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	45		45.8		mg/L		3	8

Lab Sample ID: MB 400-321897/6
Matrix: Water
Analysis Batch: 321897

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			09/08/16 07:51	1

Lab Sample ID: LCS 400-321897/7
Matrix: Water
Analysis Batch: 321897

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	29.2		mg/L		97	90 - 110

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Lab Sample ID: MRL 400-321897/3
Matrix: Water
Analysis Batch: 321897

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	ND		mg/L		69	50 - 150

Lab Sample ID: 400-126757-A-4 MS
Matrix: Water
Analysis Batch: 321897

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	4.4		10.0	16.0		mg/L		116	73 - 120

Lab Sample ID: 400-126757-A-4 MSD
Matrix: Water
Analysis Batch: 321897

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	4.4		10.0	15.9		mg/L		115	73 - 120	0	8

Lab Sample ID: 400-126706-12 DU
Matrix: Water
Analysis Batch: 321897

Client Sample ID: CCR-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	19		18.4		mg/L		0.9	8

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

Lab Sample ID: MB 400-321595/1
Matrix: Water
Analysis Batch: 321595

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			09/07/16 11:48	1

Lab Sample ID: LCS 400-321595/2
Matrix: Water
Analysis Batch: 321595

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	293	250		mg/L		85	78 - 122

Lab Sample ID: 400-126621-A-11 DU
Matrix: Water
Analysis Batch: 321595

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		142		mg/L		0	5

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

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

Lab Sample ID: MB 400-321596/1

Matrix: Water

Analysis Batch: 321596

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			09/07/16 13:28	1

Lab Sample ID: LCS 400-321596/2

Matrix: Water

Analysis Batch: 321596

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	293	320		mg/L		109	78 - 122

Lab Sample ID: 400-126631-G-10 DU

Matrix: Water

Analysis Batch: 321596

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	320		318		mg/L		0.6	5

Lab Sample ID: MB 400-321650/1

Matrix: Water

Analysis Batch: 321650

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			09/07/16 13:21	1

Lab Sample ID: LCS 400-321650/2

Matrix: Water

Analysis Batch: 321650

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	293	264		mg/L		90	78 - 122

Lab Sample ID: 400-126512-B-13 DU

Matrix: Water

Analysis Batch: 321650

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	180		182		mg/L		1	5

Lab Sample ID: MB 400-321855/1

Matrix: Water

Analysis Batch: 321855

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			09/08/16 16:23	1

Lab Sample ID: LCS 400-321855/2

Matrix: Water

Analysis Batch: 321855

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	293	320		mg/L		109	78 - 122

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QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Lab Sample ID: 400-126621-A-14 DU
Matrix: Water
Analysis Batch: 321855

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	450		446		mg/L		0.4	5

Lab Sample ID: MB 400-321859/1
Matrix: Water
Analysis Batch: 321859

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			09/08/16 17:26	1

Lab Sample ID: 400-126706-3 DU
Matrix: Water
Analysis Batch: 321859

Client Sample ID: CCR-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	450		448		mg/L		0	5

Chain of Custody Record

Client Information Client Contact: Terry Elnaggar Company: Pivotal Engineering LLC Address: 1515 Poydras Street Suite 1875 City: New Orleans State, Zip: LA, 70112 Phone: PO #: Purchase Order not required WO #: Email: teinaggar@pivotaleng.com Project Name: Entergy Nelson - CCR Detection Monitoring Site: CCR		Lab Pkt: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com Sampler: GEM Phone: 225-5015		Carrier Tracking No(s): COC No: 400-55839-24300.1 Page: Page 1 of 2 Job #:	
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #: Project #: 40006993 SSOW#:		Analysis Requested			
Sample Identification		Special Instructions/Note:			
Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (W=Water, S=Solid, O=Other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)
9/1	1215	G	Water	X	X
9/1	1100		Water		
9/1	0950		Water		
8/31	1045		Water		
8/30	1535		Water		
8/30	1720		Water		
8/31	0900		Water		
8/31	0930		Water		
8/31	1535		Water		
9/1	1355		Water		
9/1	1570		Water		
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months			
Empty Kit Relinquished by:		Special Instructions/QC Requirements:			
Relinquished by:		Method of Shipment:			
Date/Time: 9/2/16 1400 Company: TA		Date/Time: 9/2/16 1400 Company: TA			
Date/Time: 9/2/16 1500 Company: TA		Date/Time: 9/2/16 1500 Company: TA			
Date/Time: 9/2/16 1500 Company: TA		Date/Time: 9/2/16 1500 Company: TA			
Custody Seals Intact:		Cooler Temperature(s) °C and Other Remarks: 4.0°C, 17°C IRG			

Chain of Custody Record

Client Information Client Contact: Terry Elnaggar Company: Pivotal Engineering LLC Address: 1515 Poydras Street Suite 1875 City: New Orleans State, Zip: LA, 70112 Phone: _____ Email: tehnaggar@pivotaleng.com Project Name: Entergy Nelson - CCR Detection Monitoring Site: CCR		Lab P/N: Whitmore, Cheyenne R E-Mail: cheyenne.whitmore@testamerica.com Carrier Tracking No(s): 400-55839-24300.2 Page: Page 2 of 2 Job #: _____	
Due Date Requested: TAT Requested (days): _____ PO #: _____ Purchase Order not required WO #: _____ Project #: 40006993 SOW#: _____		Analysis Requested 2540C - TDS; 325.1 - Chloride; 300.0 - Fluoride; Sulfate 6020 - Boron and Calcium Field Filtered Sample (Yes or No)	
Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=soil, B=biomass, A=air) Preservation Code		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 Other: _____ Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecylhydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)	
Sample Identification CCR-12 CCR-13 CCR-14 Duplicate MS MSD Field Blank		Special Instructions/Note: Total Number of Containers: _____	
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify) _____			
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:			
Relinquished by: Relinquished by: _____ Relinquished by: _____ Relinquished by: _____		Received by: Received by: _____ Received by: _____ Received by: _____	
Date: 9/12/16 Date: 9/12/16 Date: 9/12/16		Date: 9/12/16 Date: 9/12/16 Date: 9/12/16	
Company: TA Company: TA Company: TA		Company: TA Company: TA Company: TA	
Empty Kit Relinquished by: _____		Method of Shipment: _____	
Custody Seals Intact Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks: _____	

Login Sample Receipt Checklist

Client: Pivotal Engineering LLC

Job Number: 400-126706-1

SDG Number: CADL

Login Number: 126706

List Source: TestAmerica Pensacola

List Number: 1

Creator: Hughes, Nicholas T

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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	1.7°C , 2.1°C , 2.3°C , 3.4°C , 4.0°C IR-6
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-126706-1
SDG: CADL

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	07-31-16 *
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16 *
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

* Certification renewal pending - certification considered valid.

TestAmerica Pensacola

TestAmerica

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-131354-1

TestAmerica Sample Delivery Group: CADL

Client Project/Site: Entergy Nelson - CCR Detection

For:

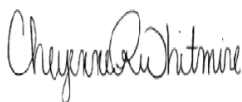
Pivotal Engineering LLC

1515 Poydras Street

Suite 1875

New Orleans, Louisiana 70112

Attn: Terry Elnaggar



Authorized for release by:

1/5/2017 3:12:24 PM

Cheyenne Whitmire, Project Manager II

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Method Summary	3
Sample Summary	4
Client Sample Results	5
Definitions	21
Chronicle	22
QC Association	26
QC Sample Results	30
Chain of Custody	36
Receipt Checklists	38
Certification Summary	39

Method Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL PEN
325.2	Chloride	MCAWW	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN

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 PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-131354-1	CCR-1	Water	12/06/16 14:10	12/10/16 09:21
400-131354-2	CCR-2	Water	12/06/16 12:55	12/10/16 09:21
400-131354-3	CCR-3	Water	12/06/16 11:45	12/10/16 09:21
400-131354-4	CCR-4	Water	12/06/16 15:30	12/10/16 09:21
400-131354-5	CCR-5	Water	12/07/16 17:35	12/10/16 09:21
400-131354-6	CCR-6	Water	12/08/16 11:50	12/10/16 09:21
400-131354-7	CCR-7	Water	12/08/16 17:20	12/10/16 09:21
400-131354-8	CCR-8	Water	12/06/16 17:00	12/10/16 09:21
400-131354-9	CCR-9	Water	12/07/16 16:30	12/10/16 09:21
400-131354-10	CCR-10	Water	12/07/16 15:20	12/10/16 09:21
400-131354-11	CCR-11	Water	12/07/16 14:30	12/10/16 09:21
400-131354-12	CCR-12	Water	12/07/16 13:20	12/10/16 09:21
400-131354-13	CCR-13	Water	12/07/16 12:30	12/10/16 09:21
400-131354-14	CCR-14	Water	12/07/16 11:20	12/10/16 09:21
400-131354-15	DUPLICATE	Water	12/06/16 00:00	12/10/16 09:21
400-131354-16	FIELD BLANK	Water	12/07/16 10:00	12/10/16 09:21

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: CCR-1
Date Collected: 12/06/16 14:10
Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-1
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.30		0.20		mg/L			12/29/16 03:46	1
Sulfate	ND		1.0		mg/L			12/29/16 03:46	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.078		0.050		mg/L		12/14/16 08:30	12/14/16 18:22	5
Calcium	24		0.25		mg/L		12/14/16 08:30	12/14/16 18:22	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	42		2.0		mg/L			12/29/16 12:14	1
Total Dissolved Solids	300		5.0		mg/L			12/12/16 13:46	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: CCR-2

Date Collected: 12/06/16 12:55

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-2

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.43		0.20		mg/L			12/29/16 04:09	1
Sulfate	ND		1.0		mg/L			12/29/16 04:09	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.066		0.050		mg/L		12/14/16 08:30	12/14/16 18:26	5
Calcium	19		0.25		mg/L		12/14/16 08:30	12/14/16 18:26	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	59		4.0		mg/L			12/29/16 12:52	2
Total Dissolved Solids	270		5.0		mg/L			12/12/16 13:46	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: CCR-3

Date Collected: 12/06/16 11:45

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.46		0.20		mg/L			12/29/16 04:32	1
Sulfate	6.7		1.0		mg/L			12/29/16 04:32	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.065		0.050		mg/L		12/14/16 08:30	12/14/16 18:31	5
Calcium	22		0.25		mg/L		12/14/16 08:30	12/14/16 18:31	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	80		10		mg/L			12/29/16 12:52	5
Total Dissolved Solids	300		5.0		mg/L			12/12/16 13:46	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: CCR-4

Date Collected: 12/06/16 15:30

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.21		0.20		mg/L			12/29/16 04:54	1
Sulfate	4.4		1.0		mg/L			12/29/16 04:54	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.10		0.050		mg/L		12/14/16 08:30	12/14/16 18:58	5
Calcium	18		0.25		mg/L		12/14/16 08:30	12/14/16 18:58	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45		2.0		mg/L			12/29/16 14:40	1
Total Dissolved Solids	230		5.0		mg/L			12/12/16 13:46	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: CCR-5

Date Collected: 12/07/16 17:35

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-5

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.31		0.20		mg/L			12/29/16 06:49	1
Sulfate	ND		1.0		mg/L			12/29/16 06:49	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.10		0.050		mg/L		12/14/16 08:30	12/14/16 19:20	5
Calcium	32		0.25		mg/L		12/14/16 08:30	12/14/16 19:20	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58		4.0		mg/L			12/29/16 15:36	2
Total Dissolved Solids	390		5.0		mg/L			12/13/16 13:50	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: CCR-6

Date Collected: 12/08/16 11:50

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-6

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.23		0.20		mg/L			12/29/16 07:12	1
Sulfate	ND		1.0		mg/L			12/29/16 07:12	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.098		0.050		mg/L		12/14/16 08:30	12/14/16 19:25	5
Calcium	31		0.25		mg/L		12/14/16 08:30	12/14/16 19:25	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95		20		mg/L			12/29/16 15:36	10
Total Dissolved Solids	310		5.0		mg/L			12/13/16 16:00	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: CCR-7

Date Collected: 12/08/16 17:20

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-7

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.34		0.20		mg/L			12/29/16 07:34	1
Sulfate	ND		1.0		mg/L			12/29/16 07:34	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.077		0.050		mg/L		12/14/16 08:30	12/14/16 19:29	5
Calcium	43		0.25		mg/L		12/14/16 08:30	12/14/16 19:29	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	68		4.0		mg/L			12/29/16 15:36	2
Total Dissolved Solids	300		5.0		mg/L			12/13/16 16:00	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: CCR-8

Date Collected: 12/06/16 17:00

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-8

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.21		0.20		mg/L			12/29/16 07:57	1
Sulfate	ND		1.0		mg/L			12/29/16 07:57	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.060		0.050		mg/L		12/14/16 08:30	12/14/16 19:34	5
Calcium	12		0.25		mg/L		12/14/16 08:30	12/14/16 19:34	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96		20		mg/L			12/29/16 15:36	10
Total Dissolved Solids	300		5.0		mg/L			12/12/16 13:46	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: CCR-9

Date Collected: 12/07/16 16:30

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-9

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.47		0.20		mg/L			12/29/16 08:20	1
Sulfate	8.4		1.0		mg/L			12/29/16 08:20	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.077		0.050		mg/L		12/16/16 12:00	12/16/16 22:02	5
Calcium	28		0.25		mg/L		12/16/16 12:00	12/16/16 22:02	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	46		2.0		mg/L			12/29/16 14:40	1
Total Dissolved Solids	360		5.0		mg/L			12/13/16 13:50	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: CCR-10

Date Collected: 12/07/16 15:20

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-10

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.72		0.20		mg/L			12/29/16 08:43	1
Sulfate	ND		1.0		mg/L			12/29/16 08:43	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.073		0.050		mg/L		12/16/16 12:00	12/16/16 22:16	5
Calcium	27		0.25		mg/L		12/16/16 12:00	12/16/16 22:16	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	39		2.0		mg/L			12/30/16 11:38	1
Total Dissolved Solids	280		5.0		mg/L			12/13/16 13:50	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: CCR-11

Date Collected: 12/07/16 14:30

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-11

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.77		0.20		mg/L			12/29/16 09:06	1
Sulfate	2.7		1.0		mg/L			12/29/16 09:06	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.071		0.050		mg/L		12/16/16 12:00	12/16/16 22:20	5
Calcium	27		0.25		mg/L		12/16/16 12:00	12/16/16 22:20	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		2.0		mg/L			12/30/16 11:38	1
Total Dissolved Solids	260		5.0		mg/L			12/13/16 13:50	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: CCR-12

Date Collected: 12/07/16 13:20

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-12

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			12/29/16 10:37	1
Sulfate	21		1.0		mg/L			12/29/16 10:37	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		12/16/16 12:00	12/16/16 22:25	5
Calcium	19		0.25		mg/L		12/16/16 12:00	12/16/16 22:25	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		2.0		mg/L			12/30/16 11:38	1
Total Dissolved Solids	200		5.0		mg/L			12/13/16 13:50	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: CCR-13

Date Collected: 12/07/16 12:30

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-13

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.28		0.20		mg/L			12/29/16 11:00	1
Sulfate	21		1.0		mg/L			12/29/16 11:00	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.055		0.050		mg/L		12/16/16 12:00	12/16/16 22:29	5
Calcium	22		0.25		mg/L		12/16/16 12:00	12/16/16 22:29	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15		2.0		mg/L			12/30/16 11:38	1
Total Dissolved Solids	210		5.0		mg/L			12/13/16 16:00	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: CCR-14

Date Collected: 12/07/16 11:20

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-14

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.26		0.20		mg/L			12/29/16 11:23	1
Sulfate	ND		1.0		mg/L			12/29/16 11:23	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		12/16/16 12:00	12/16/16 22:56	5
Calcium	18		0.25		mg/L		12/16/16 12:00	12/16/16 22:56	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0		mg/L			12/30/16 11:38	1
Total Dissolved Solids	130		5.0		mg/L			12/13/16 16:00	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: DUPLICATE

Lab Sample ID: 400-131354-15

Date Collected: 12/06/16 00:00

Matrix: Water

Date Received: 12/10/16 09:21

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			12/29/16 11:45	1
Sulfate	ND		1.0		mg/L			12/29/16 11:45	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.052		0.050		mg/L		12/16/16 12:00	12/16/16 23:01	5
Calcium	12		0.25		mg/L		12/16/16 12:00	12/16/16 23:01	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	93		10		mg/L			12/30/16 12:15	5
Total Dissolved Solids	290		5.0		mg/L			12/12/16 13:46	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: FIELD BLANK

Lab Sample ID: 400-131354-16

Date Collected: 12/07/16 10:00

Matrix: Water

Date Received: 12/10/16 09:21

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			12/29/16 12:08	1
Sulfate	ND		1.0		mg/L			12/29/16 12:08	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		12/16/16 12:00	12/16/16 23:05	5
Calcium	ND		0.25		mg/L		12/16/16 12:00	12/16/16 23:05	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/30/16 11:38	1
Total Dissolved Solids	ND		5.0		mg/L			12/13/16 16:00	1

Definitions/Glossary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

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.

General Chemistry

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.
α	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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: CCR-1

Date Collected: 12/06/16 14:10

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	336845	12/29/16 03:46	KH1	TAL PEN
Total Recoverable	Prep	3005A			334835	12/14/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	335038	12/14/16 18:22	AJR	TAL PEN
Total/NA	Analysis	325.2		1	336901	12/29/16 12:14	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	334655	12/12/16 13:46	RRC	TAL PEN

Client Sample ID: CCR-2

Date Collected: 12/06/16 12:55

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	336845	12/29/16 04:09	KH1	TAL PEN
Total Recoverable	Prep	3005A			334835	12/14/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	335038	12/14/16 18:26	AJR	TAL PEN
Total/NA	Analysis	325.2		2	336901	12/29/16 12:52	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	334655	12/12/16 13:46	RRC	TAL PEN

Client Sample ID: CCR-3

Date Collected: 12/06/16 11:45

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	336845	12/29/16 04:32	KH1	TAL PEN
Total Recoverable	Prep	3005A			334835	12/14/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	335038	12/14/16 18:31	AJR	TAL PEN
Total/NA	Analysis	325.2		5	336901	12/29/16 12:52	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	334655	12/12/16 13:46	RRC	TAL PEN

Client Sample ID: CCR-4

Date Collected: 12/06/16 15:30

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	336845	12/29/16 04:54	KH1	TAL PEN
Total Recoverable	Prep	3005A			334835	12/14/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	335038	12/14/16 18:58	AJR	TAL PEN
Total/NA	Analysis	325.2		1	336901	12/29/16 14:40	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	334655	12/12/16 13:46	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: CCR-5

Date Collected: 12/07/16 17:35

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	336845	12/29/16 06:49	KH1	TAL PEN
Total Recoverable	Prep	3005A			334835	12/14/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	335038	12/14/16 19:20	AJR	TAL PEN
Total/NA	Analysis	325.2		2	336901	12/29/16 15:36	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	334760	12/13/16 13:50	TET	TAL PEN

Client Sample ID: CCR-6

Date Collected: 12/08/16 11:50

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	336845	12/29/16 07:12	KH1	TAL PEN
Total Recoverable	Prep	3005A			334835	12/14/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	335038	12/14/16 19:25	AJR	TAL PEN
Total/NA	Analysis	325.2		10	336901	12/29/16 15:36	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	334827	12/13/16 16:00	TET	TAL PEN

Client Sample ID: CCR-7

Date Collected: 12/08/16 17:20

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	336845	12/29/16 07:34	KH1	TAL PEN
Total Recoverable	Prep	3005A			334835	12/14/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	335038	12/14/16 19:29	AJR	TAL PEN
Total/NA	Analysis	325.2		2	336901	12/29/16 15:36	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	334827	12/13/16 16:00	TET	TAL PEN

Client Sample ID: CCR-8

Date Collected: 12/06/16 17:00

Date Received: 12/10/16 09:21

Lab Sample ID: 400-131354-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	336845	12/29/16 07:57	KH1	TAL PEN
Total Recoverable	Prep	3005A			334835	12/14/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	335038	12/14/16 19:34	AJR	TAL PEN
Total/NA	Analysis	325.2		10	336901	12/29/16 15:36	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	334655	12/12/16 13:46	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: CCR-9

Lab Sample ID: 400-131354-9

Date Collected: 12/07/16 16:30

Matrix: Water

Date Received: 12/10/16 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	336845	12/29/16 08:20	KH1	TAL PEN
Total Recoverable	Prep	3005A			335297	12/16/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	335510	12/16/16 22:02	AJR	TAL PEN
Total/NA	Analysis	325.2		1	336901	12/29/16 14:40	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	334760	12/13/16 13:50	TET	TAL PEN

Client Sample ID: CCR-10

Lab Sample ID: 400-131354-10

Date Collected: 12/07/16 15:20

Matrix: Water

Date Received: 12/10/16 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	336845	12/29/16 08:43	KH1	TAL PEN
Total Recoverable	Prep	3005A			335297	12/16/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	335510	12/16/16 22:16	AJR	TAL PEN
Total/NA	Analysis	325.2		1	337018	12/30/16 11:38	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	334760	12/13/16 13:50	TET	TAL PEN

Client Sample ID: CCR-11

Lab Sample ID: 400-131354-11

Date Collected: 12/07/16 14:30

Matrix: Water

Date Received: 12/10/16 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	336845	12/29/16 09:06	KH1	TAL PEN
Total Recoverable	Prep	3005A			335297	12/16/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	335510	12/16/16 22:20	AJR	TAL PEN
Total/NA	Analysis	325.2		1	337018	12/30/16 11:38	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	334760	12/13/16 13:50	TET	TAL PEN

Client Sample ID: CCR-12

Lab Sample ID: 400-131354-12

Date Collected: 12/07/16 13:20

Matrix: Water

Date Received: 12/10/16 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	336845	12/29/16 10:37	KH1	TAL PEN
Total Recoverable	Prep	3005A			335297	12/16/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	335510	12/16/16 22:25	AJR	TAL PEN
Total/NA	Analysis	325.2		1	337018	12/30/16 11:38	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	334760	12/13/16 13:50	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Client Sample ID: CCR-13

Lab Sample ID: 400-131354-13

Date Collected: 12/07/16 12:30

Matrix: Water

Date Received: 12/10/16 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	336845	12/29/16 11:00	KH1	TAL PEN
Total Recoverable	Prep	3005A			335297	12/16/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	335510	12/16/16 22:29	AJR	TAL PEN
Total/NA	Analysis	325.2		1	337018	12/30/16 11:38	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	334827	12/13/16 16:00	TET	TAL PEN

Client Sample ID: CCR-14

Lab Sample ID: 400-131354-14

Date Collected: 12/07/16 11:20

Matrix: Water

Date Received: 12/10/16 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	336845	12/29/16 11:23	KH1	TAL PEN
Total Recoverable	Prep	3005A			335297	12/16/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	335510	12/16/16 22:56	AJR	TAL PEN
Total/NA	Analysis	325.2		1	337018	12/30/16 11:38	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	334827	12/13/16 16:00	TET	TAL PEN

Client Sample ID: DUPLICATE

Lab Sample ID: 400-131354-15

Date Collected: 12/06/16 00:00

Matrix: Water

Date Received: 12/10/16 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	336845	12/29/16 11:45	KH1	TAL PEN
Total Recoverable	Prep	3005A			335297	12/16/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	335510	12/16/16 23:01	AJR	TAL PEN
Total/NA	Analysis	325.2		5	337018	12/30/16 12:15	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	334655	12/12/16 13:46	RRC	TAL PEN

Client Sample ID: FIELD BLANK

Lab Sample ID: 400-131354-16

Date Collected: 12/07/16 10:00

Matrix: Water

Date Received: 12/10/16 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	336845	12/29/16 12:08	KH1	TAL PEN
Total Recoverable	Prep	3005A			335297	12/16/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	335510	12/16/16 23:05	AJR	TAL PEN
Total/NA	Analysis	325.2		1	337018	12/30/16 11:38	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	334827	12/13/16 16:00	TET	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

HPLC/IC

Analysis Batch: 336845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-131354-1	CCR-1	Total/NA	Water	300.0	
400-131354-2	CCR-2	Total/NA	Water	300.0	
400-131354-3	CCR-3	Total/NA	Water	300.0	
400-131354-4	CCR-4	Total/NA	Water	300.0	
400-131354-5	CCR-5	Total/NA	Water	300.0	
400-131354-6	CCR-6	Total/NA	Water	300.0	
400-131354-7	CCR-7	Total/NA	Water	300.0	
400-131354-8	CCR-8	Total/NA	Water	300.0	
400-131354-9	CCR-9	Total/NA	Water	300.0	
400-131354-10	CCR-10	Total/NA	Water	300.0	
400-131354-11	CCR-11	Total/NA	Water	300.0	
400-131354-12	CCR-12	Total/NA	Water	300.0	
400-131354-13	CCR-13	Total/NA	Water	300.0	
400-131354-14	CCR-14	Total/NA	Water	300.0	
400-131354-15	DUPLICATE	Total/NA	Water	300.0	
400-131354-16	FIELD BLANK	Total/NA	Water	300.0	
MB 400-336845/4	Method Blank	Total/NA	Water	300.0	
LCS 400-336845/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-336845/6	Lab Control Sample Dup	Total/NA	Water	300.0	
400-131354-4 MS	CCR-4	Total/NA	Water	300.0	
400-131354-4 MSD	CCR-4	Total/NA	Water	300.0	

Metals

Prep Batch: 334835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-131354-1	CCR-1	Total Recoverable	Water	3005A	
400-131354-2	CCR-2	Total Recoverable	Water	3005A	
400-131354-3	CCR-3	Total Recoverable	Water	3005A	
400-131354-4	CCR-4	Total Recoverable	Water	3005A	
400-131354-5	CCR-5	Total Recoverable	Water	3005A	
400-131354-6	CCR-6	Total Recoverable	Water	3005A	
400-131354-7	CCR-7	Total Recoverable	Water	3005A	
400-131354-8	CCR-8	Total Recoverable	Water	3005A	
MB 400-334835/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-334835/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-131354-4 MS	CCR-4	Total Recoverable	Water	3005A	
400-131354-4 MSD	CCR-4	Total Recoverable	Water	3005A	

Analysis Batch: 335038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-131354-1	CCR-1	Total Recoverable	Water	6020	334835
400-131354-2	CCR-2	Total Recoverable	Water	6020	334835
400-131354-3	CCR-3	Total Recoverable	Water	6020	334835
400-131354-4	CCR-4	Total Recoverable	Water	6020	334835
400-131354-5	CCR-5	Total Recoverable	Water	6020	334835
400-131354-6	CCR-6	Total Recoverable	Water	6020	334835
400-131354-7	CCR-7	Total Recoverable	Water	6020	334835
400-131354-8	CCR-8	Total Recoverable	Water	6020	334835
MB 400-334835/1-A ^5	Method Blank	Total Recoverable	Water	6020	334835

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Metals (Continued)

Analysis Batch: 335038 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-334835/2-A	Lab Control Sample	Total Recoverable	Water	6020	334835
400-131354-4 MS	CCR-4	Total Recoverable	Water	6020	334835
400-131354-4 MSD	CCR-4	Total Recoverable	Water	6020	334835

Prep Batch: 335297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-131354-9	CCR-9	Total Recoverable	Water	3005A	
400-131354-10	CCR-10	Total Recoverable	Water	3005A	
400-131354-11	CCR-11	Total Recoverable	Water	3005A	
400-131354-12	CCR-12	Total Recoverable	Water	3005A	
400-131354-13	CCR-13	Total Recoverable	Water	3005A	
400-131354-14	CCR-14	Total Recoverable	Water	3005A	
400-131354-15	DUPLICATE	Total Recoverable	Water	3005A	
400-131354-16	FIELD BLANK	Total Recoverable	Water	3005A	
MB 400-335297/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-335297/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-131378-C-1-B MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-131378-C-1-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 335510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-131354-9	CCR-9	Total Recoverable	Water	6020	335297
400-131354-10	CCR-10	Total Recoverable	Water	6020	335297
400-131354-11	CCR-11	Total Recoverable	Water	6020	335297
400-131354-12	CCR-12	Total Recoverable	Water	6020	335297
400-131354-13	CCR-13	Total Recoverable	Water	6020	335297
400-131354-14	CCR-14	Total Recoverable	Water	6020	335297
400-131354-15	DUPLICATE	Total Recoverable	Water	6020	335297
400-131354-16	FIELD BLANK	Total Recoverable	Water	6020	335297
MB 400-335297/1-A ^5	Method Blank	Total Recoverable	Water	6020	335297
LCS 400-335297/2-A	Lab Control Sample	Total Recoverable	Water	6020	335297
400-131378-C-1-B MS ^5	Matrix Spike	Total Recoverable	Water	6020	335297
400-131378-C-1-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	335297

General Chemistry

Analysis Batch: 334655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-131354-1	CCR-1	Total/NA	Water	SM 2540C	
400-131354-2	CCR-2	Total/NA	Water	SM 2540C	
400-131354-3	CCR-3	Total/NA	Water	SM 2540C	
400-131354-4	CCR-4	Total/NA	Water	SM 2540C	
400-131354-8	CCR-8	Total/NA	Water	SM 2540C	
400-131354-15	DUPLICATE	Total/NA	Water	SM 2540C	
MB 400-334655/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-334655/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-131354-1 DU	CCR-1	Total/NA	Water	SM 2540C	
400-131354-4 DU	CCR-4	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

General Chemistry (Continued)

Analysis Batch: 334760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-131354-5	CCR-5	Total/NA	Water	SM 2540C	
400-131354-9	CCR-9	Total/NA	Water	SM 2540C	
400-131354-10	CCR-10	Total/NA	Water	SM 2540C	
400-131354-11	CCR-11	Total/NA	Water	SM 2540C	
400-131354-12	CCR-12	Total/NA	Water	SM 2540C	
MB 400-334760/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-334760/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-131240-A-6 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 334827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-131354-6	CCR-6	Total/NA	Water	SM 2540C	
400-131354-7	CCR-7	Total/NA	Water	SM 2540C	
400-131354-13	CCR-13	Total/NA	Water	SM 2540C	
400-131354-14	CCR-14	Total/NA	Water	SM 2540C	
400-131354-16	FIELD BLANK	Total/NA	Water	SM 2540C	
MB 400-334827/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-334827/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-131354-13 DU	CCR-13	Total/NA	Water	SM 2540C	

Analysis Batch: 336901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-131354-1	CCR-1	Total/NA	Water	325.2	
400-131354-2	CCR-2	Total/NA	Water	325.2	
400-131354-3	CCR-3	Total/NA	Water	325.2	
400-131354-4	CCR-4	Total/NA	Water	325.2	
400-131354-5	CCR-5	Total/NA	Water	325.2	
400-131354-6	CCR-6	Total/NA	Water	325.2	
400-131354-7	CCR-7	Total/NA	Water	325.2	
400-131354-8	CCR-8	Total/NA	Water	325.2	
400-131354-9	CCR-9	Total/NA	Water	325.2	
MB 400-336901/15	Method Blank	Total/NA	Water	325.2	
MB 400-336901/6	Method Blank	Total/NA	Water	325.2	
LCS 400-336901/7	Lab Control Sample	Total/NA	Water	325.2	
MRL 400-336901/12	Lab Control Sample	Total/NA	Water	325.2	
MRL 400-336901/3	Lab Control Sample	Total/NA	Water	325.2	
400-131354-4 MS	CCR-4	Total/NA	Water	325.2	
400-131354-4 MSD	CCR-4	Total/NA	Water	325.2	

Analysis Batch: 337018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-131354-10	CCR-10	Total/NA	Water	325.2	
400-131354-11	CCR-11	Total/NA	Water	325.2	
400-131354-12	CCR-12	Total/NA	Water	325.2	
400-131354-13	CCR-13	Total/NA	Water	325.2	
400-131354-14	CCR-14	Total/NA	Water	325.2	
400-131354-15	DUPLICATE	Total/NA	Water	325.2	
400-131354-16	FIELD BLANK	Total/NA	Water	325.2	
MB 400-337018/15	Method Blank	Total/NA	Water	325.2	
LCS 400-337018/16	Lab Control Sample	Total/NA	Water	325.2	
MRL 400-337018/12	Lab Control Sample	Total/NA	Water	325.2	

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

General Chemistry (Continued)

Analysis Batch: 337018 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-131921-G-1 MS	Matrix Spike	Total/NA	Water	325.2	
400-131921-G-1 MSD	Matrix Spike Duplicate	Total/NA	Water	325.2	

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-336845/4

Matrix: Water

Analysis Batch: 336845

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			12/29/16 02:37	1
Sulfate	ND		1.0		mg/L			12/29/16 02:37	1

Lab Sample ID: LCS 400-336845/5

Matrix: Water

Analysis Batch: 336845

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.4		mg/L		104	90 - 110
Sulfate	10.0	9.20		mg/L		92	90 - 110

Lab Sample ID: LCSD 400-336845/6

Matrix: Water

Analysis Batch: 336845

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	10.7		mg/L		107	90 - 110	2	15
Sulfate	10.0	9.37		mg/L		94	90 - 110	2	15

Lab Sample ID: 400-131354-4 MS

Matrix: Water

Analysis Batch: 336845

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.21		10.0	10.1		mg/L		98	80 - 120
Sulfate	4.4		10.0	14.7		mg/L		103	80 - 120

Lab Sample ID: 400-131354-4 MSD

Matrix: Water

Analysis Batch: 336845

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.21		10.0	11.0		mg/L		108	80 - 120	9	20
Sulfate	4.4		10.0	15.1		mg/L		107	80 - 120	3	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-334835/1-A ^5

Matrix: Water

Analysis Batch: 335038

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 334835

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		12/14/16 08:30	12/14/16 15:26	5
Calcium	ND		0.25		mg/L		12/14/16 08:30	12/14/16 15:26	5

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 400-334835/2-A

Matrix: Water

Analysis Batch: 335038

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 334835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Boron	0.100	0.0976		mg/L		98	80 - 120
Calcium	5.00	4.79		mg/L		96	80 - 120

Lab Sample ID: 400-131354-4 MS

Matrix: Water

Analysis Batch: 335038

Client Sample ID: CCR-4

Prep Type: Total Recoverable

Prep Batch: 334835

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Boron	0.10		0.100	0.212		mg/L		111	75 - 125
Calcium	18		5.00	22.8		mg/L		89	75 - 125

Lab Sample ID: 400-131354-4 MSD

Matrix: Water

Analysis Batch: 335038

Client Sample ID: CCR-4

Prep Type: Total Recoverable

Prep Batch: 334835

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Boron	0.10		0.100	0.203		mg/L		101	75 - 125	5	20
Calcium	18		5.00	23.1		mg/L		96	75 - 125	2	20

Lab Sample ID: MB 400-335297/1-A ^5

Matrix: Water

Analysis Batch: 335510

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 335297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		12/16/16 12:00	12/16/16 21:53	5
Calcium	ND		0.25		mg/L		12/16/16 12:00	12/16/16 21:53	5

Lab Sample ID: LCS 400-335297/2-A

Matrix: Water

Analysis Batch: 335510

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 335297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Boron	0.100	0.0943		mg/L		94	80 - 120
Calcium	5.00	4.94		mg/L		99	80 - 120

Lab Sample ID: 400-131378-C-1-B MS ^5

Matrix: Water

Analysis Batch: 335510

Client Sample ID: Matrix Spike

Prep Type: Total Recoverable

Prep Batch: 335297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Boron	0.48		0.100	0.577	4	mg/L		96	75 - 125
Calcium	28		5.00	33.2	4	mg/L		96	75 - 125

Lab Sample ID: 400-131378-C-1-C MSD ^5

Matrix: Water

Analysis Batch: 335510

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total Recoverable

Prep Batch: 335297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Boron	0.48		0.100	0.593	4	mg/L		112	75 - 125	3	20

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-131378-C-1-C MSD ^5

Matrix: Water

Analysis Batch: 335510

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total Recoverable

Prep Batch: 335297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	28		5.00	33.1	4	mg/L		94	75 - 125	0	20

Method: 325.2 - Chloride

Lab Sample ID: MB 400-336901/15

Matrix: Water

Analysis Batch: 336901

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/29/16 11:32	1

Lab Sample ID: MB 400-336901/6

Matrix: Water

Analysis Batch: 336901

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/29/16 11:13	1

Lab Sample ID: LCS 400-336901/7

Matrix: Water

Analysis Batch: 336901

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.3		mg/L		104	90 - 110

Lab Sample ID: MRL 400-336901/3

Matrix: Water

Analysis Batch: 336901

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	2.86		mg/L		143	50 - 150

Lab Sample ID: 400-131354-4 MS

Matrix: Water

Analysis Batch: 336901

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	45		10.0	52.9	4	mg/L		76	73 - 120

Lab Sample ID: 400-131354-4 MSD

Matrix: Water

Analysis Batch: 336901

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	45		10.0	52.9	4	mg/L		76	73 - 120	0	8

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Method: 325.2 - Chloride (Continued)

Lab Sample ID: MB 400-337018/15
Matrix: Water
Analysis Batch: 337018

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			12/30/16 11:07	1

Lab Sample ID: LCS 400-337018/16
Matrix: Water
Analysis Batch: 337018

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.5		mg/L		105	90 - 110

Lab Sample ID: MRL 400-337018/12
Matrix: Water
Analysis Batch: 337018

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	2.73		mg/L		137	50 - 150

Lab Sample ID: 400-131921-G-1 MS
Matrix: Water
Analysis Batch: 337018

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	22		10.0	31.2		mg/L		90	73 - 120

Lab Sample ID: 400-131921-G-1 MSD
Matrix: Water
Analysis Batch: 337018

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	22		10.0	31.0		mg/L		88	73 - 120	1	8

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

Lab Sample ID: MB 400-334655/1
Matrix: Water
Analysis Batch: 334655

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			12/12/16 13:46	1

Lab Sample ID: LCS 400-334655/2
Matrix: Water
Analysis Batch: 334655

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	293	262		mg/L		89	78 - 122

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

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

Lab Sample ID: 400-131354-1 DU
Matrix: Water
Analysis Batch: 334655

Client Sample ID: CCR-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	300		298		mg/L		0	5

Lab Sample ID: 400-131354-4 DU
Matrix: Water
Analysis Batch: 334655

Client Sample ID: CCR-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	230		234		mg/L		0	5

Lab Sample ID: MB 400-334760/1
Matrix: Water
Analysis Batch: 334760

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			12/13/16 13:50	1

Lab Sample ID: LCS 400-334760/2
Matrix: Water
Analysis Batch: 334760

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	293	256		mg/L		87	78 - 122

Lab Sample ID: 400-131240-A-6 DU
Matrix: Water
Analysis Batch: 334760

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	120		120		mg/L		0	5

Lab Sample ID: MB 400-334827/1
Matrix: Water
Analysis Batch: 334827

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			12/13/16 16:00	1

Lab Sample ID: LCS 400-334827/2
Matrix: Water
Analysis Batch: 334827

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	293	244		mg/L		83	78 - 122

Lab Sample ID: 400-131354-13 DU
Matrix: Water
Analysis Batch: 334827

Client Sample ID: CCR-13
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	210		210		mg/L		0	5

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

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Chain of Custody Record

Client Information Client Contact: Terry Elnaggar Company: Pivotal Engineering LLC Address: 1515 Poydras Street Suite 1875 City: New Orleans State: LA Zip: 70112 Phone: 504-799-3653 Email: telnaggar@pivotaleng.com Project Name: Entergy Nelson - CCR Detection Monitoring Site:		Sampler: Lab PM: Whitmire, Cheyenne R Phone: E-Mail: cheyenne.whitmire@testamerica.com		Carrier Tracking No(s): COC No: 400-55839-24300.1 Page: Page 1 of 2 Job #: 15-125	
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #:		Analysis Requested  400-131354 COC			
Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		2540C - TDS; 325.1 - Chloride; 300.0 - Fluoride, Sulfate	
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Other)
CCR-1	12/6/16	1410	G	Water	Water
CCR-2	12/6/16	1255	G	Water	Water
CCR-3	12/6/16	1415	G	Water	Water
CCR-4	12/6/16	1530	G	Water	Water
CCR-5	12/7/16	1735	G	Water	Water
CCR-6	12/8/16	1150	G	Water	Water
CCR-7	12/8/16	1730	G	Water	Water
CCR-8	12/6/16	1700	G	Water	Water
CCR-9	12/9/16	1630	G	Water	Water
CCR-10	12/7/16	1520	G	Water	Water
CCR-11	12/7/16	1430	G	Water	Water
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab ☐ Archive For 1 Months					
Special Instructions/OC Requirements:					
Empty Kit Relinquished by: Date: 12/9/2016 Time: 12:36 PM Company: PFE Relinquished by: C. N. P. Date: 12/9/16 Time: 3:00 PM Company: PFE Relinquished by: Date: Time: Company:					
Custody Seals Intact: ☒ Yes ☐ No Custody Seal No.:					

Chain of Custody Record

Client Information Company: Pivotal Engineering LLC Address: 1515 Poydras Street Suite 1875 City: New Orleans State, Zip: LA, 70112 Phone: _____ Email: telneggar@pivotaleng.com Project Name: Entergy Nelson - CCR Detection Monitoring Site: _____		Sampler: Whitmire, Cheyenne R Phone: _____ E-Mail: cheyenne.whitmire@testamericainc.com		Lab PM: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com		Carrier Tracking No(s): 400-55839-24300.2 Page: Page 2 of 2 Job #: 15-125	
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 Other: _____ 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)			
Sample Identification				Special Instructions/Note:			
CCR-12	12/17/16	1320	G	Water	Field Filtered Sample (Yes or No)	6020 - Boron and Calcium	240C - TDS, 325.1 - Chloride, 300.0 - Fluoride, Sulfate
CCR-13	12/17/16	1230	G	Water			
CCR-14	12/17/16	1120	G	Water			
Duplicate	12/16/16	—	G	Water			
MS	12/16/16	1530	G	Water			
MSD	12/16/16	1530	G	Water			
Field Blank	12/17/16	1000	G	Water			
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months			
Relinquished by: [Signature]				Special Instructions/QC Requirements:			
Relinquished by: [Signature]				Method of Shipment:			
Relinquished by: [Signature]				Received by: [Signature]			
Relinquished by: [Signature]				Received by: [Signature]			
Relinquished by: [Signature]				Received by: [Signature]			
Custody Seal No.: A Yes Δ No				Cooler Temperature(s) °C and Other Remarks:			

Login Sample Receipt Checklist

Client: Pivotal Engineering LLC

Job Number: 400-131354-1

SDG Number: CADL

Login Number: 131354

List Number: 1

Creator: Perez, Trina M

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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	4.8°C, 2.5°C, 2.0°C, 1.6°C, 0.5°C IR-5
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.	False	Sample 10 of job-1 has different sample times than samples 10 of jobs-2 and -3.
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-131354-1
SDG: CADL

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-16 *
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16 *
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

* Certification renewal pending - certification considered valid.

TestAmerica Pensacola

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-135900-1

Client Project/Site: Entergy Nelson - CCR Detection

For:

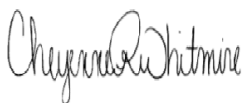
Pivotal Engineering LLC

1515 Poydras Street

Suite 1875

New Orleans, Louisiana 70112

Attn: Terry Elnaggar



Authorized for release by:

4/20/2017 2:35:57 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

5

6

7

8

9

10

11

12

13

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Method Summary	4
Sample Summary	5
Client Sample Results	6
Definitions	22
Chronicle	23
QC Association	27
QC Sample Results	31
Chain of Custody	37
Receipt Checklists	39
Certification Summary	40



Case Narrative

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Job ID: 400-135900-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-135900-1

General Chemistry

Method(s) 325.2: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 349351 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 325.2: The following samples were diluted to bring the concentration of target analytes within the calibration range: CCR-5 (400-135900-5), CCR-6 (400-135900-6), CCR-7 (400-135900-7) and DUPLICATE (400-135900-15). Elevated reporting limits (RLs) are provided.

Method Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL PEN
325.2	Chloride	MCAWW	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN

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 PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-135900-1	CCR-1	Water	03/27/17 18:10	03/31/17 08:50
400-135900-2	CCR-2	Water	03/27/17 16:55	03/31/17 08:50
400-135900-3	CCR-3	Water	03/27/17 15:25	03/31/17 08:50
400-135900-4	CCR-4	Water	03/28/17 17:45	03/31/17 08:50
400-135900-5	CCR-5	Water	03/29/17 09:35	03/31/17 08:50
400-135900-6	CCR-6	Water	03/29/17 10:45	03/31/17 08:50
400-135900-7	CCR-7	Water	03/29/17 11:40	03/31/17 08:50
400-135900-8	CCR-8	Water	03/28/17 16:05	03/31/17 08:50
400-135900-9	CCR-9	Water	03/28/17 14:50	03/31/17 08:50
400-135900-10	CCR-10	Water	03/28/17 13:55	03/31/17 08:50
400-135900-11	CCR-11	Water	03/28/17 12:55	03/31/17 08:50
400-135900-12	CCR-12	Water	03/28/17 11:40	03/31/17 08:50
400-135900-13	CCR-13	Water	03/28/17 10:40	03/31/17 08:50
400-135900-14	CCR-14	Water	03/28/17 09:25	03/31/17 08:50
400-135900-15	DUPLICATE	Water	03/29/17 00:00	03/31/17 08:50
400-135900-16	FIELD BLANK	Water	03/29/17 11:15	03/31/17 08:50

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: CCR-1

Date Collected: 03/27/17 18:10

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.35		0.20		mg/L			04/01/17 10:42	1
Sulfate	1.1		1.0		mg/L			04/01/17 10:42	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.089		0.050		mg/L		04/06/17 13:40	04/07/17 20:06	5
Calcium	25		0.25		mg/L		04/06/17 13:40	04/07/17 20:06	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45		2.0		mg/L			04/06/17 17:39	1
Total Dissolved Solids	280		5.0		mg/L			04/01/17 14:05	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: CCR-2

Date Collected: 03/27/17 16:55

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-2

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.42		0.20		mg/L			04/01/17 11:05	1
Sulfate	ND		1.0		mg/L			04/01/17 11:05	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.066		0.050		mg/L		04/06/17 13:40	04/07/17 20:28	5
Calcium	20		0.25		mg/L		04/06/17 13:40	04/07/17 20:28	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56		2.0		mg/L			04/06/17 17:39	1
Total Dissolved Solids	250		5.0		mg/L			04/01/17 14:05	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: CCR-3

Date Collected: 03/27/17 15:25

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.44		0.20		mg/L			04/01/17 11:28	1
Sulfate	6.5		1.0		mg/L			04/01/17 11:28	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.078		0.050		mg/L		04/06/17 13:40	04/07/17 20:33	5
Calcium	26		0.25		mg/L		04/06/17 13:40	04/07/17 20:33	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87		2.0		mg/L			04/06/17 17:39	1
Total Dissolved Solids	370		5.0		mg/L			04/01/17 14:05	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: CCR-4

Date Collected: 03/28/17 17:45

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.25		0.20		mg/L			04/01/17 11:51	1
Sulfate	3.5		1.0		mg/L			04/01/17 11:51	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.11		0.050		mg/L		04/06/17 13:40	04/07/17 19:43	5
Calcium	18		0.25		mg/L		04/06/17 13:40	04/07/17 19:43	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48		2.0		mg/L			04/06/17 18:02	1
Total Dissolved Solids	230		5.0		mg/L			04/01/17 14:05	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: CCR-5

Date Collected: 03/29/17 09:35

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-5

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.26		0.20		mg/L			04/01/17 12:59	1
Sulfate	ND		1.0		mg/L			04/01/17 12:59	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.10		0.050		mg/L		04/06/17 13:40	04/07/17 20:37	5
Calcium	32		0.25		mg/L		04/06/17 13:40	04/07/17 20:37	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56		4.0		mg/L			04/11/17 19:24	2
Total Dissolved Solids	390		5.0		mg/L			04/03/17 13:08	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: CCR-6

Date Collected: 03/29/17 10:45

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-6

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.29		0.20		mg/L			04/01/17 14:08	1
Sulfate	ND		1.0		mg/L			04/01/17 14:08	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.090		0.050		mg/L		04/06/17 13:40	04/07/17 20:42	5
Calcium	29		0.25		mg/L		04/06/17 13:40	04/07/17 20:42	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	90		10		mg/L			04/12/17 09:25	5
Total Dissolved Solids	300		5.0		mg/L			04/03/17 13:08	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: CCR-7

Date Collected: 03/29/17 11:40

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-7

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.32		0.20		mg/L			04/01/17 14:31	1
Sulfate	ND		1.0		mg/L			04/01/17 14:31	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.076		0.050		mg/L		04/06/17 13:40	04/07/17 20:46	5
Calcium	43		0.25		mg/L		04/06/17 13:40	04/07/17 20:46	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	73		10		mg/L			04/12/17 09:25	5
Total Dissolved Solids	330		5.0		mg/L			04/03/17 13:08	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: CCR-8

Date Collected: 03/28/17 16:05

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-8

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/01/17 14:53	1
Sulfate	ND		1.0		mg/L			04/01/17 14:53	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.062		0.050		mg/L		04/06/17 13:40	04/07/17 20:51	5
Calcium	12		0.25		mg/L		04/06/17 13:40	04/07/17 20:51	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77		2.0		mg/L			04/06/17 18:02	1
Total Dissolved Solids	280		5.0		mg/L			04/01/17 14:05	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: CCR-9

Date Collected: 03/28/17 14:50

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-9

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.66		0.20		mg/L			04/01/17 15:16	1
Sulfate	5.2		1.0		mg/L			04/01/17 15:16	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.068		0.050		mg/L		04/06/17 13:40	04/07/17 20:55	5
Calcium	30		0.25		mg/L		04/06/17 13:40	04/07/17 20:55	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	61		2.0		mg/L			04/06/17 18:02	1
Total Dissolved Solids	320		5.0		mg/L			04/01/17 14:05	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: CCR-10

Date Collected: 03/28/17 13:55

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-10

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.68		0.20		mg/L			04/01/17 15:39	1
Sulfate	14		1.0		mg/L			04/01/17 15:39	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.065		0.050		mg/L		04/06/17 13:40	04/07/17 21:00	5
Calcium	29		0.25		mg/L		04/06/17 13:40	04/07/17 21:00	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43		2.0		mg/L			04/06/17 18:02	1
Total Dissolved Solids	320		5.0		mg/L			04/01/17 14:43	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: CCR-11

Date Collected: 03/28/17 12:55

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-11

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.81		0.20		mg/L			04/01/17 16:02	1
Sulfate	4.1		1.0		mg/L			04/01/17 16:02	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.058		0.050		mg/L		04/06/17 13:40	04/07/17 21:04	5
Calcium	24		0.25		mg/L		04/06/17 13:40	04/07/17 21:04	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		2.0		mg/L			04/11/17 17:16	1
Total Dissolved Solids	210		5.0		mg/L			04/01/17 14:43	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: CCR-12

Date Collected: 03/28/17 11:40

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-12

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/01/17 16:48	1
Sulfate	14		1.0		mg/L			04/01/17 16:48	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		04/06/17 13:40	04/07/17 21:09	5
Calcium	18		0.25		mg/L		04/06/17 13:40	04/07/17 21:09	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		2.0		mg/L			04/11/17 17:22	1
Total Dissolved Solids	180		5.0		mg/L			04/01/17 14:43	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: CCR-13

Date Collected: 03/28/17 10:40

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-13

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.26		0.20		mg/L			04/01/17 17:10	1
Sulfate	12		1.0		mg/L			04/01/17 17:10	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.055		0.050		mg/L		04/06/17 13:40	04/07/17 21:31	5
Calcium	21		0.25		mg/L		04/06/17 13:40	04/07/17 21:31	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14		2.0		mg/L			04/11/17 17:22	1
Total Dissolved Solids	220		5.0		mg/L			04/01/17 14:43	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: CCR-14

Date Collected: 03/28/17 09:25

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-14

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.20		0.20		mg/L			04/01/17 17:33	1
Sulfate	ND		1.0		mg/L			04/01/17 17:33	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		04/06/17 13:40	04/07/17 21:36	5
Calcium	17		0.25		mg/L		04/06/17 13:40	04/07/17 21:36	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0		mg/L			04/11/17 17:22	1
Total Dissolved Solids	170		5.0		mg/L			04/01/17 14:43	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: DUPLICATE

Lab Sample ID: 400-135900-15

Date Collected: 03/29/17 00:00

Matrix: Water

Date Received: 03/31/17 08:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.27		0.20		mg/L			04/01/17 18:42	1
Sulfate	ND		1.0		mg/L			04/01/17 18:42	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.11		0.050		mg/L		04/06/17 13:40	04/07/17 21:40	5
Calcium	33		0.25		mg/L		04/06/17 13:40	04/07/17 21:40	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58		4.0		mg/L			04/12/17 09:25	2
Total Dissolved Solids	390		5.0		mg/L			04/03/17 13:08	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: FIELD BLANK

Lab Sample ID: 400-135900-16

Date Collected: 03/29/17 11:15

Matrix: Water

Date Received: 03/31/17 08:50

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/01/17 19:04	1
Sulfate	ND		1.0		mg/L			04/01/17 19:04	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		04/06/17 13:40	04/07/17 21:45	5
Calcium	ND		0.25		mg/L		04/06/17 13:40	04/07/17 21:45	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			04/12/17 09:06	1
Total Dissolved Solids	ND		5.0		mg/L			04/03/17 13:08	1

Definitions/Glossary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Qualifiers

General Chemistry

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.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: CCR-1

Date Collected: 03/27/17 18:10

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	348030	04/01/17 10:42	KH1	TAL PEN
Total Recoverable	Prep	3005A			348737	04/06/17 13:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	349072	04/07/17 20:06	DRE	TAL PEN
Total/NA	Analysis	325.2		1	348793	04/06/17 17:39	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	348052	04/01/17 14:05	TET	TAL PEN

Client Sample ID: CCR-2

Date Collected: 03/27/17 16:55

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	348030	04/01/17 11:05	KH1	TAL PEN
Total Recoverable	Prep	3005A			348737	04/06/17 13:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	349072	04/07/17 20:28	DRE	TAL PEN
Total/NA	Analysis	325.2		1	348793	04/06/17 17:39	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	348052	04/01/17 14:05	TET	TAL PEN

Client Sample ID: CCR-3

Date Collected: 03/27/17 15:25

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	348030	04/01/17 11:28	KH1	TAL PEN
Total Recoverable	Prep	3005A			348737	04/06/17 13:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	349072	04/07/17 20:33	DRE	TAL PEN
Total/NA	Analysis	325.2		1	348793	04/06/17 17:39	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	348052	04/01/17 14:05	TET	TAL PEN

Client Sample ID: CCR-4

Date Collected: 03/28/17 17:45

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	348030	04/01/17 11:51	KH1	TAL PEN
Total Recoverable	Prep	3005A			348737	04/06/17 13:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	349072	04/07/17 19:43	DRE	TAL PEN
Total/NA	Analysis	325.2		1	348793	04/06/17 18:02	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	348052	04/01/17 14:05	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: CCR-5

Date Collected: 03/29/17 09:35

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	348030	04/01/17 12:59	KH1	TAL PEN
Total Recoverable	Prep	3005A			348737	04/06/17 13:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	349072	04/07/17 20:37	DRE	TAL PEN
Total/NA	Analysis	325.2		2	349351	04/11/17 19:24	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	348191	04/03/17 13:08	TET	TAL PEN

Client Sample ID: CCR-6

Date Collected: 03/29/17 10:45

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	348030	04/01/17 14:08	KH1	TAL PEN
Total Recoverable	Prep	3005A			348737	04/06/17 13:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	349072	04/07/17 20:42	DRE	TAL PEN
Total/NA	Analysis	325.2		5	349400	04/12/17 09:25	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	348191	04/03/17 13:08	TET	TAL PEN

Client Sample ID: CCR-7

Date Collected: 03/29/17 11:40

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	348030	04/01/17 14:31	KH1	TAL PEN
Total Recoverable	Prep	3005A			348737	04/06/17 13:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	349072	04/07/17 20:46	DRE	TAL PEN
Total/NA	Analysis	325.2		5	349400	04/12/17 09:25	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	348191	04/03/17 13:08	TET	TAL PEN

Client Sample ID: CCR-8

Date Collected: 03/28/17 16:05

Date Received: 03/31/17 08:50

Lab Sample ID: 400-135900-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	348030	04/01/17 14:53	KH1	TAL PEN
Total Recoverable	Prep	3005A			348737	04/06/17 13:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	349072	04/07/17 20:51	DRE	TAL PEN
Total/NA	Analysis	325.2		1	348793	04/06/17 18:02	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	348052	04/01/17 14:05	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: CCR-9

Lab Sample ID: 400-135900-9

Date Collected: 03/28/17 14:50

Matrix: Water

Date Received: 03/31/17 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	348030	04/01/17 15:16	KH1	TAL PEN
Total Recoverable	Prep	3005A			348737	04/06/17 13:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	349072	04/07/17 20:55	DRE	TAL PEN
Total/NA	Analysis	325.2		1	348793	04/06/17 18:02	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	348052	04/01/17 14:05	TET	TAL PEN

Client Sample ID: CCR-10

Lab Sample ID: 400-135900-10

Date Collected: 03/28/17 13:55

Matrix: Water

Date Received: 03/31/17 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	348030	04/01/17 15:39	KH1	TAL PEN
Total Recoverable	Prep	3005A			348737	04/06/17 13:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	349072	04/07/17 21:00	DRE	TAL PEN
Total/NA	Analysis	325.2		1	348793	04/06/17 18:02	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	348053	04/01/17 14:43	TET	TAL PEN

Client Sample ID: CCR-11

Lab Sample ID: 400-135900-11

Date Collected: 03/28/17 12:55

Matrix: Water

Date Received: 03/31/17 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	348030	04/01/17 16:02	KH1	TAL PEN
Total Recoverable	Prep	3005A			348737	04/06/17 13:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	349072	04/07/17 21:04	DRE	TAL PEN
Total/NA	Analysis	325.2		1	349348	04/11/17 17:16	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	348053	04/01/17 14:43	TET	TAL PEN

Client Sample ID: CCR-12

Lab Sample ID: 400-135900-12

Date Collected: 03/28/17 11:40

Matrix: Water

Date Received: 03/31/17 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	348030	04/01/17 16:48	KH1	TAL PEN
Total Recoverable	Prep	3005A			348737	04/06/17 13:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	349072	04/07/17 21:09	DRE	TAL PEN
Total/NA	Analysis	325.2		1	349348	04/11/17 17:22	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	348053	04/01/17 14:43	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Client Sample ID: CCR-13

Lab Sample ID: 400-135900-13

Date Collected: 03/28/17 10:40

Matrix: Water

Date Received: 03/31/17 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	348030	04/01/17 17:10	KH1	TAL PEN
Total Recoverable	Prep	3005A			348737	04/06/17 13:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	349072	04/07/17 21:31	DRE	TAL PEN
Total/NA	Analysis	325.2		1	349348	04/11/17 17:22	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	348053	04/01/17 14:43	TET	TAL PEN

Client Sample ID: CCR-14

Lab Sample ID: 400-135900-14

Date Collected: 03/28/17 09:25

Matrix: Water

Date Received: 03/31/17 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	348030	04/01/17 17:33	KH1	TAL PEN
Total Recoverable	Prep	3005A			348737	04/06/17 13:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	349072	04/07/17 21:36	DRE	TAL PEN
Total/NA	Analysis	325.2		1	349348	04/11/17 17:22	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	348053	04/01/17 14:43	TET	TAL PEN

Client Sample ID: DUPLICATE

Lab Sample ID: 400-135900-15

Date Collected: 03/29/17 00:00

Matrix: Water

Date Received: 03/31/17 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	348030	04/01/17 18:42	KH1	TAL PEN
Total Recoverable	Prep	3005A			348737	04/06/17 13:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	349072	04/07/17 21:40	DRE	TAL PEN
Total/NA	Analysis	325.2		2	349400	04/12/17 09:25	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	348191	04/03/17 13:08	TET	TAL PEN

Client Sample ID: FIELD BLANK

Lab Sample ID: 400-135900-16

Date Collected: 03/29/17 11:15

Matrix: Water

Date Received: 03/31/17 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	348030	04/01/17 19:04	KH1	TAL PEN
Total Recoverable	Prep	3005A			348737	04/06/17 13:40	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	349072	04/07/17 21:45	DRE	TAL PEN
Total/NA	Analysis	325.2		1	349400	04/12/17 09:06	BJB	TAL PEN
Total/NA	Analysis	SM 2540C		1	348191	04/03/17 13:08	TET	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

HPLC/IC

Analysis Batch: 348030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135900-1	CCR-1	Total/NA	Water	300.0	
400-135900-2	CCR-2	Total/NA	Water	300.0	
400-135900-3	CCR-3	Total/NA	Water	300.0	
400-135900-4	CCR-4	Total/NA	Water	300.0	
400-135900-5	CCR-5	Total/NA	Water	300.0	
400-135900-6	CCR-6	Total/NA	Water	300.0	
400-135900-7	CCR-7	Total/NA	Water	300.0	
400-135900-8	CCR-8	Total/NA	Water	300.0	
400-135900-9	CCR-9	Total/NA	Water	300.0	
400-135900-10	CCR-10	Total/NA	Water	300.0	
400-135900-11	CCR-11	Total/NA	Water	300.0	
400-135900-12	CCR-12	Total/NA	Water	300.0	
400-135900-13	CCR-13	Total/NA	Water	300.0	
400-135900-14	CCR-14	Total/NA	Water	300.0	
400-135900-15	DUPLICATE	Total/NA	Water	300.0	
400-135900-16	FIELD BLANK	Total/NA	Water	300.0	
MB 400-348030/4	Method Blank	Total/NA	Water	300.0	
LCS 400-348030/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-348030/6	Lab Control Sample Dup	Total/NA	Water	300.0	
400-135900-4 MS	CCR-4	Total/NA	Water	300.0	
400-135900-4 MSD	CCR-4	Total/NA	Water	300.0	

Metals

Prep Batch: 348737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135900-1	CCR-1	Total Recoverable	Water	3005A	
400-135900-2	CCR-2	Total Recoverable	Water	3005A	
400-135900-3	CCR-3	Total Recoverable	Water	3005A	
400-135900-4	CCR-4	Total Recoverable	Water	3005A	
400-135900-5	CCR-5	Total Recoverable	Water	3005A	
400-135900-6	CCR-6	Total Recoverable	Water	3005A	
400-135900-7	CCR-7	Total Recoverable	Water	3005A	
400-135900-8	CCR-8	Total Recoverable	Water	3005A	
400-135900-9	CCR-9	Total Recoverable	Water	3005A	
400-135900-10	CCR-10	Total Recoverable	Water	3005A	
400-135900-11	CCR-11	Total Recoverable	Water	3005A	
400-135900-12	CCR-12	Total Recoverable	Water	3005A	
400-135900-13	CCR-13	Total Recoverable	Water	3005A	
400-135900-14	CCR-14	Total Recoverable	Water	3005A	
400-135900-15	DUPLICATE	Total Recoverable	Water	3005A	
400-135900-16	FIELD BLANK	Total Recoverable	Water	3005A	
MB 400-348737/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-348737/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-135900-4 MS	CCR-4	Total Recoverable	Water	3005A	
400-135900-4 MSD	CCR-4	Total Recoverable	Water	3005A	

Analysis Batch: 349072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135900-1	CCR-1	Total Recoverable	Water	6020	348737

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Metals (Continued)

Analysis Batch: 349072 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135900-2	CCR-2	Total Recoverable	Water	6020	348737
400-135900-3	CCR-3	Total Recoverable	Water	6020	348737
400-135900-4	CCR-4	Total Recoverable	Water	6020	348737
400-135900-5	CCR-5	Total Recoverable	Water	6020	348737
400-135900-6	CCR-6	Total Recoverable	Water	6020	348737
400-135900-7	CCR-7	Total Recoverable	Water	6020	348737
400-135900-8	CCR-8	Total Recoverable	Water	6020	348737
400-135900-9	CCR-9	Total Recoverable	Water	6020	348737
400-135900-10	CCR-10	Total Recoverable	Water	6020	348737
400-135900-11	CCR-11	Total Recoverable	Water	6020	348737
400-135900-12	CCR-12	Total Recoverable	Water	6020	348737
400-135900-13	CCR-13	Total Recoverable	Water	6020	348737
400-135900-14	CCR-14	Total Recoverable	Water	6020	348737
400-135900-15	DUPLICATE	Total Recoverable	Water	6020	348737
400-135900-16	FIELD BLANK	Total Recoverable	Water	6020	348737
MB 400-348737/1-A ^5	Method Blank	Total Recoverable	Water	6020	348737
LCS 400-348737/2-A	Lab Control Sample	Total Recoverable	Water	6020	348737
400-135900-4 MS	CCR-4	Total Recoverable	Water	6020	348737
400-135900-4 MSD	CCR-4	Total Recoverable	Water	6020	348737

General Chemistry

Analysis Batch: 348052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135900-1	CCR-1	Total/NA	Water	SM 2540C	
400-135900-2	CCR-2	Total/NA	Water	SM 2540C	
400-135900-3	CCR-3	Total/NA	Water	SM 2540C	
400-135900-4	CCR-4	Total/NA	Water	SM 2540C	
400-135900-8	CCR-8	Total/NA	Water	SM 2540C	
400-135900-9	CCR-9	Total/NA	Water	SM 2540C	
MB 400-348052/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-348052/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-135838-A-2 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 348053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135900-10	CCR-10	Total/NA	Water	SM 2540C	
400-135900-11	CCR-11	Total/NA	Water	SM 2540C	
400-135900-12	CCR-12	Total/NA	Water	SM 2540C	
400-135900-13	CCR-13	Total/NA	Water	SM 2540C	
400-135900-14	CCR-14	Total/NA	Water	SM 2540C	
MB 400-348053/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-348053/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-135794-D-10 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 348191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135900-5	CCR-5	Total/NA	Water	SM 2540C	
400-135900-6	CCR-6	Total/NA	Water	SM 2540C	
400-135900-7	CCR-7	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

General Chemistry (Continued)

Analysis Batch: 348191 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135900-15	DUPLICATE	Total/NA	Water	SM 2540C	
400-135900-16	FIELD BLANK	Total/NA	Water	SM 2540C	
MB 400-348191/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-348191/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-135838-A-13 DU	Duplicate	Total/NA	Water	SM 2540C	
400-135904-A-2 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 348793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135900-1	CCR-1	Total/NA	Water	325.2	
400-135900-2	CCR-2	Total/NA	Water	325.2	
400-135900-3	CCR-3	Total/NA	Water	325.2	
400-135900-4	CCR-4	Total/NA	Water	325.2	
400-135900-8	CCR-8	Total/NA	Water	325.2	
400-135900-9	CCR-9	Total/NA	Water	325.2	
400-135900-10	CCR-10	Total/NA	Water	325.2	
MB 400-348793/6	Method Blank	Total/NA	Water	325.2	
LCS 400-348793/7	Lab Control Sample	Total/NA	Water	325.2	
MRL 400-348793/3	Lab Control Sample	Total/NA	Water	325.2	
400-135900-4 MS	CCR-4	Total/NA	Water	325.2	
400-135900-4 MSD	CCR-4	Total/NA	Water	325.2	

Analysis Batch: 349348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135900-11	CCR-11	Total/NA	Water	325.2	
400-135900-12	CCR-12	Total/NA	Water	325.2	
400-135900-13	CCR-13	Total/NA	Water	325.2	
400-135900-14	CCR-14	Total/NA	Water	325.2	
MB 400-349348/6	Method Blank	Total/NA	Water	325.2	
LCS 400-349348/7	Lab Control Sample	Total/NA	Water	325.2	
MRL 400-349348/3	Lab Control Sample	Total/NA	Water	325.2	
400-135988-A-10 MS	Matrix Spike	Total/NA	Water	325.2	
400-135988-A-10 MSD	Matrix Spike Duplicate	Total/NA	Water	325.2	

Analysis Batch: 349351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135900-5	CCR-5	Total/NA	Water	325.2	
MB 400-349351/6	Method Blank	Total/NA	Water	325.2	
LCS 400-349351/7	Lab Control Sample	Total/NA	Water	325.2	
MRL 400-349351/3	Lab Control Sample	Total/NA	Water	325.2	
400-135988-A-15 MS	Matrix Spike	Total/NA	Water	325.2	
400-135988-A-15 MSD	Matrix Spike Duplicate	Total/NA	Water	325.2	

Analysis Batch: 349400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135900-6	CCR-6	Total/NA	Water	325.2	
400-135900-7	CCR-7	Total/NA	Water	325.2	
400-135900-15	DUPLICATE	Total/NA	Water	325.2	
400-135900-16	FIELD BLANK	Total/NA	Water	325.2	
MB 400-349400/6	Method Blank	Total/NA	Water	325.2	
LCS 400-349400/7	Lab Control Sample	Total/NA	Water	325.2	

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

General Chemistry (Continued)

Analysis Batch: 349400 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 400-349400/3	Lab Control Sample	Total/NA	Water	325.2	
400-135678-A-12 MS	Matrix Spike	Total/NA	Water	325.2	
400-135678-A-12 MSD	Matrix Spike Duplicate	Total/NA	Water	325.2	

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-348030/4

Matrix: Water

Analysis Batch: 348030

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			04/01/17 09:34	1
Sulfate	ND		1.0		mg/L			04/01/17 09:34	1

Lab Sample ID: LCS 400-348030/5

Matrix: Water

Analysis Batch: 348030

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.5		mg/L		105	90 - 110
Sulfate	10.0	10.2		mg/L		102	90 - 110

Lab Sample ID: LCSD 400-348030/6

Matrix: Water

Analysis Batch: 348030

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	10.4		mg/L		104	90 - 110	1	15
Sulfate	10.0	10.2		mg/L		102	90 - 110	0	15

Lab Sample ID: 400-135900-4 MS

Matrix: Water

Analysis Batch: 348030

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.25		10.0	10.5		mg/L		102	80 - 120
Sulfate	3.5		10.0	13.8		mg/L		103	80 - 120

Lab Sample ID: 400-135900-4 MSD

Matrix: Water

Analysis Batch: 348030

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.25		10.0	10.5		mg/L		102	80 - 120	0	20
Sulfate	3.5		10.0	13.9		mg/L		104	80 - 120	0	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-348737/1-A ^5

Matrix: Water

Analysis Batch: 349072

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 348737

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		04/06/17 13:40	04/07/17 19:34	5
Calcium	ND		0.25		mg/L		04/06/17 13:40	04/07/17 19:34	5

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 400-348737/2-A

Matrix: Water

Analysis Batch: 349072

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 348737

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.100	0.0987		mg/L		99	80 - 120
Calcium	5.00	4.72		mg/L		94	80 - 120

Lab Sample ID: 400-135900-4 MS

Matrix: Water

Analysis Batch: 349072

Client Sample ID: CCR-4

Prep Type: Total Recoverable

Prep Batch: 348737

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.11		0.100	0.218		mg/L		108	75 - 125
Calcium	18		5.00	22.5		mg/L		97	75 - 125

Lab Sample ID: 400-135900-4 MSD

Matrix: Water

Analysis Batch: 349072

Client Sample ID: CCR-4

Prep Type: Total Recoverable

Prep Batch: 348737

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Boron	0.11		0.100	0.220		mg/L		110	75 - 125	1	20
Calcium	18		5.00	22.9		mg/L		103	75 - 125	1	20

Method: 325.2 - Chloride

Lab Sample ID: MB 400-348793/6

Matrix: Water

Analysis Batch: 348793

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			04/06/17 17:03	1

Lab Sample ID: LCS 400-348793/7

Matrix: Water

Analysis Batch: 348793

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.9		mg/L		106	90 - 110

Lab Sample ID: MRL 400-348793/3

Matrix: Water

Analysis Batch: 348793

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	ND		mg/L		74	50 - 150

Lab Sample ID: 400-135900-4 MS

Matrix: Water

Analysis Batch: 348793

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	48		10.0	56.1	4	mg/L		78	73 - 120

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Method: 325.2 - Chloride (Continued)

Lab Sample ID: 400-135900-4 MSD

Matrix: Water

Analysis Batch: 348793

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	48		10.0	55.6	4	mg/L		74	73 - 120	1	8

Lab Sample ID: MB 400-349348/6

Matrix: Water

Analysis Batch: 349348

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			04/11/17 17:16	1

Lab Sample ID: LCS 400-349348/7

Matrix: Water

Analysis Batch: 349348

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	32.2		mg/L		107	90 - 110

Lab Sample ID: MRL 400-349348/3

Matrix: Water

Analysis Batch: 349348

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	ND		mg/L		96	50 - 150

Lab Sample ID: 400-135988-A-10 MS

Matrix: Water

Analysis Batch: 349348

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	28		10.0	36.7		mg/L		91	73 - 120

Lab Sample ID: 400-135988-A-10 MSD

Matrix: Water

Analysis Batch: 349348

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	28		10.0	36.5		mg/L		89	73 - 120	1	8

Lab Sample ID: MB 400-349351/6

Matrix: Water

Analysis Batch: 349351

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			04/11/17 18:15	1

Lab Sample ID: LCS 400-349351/7

Matrix: Water

Analysis Batch: 349351

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	32.0		mg/L		107	90 - 110

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Lab Sample ID: MRL 400-349351/3

Matrix: Water

Analysis Batch: 349351

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	ND		mg/L		90	50 - 150

Lab Sample ID: 400-135988-A-15 MS

Matrix: Water

Analysis Batch: 349351

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	4.4	F1	10.0	16.9	F1	mg/L		125	73 - 120

Lab Sample ID: 400-135988-A-15 MSD

Matrix: Water

Analysis Batch: 349351

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	4.4	F1	10.0	16.9	F1	mg/L		125	73 - 120	0	8

Lab Sample ID: MB 400-349400/6

Matrix: Water

Analysis Batch: 349400

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			04/12/17 09:06	1

Lab Sample ID: LCS 400-349400/7

Matrix: Water

Analysis Batch: 349400

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.4		mg/L		105	90 - 110

Lab Sample ID: MRL 400-349400/3

Matrix: Water

Analysis Batch: 349400

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	2.69		mg/L		134	50 - 150

Lab Sample ID: 400-135678-A-12 MS

Matrix: Water

Analysis Batch: 349400

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	2.5		10.0	14.4		mg/L		119	73 - 120

Lab Sample ID: 400-135678-A-12 MSD

Matrix: Water

Analysis Batch: 349400

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	2.5		10.0	14.3		mg/L		118	73 - 120	1	8

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

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

Lab Sample ID: MB 400-348052/1

Matrix: Water

Analysis Batch: 348052

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			04/01/17 14:05	1

Lab Sample ID: LCS 400-348052/2

Matrix: Water

Analysis Batch: 348052

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	293	248		mg/L		85	78 - 122

Lab Sample ID: 400-135838-A-2 DU

Matrix: Water

Analysis Batch: 348052

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	12		12.0		mg/L		0	5

Lab Sample ID: MB 400-348053/1

Matrix: Water

Analysis Batch: 348053

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			04/01/17 14:43	1

Lab Sample ID: LCS 400-348053/2

Matrix: Water

Analysis Batch: 348053

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	293	256		mg/L		87	78 - 122

Lab Sample ID: 400-135794-D-10 DU

Matrix: Water

Analysis Batch: 348053

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	180		184		mg/L		0	5

Lab Sample ID: MB 400-348191/1

Matrix: Water

Analysis Batch: 348191

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			04/03/17 13:08	1

Lab Sample ID: LCS 400-348191/2

Matrix: Water

Analysis Batch: 348191

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	293	288		mg/L		98	78 - 122

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Lab Sample ID: 400-135838-A-13 DU

Matrix: Water

Analysis Batch: 348191

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	1100		1040		mg/L	-	1	5

Lab Sample ID: 400-135904-A-2 DU

Matrix: Water

Analysis Batch: 348191

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	350		340		mg/L	-	2	5



TestAmerica

400-135900 COC

Temperature on Receipt

Drinking Water? Yes ☐ No ☒

THE LEADER IN ENVIRONMENTAL TESTING

Chain of Custody Record

TAL-4124 (1007)

Client PIOTAL ENG.		Project Manager TERRY ELNAGGAR		Date 3/30/17		Chain of Custody Number 302554	
Address 1515 POYDRAS ST. STE 1875		Telephone Number (Area Code)/Fax Number 504-599-3653		Lab Number		Page 1 of 2	
City NEW ORLEANS		State LA		Zip Code 70112		Site Contact LAPAR	
Project Name and Location (State) ENERGY NELSON		Carrier/Waybill Number		Analysis (Attach list if more space is needed)		Special Instructions/ Conditions of Receipt	
Contract/Purchase Order/Quote No. 40006993							

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix			Containers & Preservatives					Detection	Assessment	Reports	
			Air	Aqueous	Sed	Soil	Unpres	H2SO4	HNO3	HCl				NaOH
CCR-1	3/27	1810	X					X				X		5 SEPERATE
CCR-2	↓	1655												REPORTS:
CCR-3	↓	1525												1) DETECTION
CCR-4	3/28	1745												2) ASSESSMENT
CCR-5	3/29	0935												3) CADL SW
CCR-6	↓	1045												4) CCR-15/16
CCR-7	↓	1140												5) WW/FW
CCR-8	3/28	1605												
CCR-9	↓	1450												
CCR-10	↓	1355												
CCR-11	↓	1255												
CCR-12	↓	1140												

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

Archive For **1** Months

Disposal By Lab ☐ Disposal By Client ☐ Return To Client ☐ Sample Disposal ☐ Unknown ☐ Other ☒

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
<i>[Signature]</i>	3/30/17	1030	<i>[Signature]</i>	3/30/17	1630
2. Relinquished By	Date	Time	2. Received By	Date	Time
<i>[Signature]</i>	3/30/17	1635	<i>[Signature]</i>	3/31/17	0850
3. Relinquished By	Date	Time	3. Received By	Date	Time
<i>[Signature]</i>			<i>[Signature]</i>	3-31-17	0850

Comments
3.1°C, 4.1°C, 1.7°C, 4.1°C, 1.5°C JR 2

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Chain of Custody Record

TAL-4124 (1007)

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

Client PIVOTAL ENG.	Project Manager TERRELL E. WAGGAR	Date 3/30/17	Chain of Custody Number 302556
Address 1515 FAYDEAS ST. STE 1875	Telephone Number (Area Code)/Fax Number 504-799-3653	Lab Number	Page 2 of 2
City NEW ORLEANS LA 70112	Site Contact CANARY	Analysis (Attach list if more space is needed)	
Project Name and Location (State) ENTERGY NELSON	Carrier/Waybill Number	Special Instructions/ Conditions of Receipt	
Contract/Purchase Order/Quote No. 40006993			

City		State	Zip Code	Site Contact	Lab Contact	Analysis (Attach list if more space is needed)										Special Instructions/ Conditions of Receipt				
Project Name and Location (State)				Carrier/Waybill Number																
Contract/Purchase Order/Quote No.																				
Sample I.D. No. and Description (Containers for each sample may be combined on one line)				Date	Time	Matrix			Containers & Preservatives				DETECTION	ASSESSMENT		CADL SW				
						Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3			HCl		NaOH	ZnAc/NaOH		
CCR-13				3/28	1040	X					X						X	X	X	5 SEPARATE REPORTS :
CCR-14				3/28	0925												X	X	X	
DUPLICATE				3/29	—												X	X	X	
FIELD BLANK				3/29	1115												X	X	X	
N.S.				3/28	1730												X	X	X	1) DETECTION
MSD				3/28	1730												X	X	X	2) ASSESSMENT
CCR-15				3/30	1130	X					X		X				X	X	X	3) CADL SW
CCR-16				3/30	1100	X					X		X				X	X	X	4) CCR-15/16
WW				3/30	0900	X					X		X				X	X	X	5) WW/FW
FW				3/30	0800	X					X		X				X	X	X	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Return To Client ☐ Disposal By Lab ☒ Archive For 1 Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other

1. Relinquished By [Signature] Date 3/30/17 Time 1630

2. Relinquished By [Signature] Date 3/30/17 Time 1635

3. Relinquished By [Signature] Date 3/31/17 Time 0850

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Pivotal Engineering LLC

Job Number: 400-135900-1

Login Number: 135900

List Source: TestAmerica Pensacola

List Number: 1

Creator: Siddoway, Benjamin

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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	3.1°C, 4.1°C, 1.7°C, 4.1°C, 1.5°C IR-2
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-135900-1

Laboratory: TestAmerica Pensacola

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
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-139515-1

Client Project/Site: Entergy Nelson - CCR Detection

For:

Pivotal Engineering LLC

1515 Poydras Street

Suite 1875

New Orleans, Louisiana 70112

Attn: Terry Elnaggar



Authorized for release by:

7/28/2017 3:29:34 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

5

6

7

8

9

10

11

12

13

Table of Contents

Cover Page 1

Table of Contents 2

Case Narrative 3

Method Summary 4

Sample Summary 5

Client Sample Results 6

Definitions 22

Chronicle 23

QC Association 27

QC Sample Results 30

Chain of Custody 35

Receipt Checklists 37

Certification Summary 38



Case Narrative

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Job ID: 400-139515-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-139515-1

General Chemistry

Method(s) 325.2: The native sample, matrix spike, and matrix spike duplicate (MS/MSD) associated with analytical batch 359411 were performed at the same dilution. Due to the additional level of analyte present in the spiked samples, the concentration of Chloride in the MS/MSD was above the instrument calibration range. The data have been reported and qualified.

Method(s) 325.2: The following samples were diluted to bring the concentration of target analytes within the calibration range: CCR-2 (400-139515-2), CCR-3 (400-139515-3), CCR-5 (400-139515-5), CCR-6 (400-139515-6), CCR-7 (400-139515-7), CCR-8 (400-139515-8), CCR-9 (400-139515-9) and DUPLICATE (400-139515-15). Elevated reporting limits (RLs) are provided.

Method Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL PEN
325.2	Chloride	MCAWW	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN

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 PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-139515-1	CCR-1	Water	06/15/17 16:00	06/20/17 09:12
400-139515-2	CCR-2	Water	06/15/17 17:20	06/20/17 09:12
400-139515-3	CCR-3	Water	06/15/17 18:40	06/20/17 09:12
400-139515-4	CCR-4	Water	06/14/17 11:20	06/20/17 09:12
400-139515-5	CCR-5	Water	06/14/17 14:30	06/20/17 09:12
400-139515-6	CCR-6	Water	06/13/17 15:15	06/20/17 09:12
400-139515-7	CCR-7	Water	06/13/17 17:00	06/20/17 09:12
400-139515-8	CCR-8	Water	06/15/17 10:30	06/20/17 09:12
400-139515-9	CCR-9	Water	06/16/17 17:00	06/20/17 09:12
400-139515-10	CCR-10	Water	06/16/17 15:45	06/20/17 09:12
400-139515-11	CCR-11	Water	06/16/17 14:30	06/20/17 09:12
400-139515-12	CCR-12	Water	06/16/17 08:45	06/20/17 09:12
400-139515-13	CCR-13	Water	06/16/17 10:05	06/20/17 09:12
400-139515-14	CCR-14	Water	06/16/17 11:20	06/20/17 09:12
400-139515-15	DUPLICATE	Water	06/14/17 00:00	06/20/17 09:12
400-139515-16	FIELD BLANK	Water	06/16/17 07:30	06/20/17 09:12

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: CCR-1

Date Collected: 06/15/17 16:00

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.36		0.20		mg/L			06/23/17 09:06	1
Sulfate	2.1		1.0		mg/L			06/23/17 09:06	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.065		0.050		mg/L		07/01/17 13:11	07/05/17 15:02	5
Calcium	26		0.25		mg/L		07/01/17 13:11	07/05/17 15:02	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	42		2.0		mg/L			07/05/17 11:27	1
Total Dissolved Solids	280		5.0		mg/L			06/21/17 16:56	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: CCR-2

Date Collected: 06/15/17 17:20

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-2

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.43		0.20		mg/L			06/23/17 09:31	1
Sulfate	1.0		1.0		mg/L			06/23/17 09:31	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.059		0.050		mg/L		07/01/17 13:11	07/05/17 16:02	5
Calcium	21		0.25		mg/L		07/01/17 13:11	07/05/17 16:02	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57		4.0		mg/L			07/05/17 11:48	2
Total Dissolved Solids	260		5.0		mg/L			06/21/17 16:56	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: CCR-3

Date Collected: 06/15/17 18:40

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.46		0.20		mg/L			06/23/17 09:54	1
Sulfate	6.1		1.0		mg/L			06/23/17 09:54	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.067		0.050		mg/L		07/01/17 13:11	07/05/17 16:07	5
Calcium	27		0.25		mg/L		07/01/17 13:11	07/05/17 16:07	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	97		4.0		mg/L			07/05/17 11:48	2
Total Dissolved Solids	360		5.0		mg/L			06/21/17 16:56	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: CCR-4

Date Collected: 06/14/17 11:20

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.27		0.20		mg/L			06/22/17 16:58	1
Sulfate	4.6		1.0		mg/L			06/22/17 16:58	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.095		0.050		mg/L		07/01/17 13:11	07/05/17 15:20	5
Calcium	19		0.25		mg/L		07/01/17 13:11	07/05/17 15:20	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44		2.0		mg/L			07/05/17 11:27	1
Total Dissolved Solids	240		5.0		mg/L			06/21/17 16:56	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: CCR-5

Date Collected: 06/14/17 14:30

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-5

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.28		0.20		mg/L			06/23/17 10:17	1
Sulfate	ND		1.0		mg/L			06/23/17 10:17	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.089		0.050		mg/L		07/01/17 13:11	07/05/17 16:11	5
Calcium	33		0.25		mg/L		07/01/17 13:11	07/05/17 16:11	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56		4.0		mg/L			07/05/17 11:48	2
Total Dissolved Solids	380		5.0		mg/L			06/21/17 16:56	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: CCR-6

Date Collected: 06/13/17 15:15

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-6

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.29		0.20		mg/L			06/23/17 10:39	1
Sulfate	ND		1.0		mg/L			06/23/17 10:39	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.080		0.050		mg/L		07/01/17 13:11	07/05/17 16:16	5
Calcium	31		0.25		mg/L		07/01/17 13:11	07/05/17 16:16	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	80		4.0		mg/L			07/05/17 11:48	2
Total Dissolved Solids	360		5.0		mg/L			06/20/17 17:24	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: CCR-7

Date Collected: 06/13/17 17:00

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-7

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.36		0.20		mg/L			06/22/17 14:18	1
Sulfate	ND		1.0		mg/L			06/22/17 14:18	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.070		0.050		mg/L		07/01/17 13:11	07/05/17 16:20	5
Calcium	45		0.25		mg/L		07/01/17 13:11	07/05/17 16:20	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65		4.0		mg/L			07/05/17 11:49	2
Total Dissolved Solids	330		5.0		mg/L			06/20/17 17:24	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: CCR-8

Date Collected: 06/15/17 10:30

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-8

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			06/22/17 14:41	1
Sulfate	ND		1.0		mg/L			06/22/17 14:41	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.053		0.050		mg/L		07/01/17 13:11	07/05/17 16:25	5
Calcium	12		0.25		mg/L		07/01/17 13:11	07/05/17 16:25	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	80		4.0		mg/L			07/05/17 11:49	2
Total Dissolved Solids	270		5.0		mg/L			06/21/17 16:56	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: CCR-9

Date Collected: 06/16/17 17:00

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-9

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.68		0.20		mg/L			06/22/17 15:03	1
Sulfate	5.6		1.0		mg/L			06/22/17 15:03	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.058		0.050		mg/L		07/01/17 13:11	07/05/17 16:29	5
Calcium	30		0.25		mg/L		07/01/17 13:11	07/05/17 16:29	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60		4.0		mg/L			07/05/17 13:00	2
Total Dissolved Solids	320		5.0		mg/L			06/21/17 16:56	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: CCR-10

Date Collected: 06/16/17 15:45

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-10

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.71		0.20		mg/L			06/22/17 15:26	1
Sulfate	11		1.0		mg/L			06/22/17 15:26	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.056		0.050		mg/L		07/01/17 13:11	07/05/17 16:34	5
Calcium	30		0.25		mg/L		07/01/17 13:11	07/05/17 16:34	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40		2.0		mg/L			07/05/17 12:44	1
Total Dissolved Solids	290		5.0		mg/L			06/21/17 16:56	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: CCR-11

Date Collected: 06/16/17 14:30

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-11

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.81		0.20		mg/L			06/23/17 11:02	1
Sulfate	4.2		1.0		mg/L			06/23/17 11:02	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.052		0.050		mg/L		07/01/17 13:11	07/05/17 16:38	5
Calcium	26		0.25		mg/L		07/01/17 13:11	07/05/17 16:38	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25		2.0		mg/L			07/05/17 12:44	1
Total Dissolved Solids	200		5.0		mg/L			06/21/17 16:56	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: CCR-12

Date Collected: 06/16/17 08:45

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-12

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			06/23/17 11:25	1
Sulfate	12		1.0		mg/L			06/23/17 11:25	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		07/01/17 13:11	07/05/17 16:43	5
Calcium	18		0.25		mg/L		07/01/17 13:11	07/05/17 16:43	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		2.0		mg/L			07/05/17 12:44	1
Total Dissolved Solids	140		5.0		mg/L			06/21/17 16:56	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: CCR-13

Date Collected: 06/16/17 10:05

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-13

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.26		0.20		mg/L			06/23/17 11:48	1
Sulfate	7.7		1.0		mg/L			06/23/17 11:48	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.051		0.050		mg/L		07/01/17 13:11	07/05/17 17:05	5
Calcium	20		0.25		mg/L		07/01/17 13:11	07/05/17 17:05	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14		2.0		mg/L			07/05/17 12:44	1
Total Dissolved Solids	190		5.0		mg/L			06/22/17 16:13	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: CCR-14

Date Collected: 06/16/17 11:20

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-14

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			06/23/17 12:11	1
Sulfate	ND		1.0		mg/L			06/23/17 12:11	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		07/01/17 13:11	07/05/17 17:10	5
Calcium	18		0.25		mg/L		07/01/17 13:11	07/05/17 17:10	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0		mg/L			07/05/17 12:44	1
Total Dissolved Solids	160		5.0		mg/L			06/22/17 16:13	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: DUPLICATE

Lab Sample ID: 400-139515-15

Date Collected: 06/14/17 00:00

Matrix: Water

Date Received: 06/20/17 09:12

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.27		0.20		mg/L			06/23/17 13:42	1
Sulfate	ND		1.0		mg/L			06/23/17 13:42	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.096		0.050		mg/L		07/01/17 13:11	07/05/17 17:14	5
Calcium	33		0.25		mg/L		07/01/17 13:11	07/05/17 17:14	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57		4.0		mg/L			07/05/17 13:01	2
Total Dissolved Solids	390		5.0		mg/L			06/21/17 16:56	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: FIELD BLANK

Lab Sample ID: 400-139515-16

Date Collected: 06/16/17 07:30

Matrix: Water

Date Received: 06/20/17 09:12

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			06/23/17 14:05	1
Sulfate	ND		1.0		mg/L			06/23/17 14:05	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		07/01/17 13:11	07/05/17 17:19	5
Calcium	ND		0.25		mg/L		07/01/17 13:11	07/05/17 17:19	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			07/05/17 12:44	1
Total Dissolved Solids	ND		5.0		mg/L			06/22/17 16:13	1

Definitions/Glossary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Qualifiers

General Chemistry

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.
α	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)

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: CCR-1

Date Collected: 06/15/17 16:00

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	358049	06/23/17 09:06	TAJ	TAL PEN
Total Recoverable	Prep	3005A			359128	07/01/17 13:11	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	359473	07/05/17 15:02	DRE	TAL PEN
Total/NA	Analysis	325.2		1	359411	07/05/17 11:27	JLB	TAL PEN
Total/NA	Analysis	SM 2540C		1	357863	06/21/17 16:56	TET	TAL PEN

Client Sample ID: CCR-2

Date Collected: 06/15/17 17:20

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	358049	06/23/17 09:31	TAJ	TAL PEN
Total Recoverable	Prep	3005A			359128	07/01/17 13:11	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	359473	07/05/17 16:02	DRE	TAL PEN
Total/NA	Analysis	325.2		2	359411	07/05/17 11:48	JLB	TAL PEN
Total/NA	Analysis	SM 2540C		1	357863	06/21/17 16:56	TET	TAL PEN

Client Sample ID: CCR-3

Date Collected: 06/15/17 18:40

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	358049	06/23/17 09:54	TAJ	TAL PEN
Total Recoverable	Prep	3005A			359128	07/01/17 13:11	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	359473	07/05/17 16:07	DRE	TAL PEN
Total/NA	Analysis	325.2		2	359411	07/05/17 11:48	JLB	TAL PEN
Total/NA	Analysis	SM 2540C		1	357863	06/21/17 16:56	TET	TAL PEN

Client Sample ID: CCR-4

Date Collected: 06/14/17 11:20

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	358049	06/22/17 16:58	TAJ	TAL PEN
Total Recoverable	Prep	3005A			359128	07/01/17 13:11	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	359473	07/05/17 15:20	DRE	TAL PEN
Total/NA	Analysis	325.2		1	359411	07/05/17 11:27	JLB	TAL PEN
Total/NA	Analysis	SM 2540C		1	357863	06/21/17 16:56	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: CCR-5

Date Collected: 06/14/17 14:30

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	358049	06/23/17 10:17	TAJ	TAL PEN
Total Recoverable	Prep	3005A			359128	07/01/17 13:11	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	359473	07/05/17 16:11	DRE	TAL PEN
Total/NA	Analysis	325.2		2	359411	07/05/17 11:48	JLB	TAL PEN
Total/NA	Analysis	SM 2540C		1	357863	06/21/17 16:56	TET	TAL PEN

Client Sample ID: CCR-6

Date Collected: 06/13/17 15:15

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	358049	06/23/17 10:39	TAJ	TAL PEN
Total Recoverable	Prep	3005A			359128	07/01/17 13:11	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	359473	07/05/17 16:16	DRE	TAL PEN
Total/NA	Analysis	325.2		2	359411	07/05/17 11:48	JLB	TAL PEN
Total/NA	Analysis	SM 2540C		1	357750	06/20/17 17:24	TET	TAL PEN

Client Sample ID: CCR-7

Date Collected: 06/13/17 17:00

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	357984	06/22/17 14:18	TAJ	TAL PEN
Total Recoverable	Prep	3005A			359128	07/01/17 13:11	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	359473	07/05/17 16:20	DRE	TAL PEN
Total/NA	Analysis	325.2		2	359411	07/05/17 11:49	JLB	TAL PEN
Total/NA	Analysis	SM 2540C		1	357750	06/20/17 17:24	TET	TAL PEN

Client Sample ID: CCR-8

Date Collected: 06/15/17 10:30

Date Received: 06/20/17 09:12

Lab Sample ID: 400-139515-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	357984	06/22/17 14:41	TAJ	TAL PEN
Total Recoverable	Prep	3005A			359128	07/01/17 13:11	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	359473	07/05/17 16:25	DRE	TAL PEN
Total/NA	Analysis	325.2		2	359411	07/05/17 11:49	JLB	TAL PEN
Total/NA	Analysis	SM 2540C		1	357863	06/21/17 16:56	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: CCR-9

Lab Sample ID: 400-139515-9

Date Collected: 06/16/17 17:00

Matrix: Water

Date Received: 06/20/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	357984	06/22/17 15:03	TAJ	TAL PEN
Total Recoverable	Prep	3005A			359128	07/01/17 13:11	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	359473	07/05/17 16:29	DRE	TAL PEN
Total/NA	Analysis	325.2		2	359411	07/05/17 13:00	JLB	TAL PEN
Total/NA	Analysis	SM 2540C		1	357863	06/21/17 16:56	TET	TAL PEN

Client Sample ID: CCR-10

Lab Sample ID: 400-139515-10

Date Collected: 06/16/17 15:45

Matrix: Water

Date Received: 06/20/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	357984	06/22/17 15:26	TAJ	TAL PEN
Total Recoverable	Prep	3005A			359128	07/01/17 13:11	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	359473	07/05/17 16:34	DRE	TAL PEN
Total/NA	Analysis	325.2		1	359411	07/05/17 12:44	JLB	TAL PEN
Total/NA	Analysis	SM 2540C		1	357863	06/21/17 16:56	TET	TAL PEN

Client Sample ID: CCR-11

Lab Sample ID: 400-139515-11

Date Collected: 06/16/17 14:30

Matrix: Water

Date Received: 06/20/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	358049	06/23/17 11:02	TAJ	TAL PEN
Total Recoverable	Prep	3005A			359128	07/01/17 13:11	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	359473	07/05/17 16:38	DRE	TAL PEN
Total/NA	Analysis	325.2		1	359411	07/05/17 12:44	JLB	TAL PEN
Total/NA	Analysis	SM 2540C		1	357863	06/21/17 16:56	TET	TAL PEN

Client Sample ID: CCR-12

Lab Sample ID: 400-139515-12

Date Collected: 06/16/17 08:45

Matrix: Water

Date Received: 06/20/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	358049	06/23/17 11:25	TAJ	TAL PEN
Total Recoverable	Prep	3005A			359128	07/01/17 13:11	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	359473	07/05/17 16:43	DRE	TAL PEN
Total/NA	Analysis	325.2		1	359411	07/05/17 12:44	JLB	TAL PEN
Total/NA	Analysis	SM 2540C		1	357863	06/21/17 16:56	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Client Sample ID: CCR-13

Lab Sample ID: 400-139515-13

Date Collected: 06/16/17 10:05

Matrix: Water

Date Received: 06/20/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	358049	06/23/17 11:48	TAJ	TAL PEN
Total Recoverable	Prep	3005A			359128	07/01/17 13:11	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	359473	07/05/17 17:05	DRE	TAL PEN
Total/NA	Analysis	325.2		1	359411	07/05/17 12:44	JLB	TAL PEN
Total/NA	Analysis	SM 2540C		1	357961	06/22/17 16:13	TET	TAL PEN

Client Sample ID: CCR-14

Lab Sample ID: 400-139515-14

Date Collected: 06/16/17 11:20

Matrix: Water

Date Received: 06/20/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	358049	06/23/17 12:11	TAJ	TAL PEN
Total Recoverable	Prep	3005A			359128	07/01/17 13:11	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	359473	07/05/17 17:10	DRE	TAL PEN
Total/NA	Analysis	325.2		1	359411	07/05/17 12:44	JLB	TAL PEN
Total/NA	Analysis	SM 2540C		1	357961	06/22/17 16:13	TET	TAL PEN

Client Sample ID: DUPLICATE

Lab Sample ID: 400-139515-15

Date Collected: 06/14/17 00:00

Matrix: Water

Date Received: 06/20/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	358049	06/23/17 13:42	TAJ	TAL PEN
Total Recoverable	Prep	3005A			359128	07/01/17 13:11	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	359473	07/05/17 17:14	DRE	TAL PEN
Total/NA	Analysis	325.2		2	359411	07/05/17 13:01	JLB	TAL PEN
Total/NA	Analysis	SM 2540C		1	357863	06/21/17 16:56	TET	TAL PEN

Client Sample ID: FIELD BLANK

Lab Sample ID: 400-139515-16

Date Collected: 06/16/17 07:30

Matrix: Water

Date Received: 06/20/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	358049	06/23/17 14:05	TAJ	TAL PEN
Total Recoverable	Prep	3005A			359128	07/01/17 13:11	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	359473	07/05/17 17:19	DRE	TAL PEN
Total/NA	Analysis	325.2		1	359411	07/05/17 12:44	JLB	TAL PEN
Total/NA	Analysis	SM 2540C		1	357961	06/22/17 16:13	TET	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

HPLC/IC

Analysis Batch: 357984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139515-7	CCR-7	Total/NA	Water	300.0	
400-139515-8	CCR-8	Total/NA	Water	300.0	
400-139515-9	CCR-9	Total/NA	Water	300.0	
400-139515-10	CCR-10	Total/NA	Water	300.0	
MB 400-357984/4	Method Blank	Total/NA	Water	300.0	
LCS 400-357984/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-357984/6	Lab Control Sample Dup	Total/NA	Water	300.0	
400-139518-B-6 MS	Matrix Spike	Total/NA	Water	300.0	
400-139518-B-6 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 358049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139515-1	CCR-1	Total/NA	Water	300.0	
400-139515-2	CCR-2	Total/NA	Water	300.0	
400-139515-3	CCR-3	Total/NA	Water	300.0	
400-139515-4	CCR-4	Total/NA	Water	300.0	
400-139515-5	CCR-5	Total/NA	Water	300.0	
400-139515-6	CCR-6	Total/NA	Water	300.0	
400-139515-11	CCR-11	Total/NA	Water	300.0	
400-139515-12	CCR-12	Total/NA	Water	300.0	
400-139515-13	CCR-13	Total/NA	Water	300.0	
400-139515-14	CCR-14	Total/NA	Water	300.0	
400-139515-15	DUPLICATE	Total/NA	Water	300.0	
400-139515-16	FIELD BLANK	Total/NA	Water	300.0	
MB 400-358049/37	Method Blank	Total/NA	Water	300.0	
LCS 400-358049/38	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-358049/39	Lab Control Sample Dup	Total/NA	Water	300.0	
400-139515-4 MS	CCR-4	Total/NA	Water	300.0	
400-139515-4 MSD	CCR-4	Total/NA	Water	300.0	

Metals

Prep Batch: 359128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139515-1	CCR-1	Total Recoverable	Water	3005A	
400-139515-2	CCR-2	Total Recoverable	Water	3005A	
400-139515-3	CCR-3	Total Recoverable	Water	3005A	
400-139515-4	CCR-4	Total Recoverable	Water	3005A	
400-139515-5	CCR-5	Total Recoverable	Water	3005A	
400-139515-6	CCR-6	Total Recoverable	Water	3005A	
400-139515-7	CCR-7	Total Recoverable	Water	3005A	
400-139515-8	CCR-8	Total Recoverable	Water	3005A	
400-139515-9	CCR-9	Total Recoverable	Water	3005A	
400-139515-10	CCR-10	Total Recoverable	Water	3005A	
400-139515-11	CCR-11	Total Recoverable	Water	3005A	
400-139515-12	CCR-12	Total Recoverable	Water	3005A	
400-139515-13	CCR-13	Total Recoverable	Water	3005A	
400-139515-14	CCR-14	Total Recoverable	Water	3005A	
400-139515-15	DUPLICATE	Total Recoverable	Water	3005A	
400-139515-16	FIELD BLANK	Total Recoverable	Water	3005A	

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Metals (Continued)

Prep Batch: 359128 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-359128/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-359128/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-139515-4 MS	CCR-4	Total Recoverable	Water	3005A	
400-139515-4 MSD	CCR-4	Total Recoverable	Water	3005A	

Analysis Batch: 359473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139515-1	CCR-1	Total Recoverable	Water	6020	359128
400-139515-2	CCR-2	Total Recoverable	Water	6020	359128
400-139515-3	CCR-3	Total Recoverable	Water	6020	359128
400-139515-4	CCR-4	Total Recoverable	Water	6020	359128
400-139515-5	CCR-5	Total Recoverable	Water	6020	359128
400-139515-6	CCR-6	Total Recoverable	Water	6020	359128
400-139515-7	CCR-7	Total Recoverable	Water	6020	359128
400-139515-8	CCR-8	Total Recoverable	Water	6020	359128
400-139515-9	CCR-9	Total Recoverable	Water	6020	359128
400-139515-10	CCR-10	Total Recoverable	Water	6020	359128
400-139515-11	CCR-11	Total Recoverable	Water	6020	359128
400-139515-12	CCR-12	Total Recoverable	Water	6020	359128
400-139515-13	CCR-13	Total Recoverable	Water	6020	359128
400-139515-14	CCR-14	Total Recoverable	Water	6020	359128
400-139515-15	DUPLICATE	Total Recoverable	Water	6020	359128
400-139515-16	FIELD BLANK	Total Recoverable	Water	6020	359128
MB 400-359128/1-A ^5	Method Blank	Total Recoverable	Water	6020	359128
LCS 400-359128/2-A	Lab Control Sample	Total Recoverable	Water	6020	359128
400-139515-4 MS	CCR-4	Total Recoverable	Water	6020	359128
400-139515-4 MSD	CCR-4	Total Recoverable	Water	6020	359128

General Chemistry

Analysis Batch: 357750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139515-6	CCR-6	Total/NA	Water	SM 2540C	
400-139515-7	CCR-7	Total/NA	Water	SM 2540C	
MB 400-357750/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-357750/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-139515-6 DU	CCR-6	Total/NA	Water	SM 2540C	

Analysis Batch: 357863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139515-1	CCR-1	Total/NA	Water	SM 2540C	
400-139515-2	CCR-2	Total/NA	Water	SM 2540C	
400-139515-3	CCR-3	Total/NA	Water	SM 2540C	
400-139515-4	CCR-4	Total/NA	Water	SM 2540C	
400-139515-5	CCR-5	Total/NA	Water	SM 2540C	
400-139515-8	CCR-8	Total/NA	Water	SM 2540C	
400-139515-9	CCR-9	Total/NA	Water	SM 2540C	
400-139515-10	CCR-10	Total/NA	Water	SM 2540C	
400-139515-11	CCR-11	Total/NA	Water	SM 2540C	
400-139515-12	CCR-12	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

General Chemistry (Continued)

Analysis Batch: 357863 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139515-15	DUPLICATE	Total/NA	Water	SM 2540C	
MB 400-357863/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-357863/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-139515-1 DU	CCR-1	Total/NA	Water	SM 2540C	
400-139515-A-17 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 357961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139515-13	CCR-13	Total/NA	Water	SM 2540C	
400-139515-14	CCR-14	Total/NA	Water	SM 2540C	
400-139515-16	FIELD BLANK	Total/NA	Water	SM 2540C	
MB 400-357961/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-357961/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-139515-13 DU	CCR-13	Total/NA	Water	SM 2540C	
400-139515-14 DU	CCR-14	Total/NA	Water	SM 2540C	

Analysis Batch: 359411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139515-1	CCR-1	Total/NA	Water	325.2	
400-139515-2	CCR-2	Total/NA	Water	325.2	
400-139515-3	CCR-3	Total/NA	Water	325.2	
400-139515-4	CCR-4	Total/NA	Water	325.2	
400-139515-5	CCR-5	Total/NA	Water	325.2	
400-139515-6	CCR-6	Total/NA	Water	325.2	
400-139515-7	CCR-7	Total/NA	Water	325.2	
400-139515-8	CCR-8	Total/NA	Water	325.2	
400-139515-9	CCR-9	Total/NA	Water	325.2	
400-139515-10	CCR-10	Total/NA	Water	325.2	
400-139515-11	CCR-11	Total/NA	Water	325.2	
400-139515-12	CCR-12	Total/NA	Water	325.2	
400-139515-13	CCR-13	Total/NA	Water	325.2	
400-139515-14	CCR-14	Total/NA	Water	325.2	
400-139515-15	DUPLICATE	Total/NA	Water	325.2	
400-139515-16	FIELD BLANK	Total/NA	Water	325.2	
MB 400-359411/6	Method Blank	Total/NA	Water	325.2	
LCS 400-359411/7	Lab Control Sample	Total/NA	Water	325.2	
MRL 400-359411/3	Lab Control Sample	Total/NA	Water	325.2	
400-139515-4 MS	CCR-4	Total/NA	Water	325.2	
400-139515-4 MSD	CCR-4	Total/NA	Water	325.2	

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-357984/4

Matrix: Water

Analysis Batch: 357984

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			06/22/17 03:01	1
Sulfate	ND		1.0		mg/L			06/22/17 03:01	1

Lab Sample ID: LCS 400-357984/5

Matrix: Water

Analysis Batch: 357984

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.5		mg/L		105	90 - 110
Sulfate	10.0	10.4		mg/L		104	90 - 110

Lab Sample ID: LCSD 400-357984/6

Matrix: Water

Analysis Batch: 357984

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	10.4		mg/L		104	90 - 110	1	15
Sulfate	10.0	10.4		mg/L		104	90 - 110	1	15

Lab Sample ID: 400-139518-B-6 MS

Matrix: Water

Analysis Batch: 357984

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
Fluoride	ND		1000	1080		mg/L		108	80 - 120
Sulfate	2700		1000	3680		mg/L		100	80 - 120

Lab Sample ID: 400-139518-B-6 MSD

Matrix: Water

Analysis Batch: 357984

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
Fluoride	ND		1000	1070		mg/L		107	80 - 120	1	20
Sulfate	2700		1000	3700		mg/L		102	80 - 120	1	20

Lab Sample ID: MB 400-358049/37

Matrix: Water

Analysis Batch: 358049

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			06/22/17 15:49	1
Sulfate	ND		1.0		mg/L			06/22/17 15:49	1

Lab Sample ID: LCS 400-358049/38

Matrix: Water

Analysis Batch: 358049

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.2		mg/L		102	90 - 110

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-358049/38

Matrix: Water

Analysis Batch: 358049

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	10.3		mg/L		103	90 - 110

Lab Sample ID: LCSD 400-358049/39

Matrix: Water

Analysis Batch: 358049

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	10.2		mg/L		102	90 - 110	1	15
Sulfate	10.0	10.3		mg/L		103	90 - 110	0	15

Lab Sample ID: 400-139515-4 MS

Matrix: Water

Analysis Batch: 358049

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.27		10.0	10.5		mg/L		102	80 - 120
Sulfate	4.6		10.0	15.1		mg/L		105	80 - 120

Lab Sample ID: 400-139515-4 MSD

Matrix: Water

Analysis Batch: 358049

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.27		10.0	10.5		mg/L		103	80 - 120	0	20
Sulfate	4.6		10.0	15.2		mg/L		106	80 - 120	1	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-359128/1-A ^5

Matrix: Water

Analysis Batch: 359473

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 359128

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		07/01/17 13:11	07/05/17 14:49	5
Calcium	ND		0.25		mg/L		07/01/17 13:11	07/05/17 14:49	5

Lab Sample ID: LCS 400-359128/2-A

Matrix: Water

Analysis Batch: 359473

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 359128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.100	0.0935		mg/L		94	80 - 120
Calcium	5.00	5.05		mg/L		101	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-139515-4 MS

Matrix: Water

Analysis Batch: 359473

Client Sample ID: CCR-4

Prep Type: Total Recoverable

Prep Batch: 359128

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.095		0.100	0.198		mg/L		103	75 - 125
Calcium	19		5.00	24.1		mg/L		98	75 - 125

Lab Sample ID: 400-139515-4 MSD

Matrix: Water

Analysis Batch: 359473

Client Sample ID: CCR-4

Prep Type: Total Recoverable

Prep Batch: 359128

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	0.095		0.100	0.191		mg/L		96	75 - 125	3	20
Calcium	19		5.00	24.1		mg/L		98	75 - 125	0	20

Method: 325.2 - Chloride

Lab Sample ID: MB 400-359411/6

Matrix: Water

Analysis Batch: 359411

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			07/05/17 11:11	1

Lab Sample ID: LCS 400-359411/7

Matrix: Water

Analysis Batch: 359411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	30.2		mg/L		101	90 - 110

Lab Sample ID: MRL 400-359411/3

Matrix: Water

Analysis Batch: 359411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	ND		mg/L		100	50 - 150

Lab Sample ID: 400-139515-4 MS

Matrix: Water

Analysis Batch: 359411

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	44		10.0	52.1	4	mg/L		77	73 - 120

Lab Sample ID: 400-139515-4 MSD

Matrix: Water

Analysis Batch: 359411

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	44		10.0	51.9	4	mg/L		74	73 - 120	0	8

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

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

Lab Sample ID: MB 400-357750/1

Matrix: Water

Analysis Batch: 357750

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			06/20/17 17:24	1

Lab Sample ID: LCS 400-357750/2

Matrix: Water

Analysis Batch: 357750

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	293	294		mg/L		100	78 - 122

Lab Sample ID: 400-139515-6 DU

Matrix: Water

Analysis Batch: 357750

Client Sample ID: CCR-6

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	360		360		mg/L		0	5

Lab Sample ID: MB 400-357863/1

Matrix: Water

Analysis Batch: 357863

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			06/21/17 16:56	1

Lab Sample ID: LCS 400-357863/2

Matrix: Water

Analysis Batch: 357863

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	293	280		mg/L		96	78 - 122

Lab Sample ID: 400-139515-1 DU

Matrix: Water

Analysis Batch: 357863

Client Sample ID: CCR-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	280		276		mg/L		0	5

Lab Sample ID: 400-139515-A-17 DU

Matrix: Water

Analysis Batch: 357863

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	390		390		mg/L		0	5

Lab Sample ID: MB 400-357961/1

Matrix: Water

Analysis Batch: 357961

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			06/22/17 16:13	1

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Lab Sample ID: LCS 400-357961/2

Matrix: Water

Analysis Batch: 357961

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	293	284		mg/L	-	97	78 - 122

Lab Sample ID: 400-139515-13 DU

Matrix: Water

Analysis Batch: 357961

Client Sample ID: CCR-13

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	190		186		mg/L	-	0	5

Lab Sample ID: 400-139515-14 DU

Matrix: Water

Analysis Batch: 357961

Client Sample ID: CCR-14

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	160		160		mg/L	-	0	5

Chain of Custody Record

Client Information Client Contact: Terry Elhaggar Company: Pivotal Engineering LLC Address: 1515 Poydras Street Suite 1875 City: New Orleans State, Zip: LA, 70112 Phone: [blank] Email: telnaggar@pivotaleng.com Project Name: Entergy Nelson - CCR Detection Monitoring Site: CADL		Lab PM: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com Phone: (504) 744-3653	Carrier Tracking No(s): 400-55839-24300.1 Page: Page 1 of 2 Job #: 15-125				
Analysis Requested Due Date Requested: [blank] TAT Requested (days): [blank] PO #: [blank] Purchase Order not required WO #: [blank] Project #: 40006993 SSOV#: [blank]		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 Other: [blank] 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)					
Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=wastefoil, or Tissue, A=air) Preservation Code: Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 6020 - Boron and Calcium 2540C - TDS; 325.1 - Chloride; 300.0 - Fluoride, Sulfate		Total Number of Containers Special Instructions/Note:					
CCR-1	6/15	1600	Water	Water			
CCR-2	6/15	1720	Water	Water			
CCR-3	6/15	1840	Water	Water			
CCR-4	6/14	1120	Water	Water			
CCR-5	6/14	1430	Water	Water			
CCR-6	6/13	1515	Water	Water			
CCR-7	6/13	1700	Water	Water			
CCR-8	6/15	1030	Water	Water			
CCR-9	6/16	1700	Water	Water			
CCR-10	6/16	1545	Water	Water			
CCR-11	6/16	1430	Water	Water			
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For 1 Months			
Empty Kit Relinquished by: [blank] Date: [blank] Time: [blank]				Special Instructions/QC Requirements:			
Relinquished by: [blank] Date/Time: 6/19/17 / 1:25 pm Company: Pivotal				Relinquished by: [blank] Date/Time: 6/19/17 / 1:25 Company: Pivotal			
Relinquished by: [blank] Date/Time: 6/19/17 / 1600 Company: Pivotal				Relinquished by: [blank] Date/Time: 6/20/17 / 0910 Company: Pivotal			
Custody Seal No.: [blank]				Remarks: Cooler (3.3.3), 0.25 c 400, 2.606 1/2			

Chain of Custody Record

Client Information		Lab PM:		Carrier Tracking No(s):		COC No:	
Client Contact:		Whitmore, Cheyenne R				400-55839-24300.2	
Terry Elmaggar		E-Mail:				Page: Page 2 of 2	
		cheyenne.whitmore@testamericainc.com				Job #: 15-125	
Company:		Pivotal Engineering LLC		Analysis Requested		Preservation Codes:	
Address:		1515 Poydras Street Suite 1875				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 Other:	
City:		New Orleans				M - Hexane N - None O - AsNaO2 P - Na2SO4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecylhydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)	
State, Zip:		LA, 70112					
Phone:							
Email:		telhaggar@pivotaleng.com					
Project Name:		Entergy Nelson - CCR Detection Monitoring					
Site:		CADL					
Due Date Requested:		TAT Requested (days):		Perform MS/MSD (Yes or No)		Total Number of Containers	
PO #:		Purchase Order not required		Field Filtered Sample (Yes or No)			
WO #:				2540C - TDS; 325.1 - Chloride; 300.0 - Fluoride, Sulfate			
Project #:		40006993		6020 - Boron and Calcium			
SSOW#:							
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
MS		6/16		0845		Water	
MSD		6/16		1005		Water	
Field Blank		6/16		1120		Water	
		6/14		-		Water	
		6/14		1135		Water	
		6/14		1135		Water	
		6/16		0730		Water	
Special Instructions/Note:						MS/MSD CCR-4	
Possible Hazard Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Non-Hazard		6/16		0845		Water	
Flammable		6/16		1005		Water	
Deliverable Requested: I, II, III, IV, Other (specify)		6/16		1120		Water	
		6/14		-		Water	
		6/14		1135		Water	
		6/14		1135		Water	
		6/16		0730		Water	
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:		Date/Time:		Date/Time:		Date/Time:	
Sanatien McCary		6/19/17 1:25 PM		6/19/17 1:25 PM		6/19/17 1:25 PM	
Relinquished by:		Date/Time:		Date/Time:		Date/Time:	
Sanatien McCary		6/19/17 1:25 PM		6/19/17 1:25 PM		6/19/17 1:25 PM	
Relinquished by:		Date/Time:		Date/Time:		Date/Time:	
Sanatien McCary		6/19/17 1:25 PM		6/19/17 1:25 PM		6/19/17 1:25 PM	
Custody Seal No.:		Custody Seal No.:		Custody Seal No.:		Custody Seal No.:	
Custody Seal No.:		Custody Seal No.:		Custody Seal No.:		Custody Seal No.:	

Login Sample Receipt Checklist

Client: Pivotal Engineering LLC

Job Number: 400-139515-1

Login Number: 139515

List Source: TestAmerica Pensacola

List Number: 1

Creator: Siddoway, Benjamin

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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	4.7°C, 3.2°C, 2.2°C, 2.6°C IR-2
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-139515-1

Laboratory: TestAmerica Pensacola

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
Alabama	State Program	4	40150	06-30-18
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-18
Georgia	State Program	4	N/A	06-30-18
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17 *
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-18
Massachusetts	State Program	1	M-FL094	06-30-18
Michigan	State Program	5	9912	06-30-18
New Jersey	NELAP	2	FL006	06-30-18
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17 *
Tennessee	State Program	4	TN02907	06-30-18
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-18
Washington	State Program	10	C915	05-15-18
West Virginia DEP	State Program	3	136	06-30-18

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

TestAmerica Pensacola

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-143063-1

TestAmerica Sample Delivery Group: CADL

Client Project/Site: Entergy Nelson - CCR Detection

For:

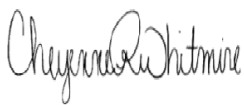
Pivotal Engineering LLC

1515 Poydras Street

Suite 1875

New Orleans, Louisiana 70112

Attn: Terry Elnaggar



Authorized for release by:

9/30/2017 11:02:09 AM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Method Summary	4
Sample Summary	5
Client Sample Results	6
Definitions	22
Chronicle	23
QC Association	27
QC Sample Results	31
Chain of Custody	38
Receipt Checklists	40
Certification Summary	41

Case Narrative

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Job ID: 400-143063-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-143063-1

General Chemistry

Method(s) 325.2: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 368718 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 325.2: The following samples were diluted to bring the concentration of target analytes within the calibration range: CCR-2 (400-143063-2), CCR-3 (400-143063-3), CCR-5 (400-143063-5), CCR-6 (400-143063-6), CCR-7 (400-143063-7), CCR-8 (400-143063-8), CCR-9 (400-143063-9) and DUPLICATE (400-143063-17). Elevated reporting limits (RLs) are provided.

Method Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	MCAWW	TAL PEN
6020	Metals (ICP/MS)	SW846	TAL PEN
325.2	Chloride	MCAWW	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN

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 PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-143063-1	CCR-1	Water	09/07/17 13:45	09/09/17 08:42
400-143063-2	CCR-2	Water	09/07/17 12:45	09/09/17 08:42
400-143063-3	CCR-3	Water	09/07/17 11:45	09/09/17 08:42
400-143063-4	CCR-4	Water	09/06/17 09:15	09/09/17 08:42
400-143063-5	CCR-5	Water	09/06/17 16:30	09/09/17 08:42
400-143063-6	CCR-6	Water	09/06/17 11:00	09/09/17 08:42
400-143063-7	CCR-7	Water	09/06/17 12:00	09/09/17 08:42
400-143063-8	CCR-8	Water	09/06/17 14:10	09/09/17 08:42
400-143063-9	CCR-9	Water	09/07/17 17:35	09/09/17 08:42
400-143063-10	CCR-10	Water	09/07/17 16:35	09/09/17 08:42
400-143063-11	CCR-11	Water	09/07/17 15:45	09/09/17 08:42
400-143063-12	CCR-12	Water	09/08/17 12:00	09/09/17 08:42
400-143063-13	CCR-13	Water	09/08/17 10:50	09/09/17 08:42
400-143063-14	CCR-14	Water	09/08/17 09:50	09/09/17 08:42
400-143063-17	DUPLICATE	Water	09/06/17 00:00	09/09/17 08:42
400-143063-18	FIELD BLANK	Water	09/06/17 14:45	09/09/17 08:42

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: CCR-1

Date Collected: 09/07/17 13:45

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-1

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.35		0.20		mg/L			09/12/17 23:15	1
Sulfate	1.8		1.0		mg/L			09/12/17 23:15	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.083		0.050		mg/L		09/21/17 12:06	09/22/17 13:19	5
Calcium	29		0.25		mg/L		09/21/17 12:06	09/22/17 13:19	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	41		2.0		mg/L			09/20/17 08:37	1
Total Dissolved Solids	280		5.0		mg/L			09/13/17 11:59	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: CCR-2

Date Collected: 09/07/17 12:45

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-2

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.43		0.20		mg/L			09/12/17 23:38	1
Sulfate	1.2		1.0		mg/L			09/12/17 23:38	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.071		0.050		mg/L		09/21/17 12:06	09/22/17 13:24	5
Calcium	23		0.25		mg/L		09/21/17 12:06	09/22/17 13:24	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57		4.0		mg/L			09/20/17 09:21	2
Total Dissolved Solids	260		5.0		mg/L			09/13/17 11:59	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: CCR-3

Date Collected: 09/07/17 11:45

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.42		0.20		mg/L			09/13/17 16:09	1
Sulfate	5.4		1.0		mg/L			09/13/17 16:09	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.078		0.050		mg/L		09/21/17 12:06	09/22/17 13:28	5
Calcium	33		0.25		mg/L		09/21/17 12:06	09/22/17 13:28	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95		4.0		mg/L			09/20/17 08:41	2
Total Dissolved Solids	390		5.0		mg/L			09/13/17 11:59	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: CCR-4

Date Collected: 09/06/17 09:15

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.26		0.20		mg/L			09/13/17 12:27	1
Sulfate	4.4		1.0		mg/L			09/13/17 12:27	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.10		0.050		mg/L		09/21/17 12:06	09/22/17 13:33	5
Calcium	20		0.25		mg/L		09/21/17 12:06	09/22/17 13:33	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43		2.0		mg/L			09/20/17 08:09	1
Total Dissolved Solids	240		5.0		mg/L			09/12/17 12:33	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: CCR-5

Date Collected: 09/06/17 16:30

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-5

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.28		0.20		mg/L			09/13/17 16:32	1
Sulfate	ND		1.0		mg/L			09/13/17 16:32	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.10		0.050		mg/L		09/21/17 12:06	09/22/17 14:13	5
Calcium	35		0.25		mg/L		09/21/17 12:06	09/22/17 14:13	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56		4.0		mg/L			09/20/17 08:41	2
Total Dissolved Solids	360		5.0		mg/L			09/12/17 12:33	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: CCR-6

Date Collected: 09/06/17 11:00

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-6

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.29		0.20		mg/L			09/13/17 16:55	1
Sulfate	ND		1.0		mg/L			09/13/17 16:55	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.14		0.050		mg/L		09/21/17 12:06	09/22/17 14:18	5
Calcium	35		0.25		mg/L		09/21/17 12:06	09/22/17 14:18	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	78		4.0		mg/L			09/20/17 08:41	2
Total Dissolved Solids	320		5.0		mg/L			09/12/17 12:33	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: CCR-7

Date Collected: 09/06/17 12:00

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-7

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.32		0.20		mg/L			09/13/17 17:18	1
Sulfate	ND		1.0		mg/L			09/13/17 17:18	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.080		0.050		mg/L		09/21/17 12:06	09/22/17 14:22	5
Calcium	52		0.25		mg/L		09/21/17 12:06	09/22/17 14:22	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	67		4.0		mg/L			09/20/17 09:19	2
Total Dissolved Solids	330		5.0		mg/L			09/12/17 12:33	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: CCR-8

Date Collected: 09/06/17 14:10

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-8

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			09/13/17 17:40	1
Sulfate	1.0		1.0		mg/L			09/13/17 17:40	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.064		0.050		mg/L		09/21/17 12:06	09/22/17 14:27	5
Calcium	13		0.25		mg/L		09/21/17 12:06	09/22/17 14:27	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	80		4.0		mg/L			09/20/17 09:19	2
Total Dissolved Solids	270		5.0		mg/L			09/12/17 12:33	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: CCR-9

Date Collected: 09/07/17 17:35

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-9

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.67		0.20		mg/L			09/13/17 18:26	1
Sulfate	4.7		1.0		mg/L			09/13/17 18:26	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.071		0.050		mg/L		09/21/17 12:06	09/22/17 14:33	5
Calcium	32		0.25		mg/L		09/21/17 12:06	09/22/17 14:33	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	59		4.0		mg/L			09/20/17 09:21	2
Total Dissolved Solids	330		5.0		mg/L			09/13/17 11:59	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: CCR-10

Date Collected: 09/07/17 16:35

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-10

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.70		0.20		mg/L			09/13/17 18:49	1
Sulfate	9.8		1.0		mg/L			09/13/17 18:49	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.069		0.050		mg/L		09/21/17 12:06	09/22/17 14:37	5
Calcium	33		0.25		mg/L		09/21/17 12:06	09/22/17 14:37	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40		2.0		mg/L			09/20/17 08:38	1
Total Dissolved Solids	320		5.0		mg/L			09/13/17 11:59	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: CCR-11

Date Collected: 09/07/17 15:45

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-11

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.83		0.20		mg/L			09/15/17 01:05	1
Sulfate	3.8		1.0		mg/L			09/15/17 01:05	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.060		0.050		mg/L		09/21/17 12:06	09/22/17 14:42	5
Calcium	28		0.25		mg/L		09/21/17 12:06	09/22/17 14:42	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26		2.0		mg/L			09/20/17 11:56	1
Total Dissolved Solids	200		5.0		mg/L			09/13/17 11:59	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: CCR-12

Date Collected: 09/08/17 12:00

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-12

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			09/15/17 02:13	1
Sulfate	11		1.0		mg/L			09/15/17 02:13	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		09/21/17 12:06	09/22/17 14:46	5
Calcium	19		0.25		mg/L		09/21/17 12:06	09/22/17 14:46	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		2.0		mg/L			09/20/17 12:10	1
Total Dissolved Solids	140		5.0		mg/L			09/14/17 13:06	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: CCR-13

Date Collected: 09/08/17 10:50

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-13

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			09/14/17 08:44	1
Sulfate	5.2		1.0		mg/L			09/14/17 08:44	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.052		0.050		mg/L		09/21/17 12:06	09/22/17 14:51	5
Calcium	22		0.25		mg/L		09/21/17 12:06	09/22/17 14:51	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14		2.0		mg/L			09/20/17 12:10	1
Total Dissolved Solids	180		5.0		mg/L			09/14/17 13:06	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: CCR-14

Date Collected: 09/08/17 09:50

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-14

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.21		0.20		mg/L			09/14/17 09:06	1
Sulfate	ND		1.0		mg/L			09/14/17 09:06	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		09/21/17 12:06	09/22/17 14:55	5
Calcium	18		0.25		mg/L		09/21/17 12:06	09/22/17 14:55	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0		mg/L			09/20/17 12:10	1
Total Dissolved Solids	130		5.0		mg/L			09/14/17 13:06	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: DUPLICATE

Lab Sample ID: 400-143063-17

Date Collected: 09/06/17 00:00

Matrix: Water

Date Received: 09/09/17 08:42

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.27		0.20		mg/L			09/14/17 10:15	1
Sulfate	ND		1.0		mg/L			09/14/17 10:15	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.11		0.050		mg/L		09/21/17 12:06	09/22/17 15:27	5
Calcium	36		0.25		mg/L		09/21/17 12:06	09/22/17 15:27	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56		4.0		mg/L			09/20/17 09:19	2
Total Dissolved Solids	380		5.0		mg/L			09/12/17 12:33	1

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: FIELD BLANK

Lab Sample ID: 400-143063-18

Date Collected: 09/06/17 14:45

Matrix: Water

Date Received: 09/09/17 08:42

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			09/14/17 10:38	1
Sulfate	ND		1.0		mg/L			09/14/17 10:38	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		09/21/17 12:06	09/22/17 15:31	5
Calcium	ND		0.25		mg/L		09/21/17 12:06	09/22/17 15:31	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			09/20/17 08:37	1
Total Dissolved Solids	ND		5.0		mg/L			09/12/17 12:33	1

Definitions/Glossary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Qualifiers

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.

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.

General Chemistry

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.
α	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)

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: CCR-1

Date Collected: 09/07/17 13:45

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	367679	09/12/17 23:15	JAW	TAL PEN
Total Recoverable	Prep	3005A			368894	09/21/17 12:06	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	369232	09/22/17 13:19	DRE	TAL PEN
Total/NA	Analysis	325.2		1	368718	09/20/17 08:37	RRC	TAL PEN
Total/NA	Analysis	SM 2540C		1	367812	09/13/17 11:59	TET	TAL PEN

Client Sample ID: CCR-2

Date Collected: 09/07/17 12:45

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	367679	09/12/17 23:38	JAW	TAL PEN
Total Recoverable	Prep	3005A			368894	09/21/17 12:06	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	369232	09/22/17 13:24	DRE	TAL PEN
Total/NA	Analysis	325.2		2	368718	09/20/17 09:21	RRC	TAL PEN
Total/NA	Analysis	SM 2540C		1	367812	09/13/17 11:59	TET	TAL PEN

Client Sample ID: CCR-3

Date Collected: 09/07/17 11:45

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	367817	09/13/17 16:09	JAW	TAL PEN
Total Recoverable	Prep	3005A			368894	09/21/17 12:06	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	369232	09/22/17 13:28	DRE	TAL PEN
Total/NA	Analysis	325.2		2	368718	09/20/17 08:41	RRC	TAL PEN
Total/NA	Analysis	SM 2540C		1	367812	09/13/17 11:59	TET	TAL PEN

Client Sample ID: CCR-4

Date Collected: 09/06/17 09:15

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	367817	09/13/17 12:27	JAW	TAL PEN
Total Recoverable	Prep	3005A			368894	09/21/17 12:06	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	369232	09/22/17 13:33	DRE	TAL PEN
Total/NA	Analysis	325.2		1	368718	09/20/17 08:09	RRC	TAL PEN
Total/NA	Analysis	SM 2540C		1	367642	09/12/17 12:33	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: CCR-5

Date Collected: 09/06/17 16:30

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	367817	09/13/17 16:32	JAW	TAL PEN
Total Recoverable	Prep	3005A			368894	09/21/17 12:06	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	369232	09/22/17 14:13	DRE	TAL PEN
Total/NA	Analysis	325.2		2	368718	09/20/17 08:41	RRC	TAL PEN
Total/NA	Analysis	SM 2540C		1	367642	09/12/17 12:33	TET	TAL PEN

Client Sample ID: CCR-6

Date Collected: 09/06/17 11:00

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	367817	09/13/17 16:55	JAW	TAL PEN
Total Recoverable	Prep	3005A			368894	09/21/17 12:06	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	369232	09/22/17 14:18	DRE	TAL PEN
Total/NA	Analysis	325.2		2	368718	09/20/17 08:41	RRC	TAL PEN
Total/NA	Analysis	SM 2540C		1	367642	09/12/17 12:33	TET	TAL PEN

Client Sample ID: CCR-7

Date Collected: 09/06/17 12:00

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	367817	09/13/17 17:18	JAW	TAL PEN
Total Recoverable	Prep	3005A			368894	09/21/17 12:06	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	369232	09/22/17 14:22	DRE	TAL PEN
Total/NA	Analysis	325.2		2	368718	09/20/17 09:19	RRC	TAL PEN
Total/NA	Analysis	SM 2540C		1	367642	09/12/17 12:33	TET	TAL PEN

Client Sample ID: CCR-8

Date Collected: 09/06/17 14:10

Date Received: 09/09/17 08:42

Lab Sample ID: 400-143063-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	367817	09/13/17 17:40	JAW	TAL PEN
Total Recoverable	Prep	3005A			368894	09/21/17 12:06	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	369232	09/22/17 14:27	DRE	TAL PEN
Total/NA	Analysis	325.2		2	368718	09/20/17 09:19	RRC	TAL PEN
Total/NA	Analysis	SM 2540C		1	367642	09/12/17 12:33	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: CCR-9

Lab Sample ID: 400-143063-9

Date Collected: 09/07/17 17:35

Matrix: Water

Date Received: 09/09/17 08:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	367817	09/13/17 18:26	JAW	TAL PEN
Total Recoverable	Prep	3005A			368894	09/21/17 12:06	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	369232	09/22/17 14:33	DRE	TAL PEN
Total/NA	Analysis	325.2		2	368718	09/20/17 09:21	RRC	TAL PEN
Total/NA	Analysis	SM 2540C		1	367812	09/13/17 11:59	TET	TAL PEN

Client Sample ID: CCR-10

Lab Sample ID: 400-143063-10

Date Collected: 09/07/17 16:35

Matrix: Water

Date Received: 09/09/17 08:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	367817	09/13/17 18:49	JAW	TAL PEN
Total Recoverable	Prep	3005A			368894	09/21/17 12:06	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	369232	09/22/17 14:37	DRE	TAL PEN
Total/NA	Analysis	325.2		1	368718	09/20/17 08:38	RRC	TAL PEN
Total/NA	Analysis	SM 2540C		1	367812	09/13/17 11:59	TET	TAL PEN

Client Sample ID: CCR-11

Lab Sample ID: 400-143063-11

Date Collected: 09/07/17 15:45

Matrix: Water

Date Received: 09/09/17 08:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	368095	09/15/17 01:05	JAW	TAL PEN
Total Recoverable	Prep	3005A			368894	09/21/17 12:06	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	369232	09/22/17 14:42	DRE	TAL PEN
Total/NA	Analysis	325.2		1	368721	09/20/17 11:56	RRC	TAL PEN
Total/NA	Analysis	SM 2540C		1	367812	09/13/17 11:59	TET	TAL PEN

Client Sample ID: CCR-12

Lab Sample ID: 400-143063-12

Date Collected: 09/08/17 12:00

Matrix: Water

Date Received: 09/09/17 08:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	368095	09/15/17 02:13	JAW	TAL PEN
Total Recoverable	Prep	3005A			368894	09/21/17 12:06	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	369232	09/22/17 14:46	DRE	TAL PEN
Total/NA	Analysis	325.2		1	368721	09/20/17 12:10	RRC	TAL PEN
Total/NA	Analysis	SM 2540C		1	367974	09/14/17 13:06	TET	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Client Sample ID: CCR-13

Lab Sample ID: 400-143063-13

Date Collected: 09/08/17 10:50

Matrix: Water

Date Received: 09/09/17 08:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	367817	09/14/17 08:44	JAW	TAL PEN
Total Recoverable	Prep	3005A			368894	09/21/17 12:06	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	369232	09/22/17 14:51	DRE	TAL PEN
Total/NA	Analysis	325.2		1	368721	09/20/17 12:10	RRC	TAL PEN
Total/NA	Analysis	SM 2540C		1	367974	09/14/17 13:06	TET	TAL PEN

Client Sample ID: CCR-14

Lab Sample ID: 400-143063-14

Date Collected: 09/08/17 09:50

Matrix: Water

Date Received: 09/09/17 08:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	367817	09/14/17 09:06	JAW	TAL PEN
Total Recoverable	Prep	3005A			368894	09/21/17 12:06	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	369232	09/22/17 14:55	DRE	TAL PEN
Total/NA	Analysis	325.2		1	368721	09/20/17 12:10	RRC	TAL PEN
Total/NA	Analysis	SM 2540C		1	367974	09/14/17 13:06	TET	TAL PEN

Client Sample ID: DUPLICATE

Lab Sample ID: 400-143063-17

Date Collected: 09/06/17 00:00

Matrix: Water

Date Received: 09/09/17 08:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	367817	09/14/17 10:15	JAW	TAL PEN
Total Recoverable	Prep	3005A			368894	09/21/17 12:06	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	369232	09/22/17 15:27	DRE	TAL PEN
Total/NA	Analysis	325.2		2	368718	09/20/17 09:19	RRC	TAL PEN
Total/NA	Analysis	SM 2540C		1	367642	09/12/17 12:33	TET	TAL PEN

Client Sample ID: FIELD BLANK

Lab Sample ID: 400-143063-18

Date Collected: 09/06/17 14:45

Matrix: Water

Date Received: 09/09/17 08:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		1	367817	09/14/17 10:38	JAW	TAL PEN
Total Recoverable	Prep	3005A			368894	09/21/17 12:06	KWN	TAL PEN
Total Recoverable	Analysis	6020		5	369232	09/22/17 15:31	DRE	TAL PEN
Total/NA	Analysis	325.2		1	368718	09/20/17 08:37	RRC	TAL PEN
Total/NA	Analysis	SM 2540C		1	367642	09/12/17 12:33	TET	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

HPLC/IC

Analysis Batch: 367679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143063-1	CCR-1	Total/NA	Water	300.0	
400-143063-2	CCR-2	Total/NA	Water	300.0	
MB 400-367679/4	Method Blank	Total/NA	Water	300.0	
LCS 400-367679/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-367679/6	Lab Control Sample Dup	Total/NA	Water	300.0	
400-143067-F-7 MS	Matrix Spike	Total/NA	Water	300.0	
400-143067-F-7 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 367817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143063-3	CCR-3	Total/NA	Water	300.0	
400-143063-4	CCR-4	Total/NA	Water	300.0	
400-143063-5	CCR-5	Total/NA	Water	300.0	
400-143063-6	CCR-6	Total/NA	Water	300.0	
400-143063-7	CCR-7	Total/NA	Water	300.0	
400-143063-8	CCR-8	Total/NA	Water	300.0	
400-143063-9	CCR-9	Total/NA	Water	300.0	
400-143063-10	CCR-10	Total/NA	Water	300.0	
400-143063-13	CCR-13	Total/NA	Water	300.0	
400-143063-14	CCR-14	Total/NA	Water	300.0	
400-143063-17	DUPLICATE	Total/NA	Water	300.0	
400-143063-18	FIELD BLANK	Total/NA	Water	300.0	
MB 400-367817/4	Method Blank	Total/NA	Water	300.0	
LCS 400-367817/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-367817/6	Lab Control Sample Dup	Total/NA	Water	300.0	
400-143063-4 MS	CCR-4	Total/NA	Water	300.0	
400-143063-4 MSD	CCR-4	Total/NA	Water	300.0	
400-143063-8 MS	CCR-8	Total/NA	Water	300.0	

Analysis Batch: 368095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143063-11	CCR-11	Total/NA	Water	300.0	
400-143063-12	CCR-12	Total/NA	Water	300.0	
MB 400-368095/68	Method Blank	Total/NA	Water	300.0	
LCS 400-368095/69	Lab Control Sample	Total/NA	Water	300.0	
LCSD 400-368095/70	Lab Control Sample Dup	Total/NA	Water	300.0	
400-143063-11 MS	CCR-11	Total/NA	Water	300.0	
400-143063-11 MSD	CCR-11	Total/NA	Water	300.0	

Metals

Prep Batch: 368894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143063-1	CCR-1	Total Recoverable	Water	3005A	
400-143063-2	CCR-2	Total Recoverable	Water	3005A	
400-143063-3	CCR-3	Total Recoverable	Water	3005A	
400-143063-4	CCR-4	Total Recoverable	Water	3005A	
400-143063-5	CCR-5	Total Recoverable	Water	3005A	
400-143063-6	CCR-6	Total Recoverable	Water	3005A	
400-143063-7	CCR-7	Total Recoverable	Water	3005A	

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Metals (Continued)

Prep Batch: 368894 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143063-8	CCR-8	Total Recoverable	Water	3005A	
400-143063-9	CCR-9	Total Recoverable	Water	3005A	
400-143063-10	CCR-10	Total Recoverable	Water	3005A	
400-143063-11	CCR-11	Total Recoverable	Water	3005A	
400-143063-12	CCR-12	Total Recoverable	Water	3005A	
400-143063-13	CCR-13	Total Recoverable	Water	3005A	
400-143063-14	CCR-14	Total Recoverable	Water	3005A	
400-143063-17	DUPLICATE	Total Recoverable	Water	3005A	
400-143063-18	FIELD BLANK	Total Recoverable	Water	3005A	
MB 400-368894/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-368894/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-143063-4 MS	CCR-4	Total Recoverable	Water	3005A	
400-143063-4 MSD	CCR-4	Total Recoverable	Water	3005A	

Analysis Batch: 369232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143063-1	CCR-1	Total Recoverable	Water	6020	368894
400-143063-2	CCR-2	Total Recoverable	Water	6020	368894
400-143063-3	CCR-3	Total Recoverable	Water	6020	368894
400-143063-4	CCR-4	Total Recoverable	Water	6020	368894
400-143063-5	CCR-5	Total Recoverable	Water	6020	368894
400-143063-6	CCR-6	Total Recoverable	Water	6020	368894
400-143063-7	CCR-7	Total Recoverable	Water	6020	368894
400-143063-8	CCR-8	Total Recoverable	Water	6020	368894
400-143063-9	CCR-9	Total Recoverable	Water	6020	368894
400-143063-10	CCR-10	Total Recoverable	Water	6020	368894
400-143063-11	CCR-11	Total Recoverable	Water	6020	368894
400-143063-12	CCR-12	Total Recoverable	Water	6020	368894
400-143063-13	CCR-13	Total Recoverable	Water	6020	368894
400-143063-14	CCR-14	Total Recoverable	Water	6020	368894
400-143063-17	DUPLICATE	Total Recoverable	Water	6020	368894
400-143063-18	FIELD BLANK	Total Recoverable	Water	6020	368894
MB 400-368894/1-A ^5	Method Blank	Total Recoverable	Water	6020	368894
LCS 400-368894/2-A	Lab Control Sample	Total Recoverable	Water	6020	368894
400-143063-4 MS	CCR-4	Total Recoverable	Water	6020	368894
400-143063-4 MSD	CCR-4	Total Recoverable	Water	6020	368894

General Chemistry

Analysis Batch: 367642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143063-4	CCR-4	Total/NA	Water	SM 2540C	
400-143063-5	CCR-5	Total/NA	Water	SM 2540C	
400-143063-6	CCR-6	Total/NA	Water	SM 2540C	
400-143063-7	CCR-7	Total/NA	Water	SM 2540C	
400-143063-8	CCR-8	Total/NA	Water	SM 2540C	
400-143063-17	DUPLICATE	Total/NA	Water	SM 2540C	
400-143063-18	FIELD BLANK	Total/NA	Water	SM 2540C	
MB 400-367642/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-367642/2	Lab Control Sample	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

General Chemistry (Continued)

Analysis Batch: 367642 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143063-4 DU	CCR-4	Total/NA	Water	SM 2540C	

Analysis Batch: 367812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143063-1	CCR-1	Total/NA	Water	SM 2540C	
400-143063-2	CCR-2	Total/NA	Water	SM 2540C	
400-143063-3	CCR-3	Total/NA	Water	SM 2540C	
400-143063-9	CCR-9	Total/NA	Water	SM 2540C	
400-143063-10	CCR-10	Total/NA	Water	SM 2540C	
400-143063-11	CCR-11	Total/NA	Water	SM 2540C	
MB 400-367812/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-367812/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-142947-A-2 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 367974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143063-12	CCR-12	Total/NA	Water	SM 2540C	
400-143063-13	CCR-13	Total/NA	Water	SM 2540C	
400-143063-14	CCR-14	Total/NA	Water	SM 2540C	
MB 400-367974/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-367974/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-143063-12 DU	CCR-12	Total/NA	Water	SM 2540C	

Analysis Batch: 368718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143063-1	CCR-1	Total/NA	Water	325.2	
400-143063-2	CCR-2	Total/NA	Water	325.2	
400-143063-3	CCR-3	Total/NA	Water	325.2	
400-143063-4	CCR-4	Total/NA	Water	325.2	
400-143063-5	CCR-5	Total/NA	Water	325.2	
400-143063-6	CCR-6	Total/NA	Water	325.2	
400-143063-7	CCR-7	Total/NA	Water	325.2	
400-143063-8	CCR-8	Total/NA	Water	325.2	
400-143063-9	CCR-9	Total/NA	Water	325.2	
400-143063-10	CCR-10	Total/NA	Water	325.2	
400-143063-17	DUPLICATE	Total/NA	Water	325.2	
400-143063-18	FIELD BLANK	Total/NA	Water	325.2	
MB 400-368718/6	Method Blank	Total/NA	Water	325.2	
LCS 400-368718/7	Lab Control Sample	Total/NA	Water	325.2	
MRL 400-368718/3	Lab Control Sample	Total/NA	Water	325.2	
400-143063-4 MS	CCR-4	Total/NA	Water	325.2	
400-143063-4 MSD	CCR-4	Total/NA	Water	325.2	
400-143177-A-1 MS	Matrix Spike	Total/NA	Water	325.2	
400-143177-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	325.2	

Analysis Batch: 368721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143063-11	CCR-11	Total/NA	Water	325.2	
400-143063-12	CCR-12	Total/NA	Water	325.2	
400-143063-13	CCR-13	Total/NA	Water	325.2	
400-143063-14	CCR-14	Total/NA	Water	325.2	

TestAmerica Pensacola

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

General Chemistry (Continued)

Analysis Batch: 368721 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-368721/6	Method Blank	Total/NA	Water	325.2	
LCS 400-368721/7	Lab Control Sample	Total/NA	Water	325.2	
MRL 400-368721/3	Lab Control Sample	Total/NA	Water	325.2	
400-143177-A-9 MS	Matrix Spike	Total/NA	Water	325.2	
400-143177-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	325.2	
400-143177-A-19 MS	Matrix Spike	Total/NA	Water	325.2	
400-143177-A-19 MSD	Matrix Spike Duplicate	Total/NA	Water	325.2	

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 400-367679/4

Matrix: Water

Analysis Batch: 367679

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			09/12/17 12:36	1
Sulfate	ND		1.0		mg/L			09/12/17 12:36	1

Lab Sample ID: LCS 400-367679/5

Matrix: Water

Analysis Batch: 367679

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	9.95		mg/L		100	90 - 110
Sulfate	10.0	10.0		mg/L		100	90 - 110

Lab Sample ID: LCSD 400-367679/6

Matrix: Water

Analysis Batch: 367679

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	10.1		mg/L		101	90 - 110	2	15
Sulfate	10.0	10.0		mg/L		100	90 - 110	0	15

Lab Sample ID: 400-143067-F-7 MS

Matrix: Water

Analysis Batch: 367679

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
Fluoride	ND		50.0	52.1		mg/L		104	80 - 120
Sulfate	240		50.0	289	E 4	mg/L		103	80 - 120

Lab Sample ID: 400-143067-F-7 MSD

Matrix: Water

Analysis Batch: 367679

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
Fluoride	ND		50.0	52.7		mg/L		105	80 - 120	1	20
Sulfate	240		50.0	292	E 4	mg/L		109	80 - 120	1	20

Lab Sample ID: MB 400-367817/4

Matrix: Water

Analysis Batch: 367817

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			09/13/17 11:19	1
Sulfate	ND		1.0		mg/L			09/13/17 11:19	1

Lab Sample ID: LCS 400-367817/5

Matrix: Water

Analysis Batch: 367817

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	9.99		mg/L		100	90 - 110

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 400-367817/5

Matrix: Water

Analysis Batch: 367817

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	10.0	10.0		mg/L		100	90 - 110

Lab Sample ID: LCSD 400-367817/6

Matrix: Water

Analysis Batch: 367817

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	9.97		mg/L		100	90 - 110	0	15
Sulfate	10.0	9.99		mg/L		100	90 - 110	0	15

Lab Sample ID: 400-143063-4 MS

Matrix: Water

Analysis Batch: 367817

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.26		10.0	10.5		mg/L		103	80 - 120
Sulfate	4.4		10.0	14.9		mg/L		105	80 - 120

Lab Sample ID: 400-143063-4 MSD

Matrix: Water

Analysis Batch: 367817

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.26		10.0	10.5		mg/L		103	80 - 120	0	20
Sulfate	4.4		10.0	15.0		mg/L		106	80 - 120	1	20

Lab Sample ID: 400-143063-8 MS

Matrix: Water

Analysis Batch: 367817

Client Sample ID: CCR-8

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	ND		10.0	10.5		mg/L		104	80 - 120
Sulfate	1.0		10.0	11.7		mg/L		106	80 - 120

Lab Sample ID: MB 400-368095/68

Matrix: Water

Analysis Batch: 368095

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20		mg/L			09/14/17 23:56	1
Sulfate	ND		1.0		mg/L			09/14/17 23:56	1

Lab Sample ID: LCS 400-368095/69

Matrix: Water

Analysis Batch: 368095

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	10.0	10.0		mg/L		100	90 - 110
Sulfate	10.0	9.99		mg/L		100	90 - 110

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 400-368095/70

Matrix: Water

Analysis Batch: 368095

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	10.0	10.1		mg/L		101	90 - 110	1	15
Sulfate	10.0	9.84		mg/L		98	90 - 110	1	15

Lab Sample ID: 400-143063-11 MS

Matrix: Water

Analysis Batch: 368095

Client Sample ID: CCR-11

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.83		10.0	10.9		mg/L		101	80 - 120		
Sulfate	3.8		10.0	14.0		mg/L		102	80 - 120		

Lab Sample ID: 400-143063-11 MSD

Matrix: Water

Analysis Batch: 368095

Client Sample ID: CCR-11

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.83		10.0	11.1		mg/L		102	80 - 120	1	20
Sulfate	3.8		10.0	13.8		mg/L		100	80 - 120	1	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-368894/1-A ^5

Matrix: Water

Analysis Batch: 369232

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 368894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		09/21/17 12:06	09/22/17 13:06	5
Calcium	ND		0.25		mg/L		09/21/17 12:06	09/22/17 13:06	5

Lab Sample ID: LCS 400-368894/2-A

Matrix: Water

Analysis Batch: 369232

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 368894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	0.100	0.100		mg/L		100	80 - 120		
Calcium	5.00	4.91		mg/L		98	80 - 120		

Lab Sample ID: 400-143063-4 MS

Matrix: Water

Analysis Batch: 369232

Client Sample ID: CCR-4

Prep Type: Total Recoverable

Prep Batch: 368894

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	0.10		0.100	0.214		mg/L		109	75 - 125		
Calcium	20		5.00	25.6	4	mg/L		109	75 - 125		

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-143063-4 MSD

Matrix: Water

Analysis Batch: 369232

Client Sample ID: CCR-4

Prep Type: Total Recoverable

Prep Batch: 368894

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	0.10		0.100	0.217		mg/L		112	75 - 125	2	20
Calcium	20		5.00	25.2	4	mg/L		101	75 - 125	2	20

Method: 325.2 - Chloride

Lab Sample ID: MB 400-368718/6

Matrix: Water

Analysis Batch: 368718

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			09/20/17 07:14	1

Lab Sample ID: LCS 400-368718/7

Matrix: Water

Analysis Batch: 368718

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	29.7		mg/L		99	90 - 110

Lab Sample ID: MRL 400-368718/3

Matrix: Water

Analysis Batch: 368718

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	2.29		mg/L		115	50 - 150

Lab Sample ID: 400-143063-4 MS

Matrix: Water

Analysis Batch: 368718

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	43		10.0	49.9	4	mg/L		73	73 - 120

Lab Sample ID: 400-143063-4 MSD

Matrix: Water

Analysis Batch: 368718

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	43		10.0	49.8	4	mg/L		72	73 - 120	0	8

Lab Sample ID: 400-143177-A-1 MS

Matrix: Water

Analysis Batch: 368718

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	2.5		10.0	13.7		mg/L		111	73 - 120

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Method: 325.2 - Chloride (Continued)

Lab Sample ID: 400-143177-A-1 MSD

Matrix: Water

Analysis Batch: 368718

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	2.5		10.0	13.7		mg/L		112	73 - 120	0	8

Lab Sample ID: MB 400-368721/6

Matrix: Water

Analysis Batch: 368721

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		2.0		mg/L			09/20/17 09:43	1

Lab Sample ID: LCS 400-368721/7

Matrix: Water

Analysis Batch: 368721

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	30.4		mg/L		101	90 - 110

Lab Sample ID: MRL 400-368721/3

Matrix: Water

Analysis Batch: 368721

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	2.23		mg/L		112	50 - 150

Lab Sample ID: 400-143177-A-9 MS

Matrix: Water

Analysis Batch: 368721

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	3.5		10.0	14.7		mg/L		112	73 - 120

Lab Sample ID: 400-143177-A-9 MSD

Matrix: Water

Analysis Batch: 368721

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	3.5		10.0	14.6		mg/L		112	73 - 120	0	8

Lab Sample ID: 400-143177-A-19 MS

Matrix: Water

Analysis Batch: 368721

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	2.8		10.0	13.8		mg/L		110	73 - 120

Lab Sample ID: 400-143177-A-19 MSD

Matrix: Water

Analysis Batch: 368721

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	2.8		10.0	13.8		mg/L		110	73 - 120	0	8

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

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

Lab Sample ID: MB 400-367642/1

Matrix: Water

Analysis Batch: 367642

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			09/12/17 12:33	1

Lab Sample ID: LCS 400-367642/2

Matrix: Water

Analysis Batch: 367642

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	293	266		mg/L		91	78 - 122

Lab Sample ID: 400-143063-4 DU

Matrix: Water

Analysis Batch: 367642

Client Sample ID: CCR-4

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	240		240		mg/L		0	5

Lab Sample ID: MB 400-367812/1

Matrix: Water

Analysis Batch: 367812

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			09/13/17 11:59	1

Lab Sample ID: LCS 400-367812/2

Matrix: Water

Analysis Batch: 367812

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	293	258		mg/L		88	78 - 122

Lab Sample ID: 400-142947-A-2 DU

Matrix: Water

Analysis Batch: 367812

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	110		106		mg/L		0	5

Lab Sample ID: MB 400-367974/1

Matrix: Water

Analysis Batch: 367974

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		5.0		mg/L			09/14/17 13:06	1

TestAmerica Pensacola

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

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

Lab Sample ID: LCS 400-367974/2

Matrix: Water

Analysis Batch: 367974

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	293	286		mg/L		98	78 - 122

Lab Sample ID: 400-143063-12 DU

Matrix: Water

Analysis Batch: 367974

Client Sample ID: CCR-12

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	140		138		mg/L		0	5

3355 McElmore Drive
Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

testamerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information		Sampler: <i>GM</i>	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):
Client Contact: Terry Elnaggar		Phone:	E-Mail: cheyenne.whitmire@testamericainc.com	
Company: Pivotal Engineering LLC				
Address: 1515 Poydras Street Suite 1875				
City: New Orleans				
State, Zip: LA, 70112				
Phone:				
Email: tehnaggar@pivotaleng.com				
Project Name: Entergy Nelson - CCR Detection Monitoring				
Site: <i>CADL</i>				

Due Date Requested:		Analysis Requested	
TAT Requested (days):			
PO #:			
Purchase Order not required			
WO #:			
Project #: 40006993			
SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=tissue, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6020 - Boron and Calcium	2540C - TDS: 325.1 - Chloride: 300.0 - Fluoride, Sulfate	Total Number of Containers	Special Instructions/Note:
CCR-1	9/7	1345	G	Water	N	N	N	N		
CCR-2	↓	1245	↓	Water	N	N	N	N		
CCR-3	↓	1145	↓	Water	N	N	N	N		
CCR-4	9/6	0915	G	Water	N	N	N	N		
CCR-5	↓	1630	↓	Water	N	N	N	N		
CCR-6	↓	1100	↓	Water	N	N	N	N		
CCR-7	↓	1200	↓	Water	N	N	N	N		
CCR-8	↓	1410	↓	Water	N	N	N	N		
CCR-9	9/7	1735	↓	Water	N	N	N	N		
CCR-10	↓	1635	↓	Water	N	N	N	N		
CCR-11	↓	1545	↓	Water	N	N	N	N		

Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
☒ Non-Hazard	☐ Flammable	☐ Return To Client	☒ Disposal By Lab
Deliverable Requested: I, II, III, IV, Other (specify)		Archive For / Months	

Empty Kit Relinquished by:		Time:	
Relinquished by:	Date/Time: 9/8/17 1600	Received by:	Date/Time: 9/8/17 842
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

Custody Seals Intact:	Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.4°C, 1.8°C, 3.0°C	
IR2	



Login Sample Receipt Checklist

Client: Pivotal Engineering LLC

Job Number: 400-143063-1

SDG Number: CADL

Login Number: 143063

List Number: 1

Creator: Hughes, Nicholas T

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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	1.4°C, 1.8°C, 3.0°C - IR2
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.	False	Did not receive CCR-15 rads bottles; CCR-15 and -16 rads cancelled by client.
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CCR Detection

TestAmerica Job ID: 400-143063-1
SDG: CADL

Laboratory: TestAmerica Pensacola

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
Alabama	State Program	4	40150	06-30-18
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-18
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-18
Georgia	State Program	4	N/A	06-30-18
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-18
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-18
Massachusetts	State Program	1	M-FL094	06-30-18
Michigan	State Program	5	9912	06-30-18
New Jersey	NELAP	2	FL006	06-30-18
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-18
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-18
Tennessee	State Program	4	TN02907	06-30-18
Texas	NELAP	6	T104704286-17-12	09-30-18
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-18
Washington	State Program	10	C915	05-15-18
West Virginia DEP	State Program	3	136	06-30-18

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-144464-2

Client Project/Site: Entergy Nelson - CADL Resample

For:

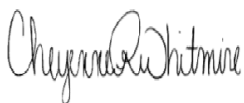
Pivotal Engineering LLC

1515 Poydras Street

Suite 1875

New Orleans, Louisiana 70112

Attn: Terry Elnaggar



Authorized for release by:

12/15/2017 5:04:05 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

5

6

7

8

9

10

11

Table of Contents

Cover Page	1
Table of Contents	2
Method Summary	3
Sample Summary	4
Client Sample Results	5
Definitions	7
Chronicle	8
QC Association	9
QC Sample Results	10
Receipt Checklists	11
Certification Summary	12



Method Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CADL Resample

TestAmerica Job ID: 400-144464-2

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN

Protocol References:

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

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Sample Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CADL Resample

TestAmerica Job ID: 400-144464-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-144464-1	CCR-6	Water	10/10/17 14:00	10/11/17 08:55
400-144464-2	CCR-7	Water	10/10/17 15:40	10/11/17 08:55

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CADL Resample

TestAmerica Job ID: 400-144464-2

Client Sample ID: CCR-6

Date Collected: 10/10/17 14:00

Date Received: 10/11/17 08:55

Lab Sample ID: 400-144464-1

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.10		0.050		mg/L		12/13/17 09:29	12/13/17 17:25	5
Calcium	32		0.25		mg/L		12/13/17 09:29	12/13/17 17:25	5

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron, Dissolved	0.11		0.050		mg/L		12/13/17 09:29	12/13/17 17:52	5
Calcium, Dissolved	32		0.25		mg/L		12/13/17 09:29	12/13/17 17:52	5

Client Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CADL Resample

TestAmerica Job ID: 400-144464-2

Client Sample ID: CCR-7

Date Collected: 10/10/17 15:40

Date Received: 10/11/17 08:55

Lab Sample ID: 400-144464-2

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	46		0.25		mg/L		12/13/17 09:29	12/13/17 17:48	5

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium, Dissolved	46		0.25		mg/L		12/13/17 09:29	12/13/17 17:57	5

Definitions/Glossary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CADL Resample

TestAmerica Job ID: 400-144464-2

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.
α	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)

Lab Chronicle

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CADL Resample

TestAmerica Job ID: 400-144464-2

Client Sample ID: CCR-6

Date Collected: 10/10/17 14:00

Date Received: 10/11/17 08:55

Lab Sample ID: 400-144464-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			379496	12/13/17 09:29	DRE	TAL PEN
Dissolved	Analysis	6020		5	379638	12/13/17 17:52	DRE	TAL PEN
Total Recoverable	Prep	3005A			379496	12/13/17 09:29	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	379638	12/13/17 17:25	DRE	TAL PEN

Client Sample ID: CCR-7

Date Collected: 10/10/17 15:40

Date Received: 10/11/17 08:55

Lab Sample ID: 400-144464-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			379496	12/13/17 09:29	DRE	TAL PEN
Dissolved	Analysis	6020		5	379638	12/13/17 17:57	DRE	TAL PEN
Total Recoverable	Prep	3005A			379496	12/13/17 09:29	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	379638	12/13/17 17:48	DRE	TAL PEN

Laboratory References:

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CADL Resample

TestAmerica Job ID: 400-144464-2

Metals

Prep Batch: 379496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-144464-1	CCR-6	Dissolved	Water	3005A	
400-144464-1	CCR-6	Total Recoverable	Water	3005A	
400-144464-2	CCR-7	Dissolved	Water	3005A	
400-144464-2	CCR-7	Total Recoverable	Water	3005A	
MB 400-379496/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-379496/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-144464-1 MS	CCR-6	Total Recoverable	Water	3005A	
400-144464-1 MSD	CCR-6	Total Recoverable	Water	3005A	

Analysis Batch: 379638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-144464-1	CCR-6	Dissolved	Water	6020	379496
400-144464-1	CCR-6	Total Recoverable	Water	6020	379496
400-144464-2	CCR-7	Dissolved	Water	6020	379496
400-144464-2	CCR-7	Total Recoverable	Water	6020	379496
MB 400-379496/1-A ^5	Method Blank	Total Recoverable	Water	6020	379496
LCS 400-379496/2-A	Lab Control Sample	Total Recoverable	Water	6020	379496
400-144464-1 MS	CCR-6	Total Recoverable	Water	6020	379496
400-144464-1 MSD	CCR-6	Total Recoverable	Water	6020	379496

QC Sample Results

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CADL Resample

TestAmerica Job ID: 400-144464-2

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-379496/1-A ^5

Matrix: Water

Analysis Batch: 379638

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 379496

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	ND		0.050		mg/L		12/13/17 09:29	12/13/17 17:16	5
Boron, Dissolved	ND		0.050		mg/L		12/13/17 09:29	12/13/17 17:16	5
Calcium	ND		0.25		mg/L		12/13/17 09:29	12/13/17 17:16	5
Calcium, Dissolved	ND		0.25		mg/L		12/13/17 09:29	12/13/17 17:16	5

Lab Sample ID: LCS 400-379496/2-A

Matrix: Water

Analysis Batch: 379638

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 379496

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.100	0.102		mg/L		102	80 - 120
Boron, Dissolved	0.100	0.102		mg/L		102	80 - 120
Calcium	5.00	5.23		mg/L		105	80 - 120
Calcium, Dissolved	5.00	5.23		mg/L		105	80 - 120

Lab Sample ID: 400-144464-1 MS

Matrix: Water

Analysis Batch: 379638

Client Sample ID: CCR-6

Prep Type: Total Recoverable

Prep Batch: 379496

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.10		0.100	0.222		mg/L		120	75 - 125
Boron, Dissolved	0.10		0.100	0.222		mg/L		120	75 - 125
Calcium	32		5.00	37.1	4	mg/L		110	75 - 125
Calcium, Dissolved	32		5.00	37.1	4	mg/L		110	75 - 125

Lab Sample ID: 400-144464-1 MSD

Matrix: Water

Analysis Batch: 379638

Client Sample ID: CCR-6

Prep Type: Total Recoverable

Prep Batch: 379496

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	0.10		0.100	0.215		mg/L		113	75 - 125	3	20
Boron, Dissolved	0.10		0.100	0.215		mg/L		113	75 - 125	3	20
Calcium	32		5.00	36.9	4	mg/L		106	75 - 125	1	20
Calcium, Dissolved	32		5.00	36.9	4	mg/L		106	75 - 125	1	20

TestAmerica Pensacola

Login Sample Receipt Checklist

Client: Pivotal Engineering LLC

Job Number: 400-144464-2

Login Number: 144464

List Number: 1

Creator: Perez, Trina M

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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	0.6°C IR-7
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	

Accreditation/Certification Summary

Client: Pivotal Engineering LLC
Project/Site: Entergy Nelson - CADL Resample

TestAmerica Job ID: 400-144464-2

Laboratory: TestAmerica Pensacola

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
Alabama	State Program	4	40150	06-30-18
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-18
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-18
Georgia	State Program	4	N/A	06-30-18
Illinois	NELAP	5	200041	10-09-18
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	12-31-17
Kentucky (UST)	State Program	4	53	06-30-18
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-18
Massachusetts	State Program	1	M-FL094	06-30-18
Michigan	State Program	5	9912	06-30-18
New Jersey	NELAP	2	FL006	06-30-18
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-18
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-18
Tennessee	State Program	4	TN02907	06-30-18
Texas	NELAP	6	T104704286-17-12	09-30-18
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-18
Washington	State Program	10	C915	05-15-18
West Virginia DEP	State Program	3	136	06-30-18



Element Materials Technology Lafayette
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January 18, 2018

Terry Elnaggar
Pivotal Engineering LLC
1515 Poydras St., STE. 1875
NEW ORLEANS, LA 70112
TEL: (504) 799-3653
FAX:

RE: CADL CCR 15-125

Order No.: 18010444

Dear Terry Elnaggar:

Element Materials Technology Lafayette received 2 sample(s) on 1/12/2018 for the analyses presented in the following report.

In accordance with your instructions Element Lafayette conducted the analysis shown on the following pages on samples submitted by your company. The results related only to the items tested. Unless otherwise noted, all analyses were conducted using EPA approved methodologies and all test results meet all requirements of TNI. All relevant sampling information is on the attached Chain-of-Custody form.

All soil data, except for 29-B, are on a wet-weight basis unless otherwise indicated in the units field as –dry.

LELAP Certification No.: 01997. TCEQ Certification No.: T104704261. A scope of accredited parameters is available upon request. A "#" by the test method or analyte indicates this parameter is outside the scope of accreditation.

Estimated uncertainty is available upon request. This report shall not be reproduced except in full, without the written approval of the laboratory.

If you have any questions regarding these test results, please feel free to call.

A handwritten signature in blue ink, appearing to read 'Cristina Thibaux'.

Cristina Thibaux
Customer Service Supervisor
2417 W. Pinhook Road
Lafayette, LA 70508-3344



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Case Narrative

WO#: 18010444
Date: 1/18/2018

CLIENT: Pivotal Engineering LLC
Project: CADL CCR 15-125

Unless specified by the client, a duplicate or MS/MSD, wherever applicable, is randomly selected and analyzed from each analytical batch provided sample volume is sufficient. The sample chosen for duplicate or MS/MSD may or may not be a sample submitted in this workorder. A method blank and/or a lab control sample (LCS)/lab control sample duplicate (LCSD), wherever applicable, are processed as a quality control check for each analytical batch. When the matrix QC data is not available due to insufficient sample volume or when the results indicate possible matrix effect, the validity of the batch is determined by the method blank and LCS/LCSD.

The results of the laboratory internal quality control data are provided in the QC Summary Report section of the report for your review. Laboratory-related QC exceptions that may impact the validity of data are discussed in the case narrative. Sample-related QC exceptions are flagged either in the results page(s) or in the QC report page(s). End users should consider QC exceptions when evaluating sample data against data quality objectives.

Any other exceptions associated with this report will be footnoted in the results page(s) or the QC summary page(s).



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Analytical Report

(consolidated)

WO#: 18010444

Date Reported: 1/18/2018

CLIENT: Pivotal Engineering LLC **Collection Date:** 1/11/2018 12:40:00 PM
Project: CADL CCR 15-125
Lab ID: 18010444-001 **Matrix:** AQUEOUS
Client Sample ID CCR-5

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
METALS IN WATER BY ICP, TOTALS				SW6010B	Analyst: STS	
Calcium	31.3	0.500		mg/L	1	1/18/2018 3:15:11 PM
METALS IN WATER BY ICP, DISSOLVED				SW6010B	Analyst: STS	
Calcium	31.0	0.500		mg/L	1	1/18/2018 2:15:51 PM

Qualifiers:	H	Holding times for preparation or analysis exceeded	M	Matrix Interference
	ND	Not Detected at the Reporting Limit	RL	Reporting Limit
	S	Spike Recovery outside accepted recovery limits	SDL	Sample detection limit
	U	Analyte not detected	W	Sample container temperature is out of limit as specified at testcode



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Analytical Report

(consolidated)

WO#: 18010444

Date Reported: 1/18/2018

CLIENT: Pivotal Engineering LLC

Collection Date: 1/11/2018

Project: CADL CCR 15-125

Lab ID: 18010444-002

Matrix: AQUEOUS

Client Sample ID Duplicate

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
METALS IN WATER BY ICP, TOTALS				SW6010B	Analyst: STS	
Calcium	31.8	0.500		mg/L	1	1/18/2018 3:18:58 PM
METALS IN WATER BY ICP, DISSOLVED				SW6010B	Analyst: STS	
Calcium	29.8	0.500		mg/L	1	1/18/2018 2:28:21 PM

Qualifiers:

H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
S Spike Recovery outside accepted recovery limits
U Analyte not detected

M Matrix Interference
RL Reporting Limit
SDL Sample detection limit
W Sample container temperature is out of limit as specified at testcode



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QC SUMMARY REPORT

WO#: 18010444
18-Jan-18

Client: Pivotal Engineering LLC
Project: CADL CCR 15-125

BatchID: 25444

Sample ID: MB-25444	SampType: MBLK	TestCode: 6010_W	Units: mg/L	Prep Date: 1/15/2018	RunNo: 66864						
Client ID: PBW	Batch ID: 25444	TestNo: SW6010B		Analysis Date: 1/18/2018	SeqNo: 1658681						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	< 0.500	0.500									

Sample ID: LCS-25444	SampType: LCS	TestCode: 6010_W	Units: mg/L	Prep Date: 1/15/2018	RunNo: 66864						
Client ID: LCSW	Batch ID: 25444	TestNo: SW6010B		Analysis Date: 1/18/2018	SeqNo: 1658682						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	50.8	0.500	50.00	0	102	80	120				

Sample ID: LCSD-25444	SampType: LCSD	TestCode: 6010_W	Units: mg/L	Prep Date: 1/15/2018	RunNo: 66864						
Client ID: LCSS02	Batch ID: 25444	TestNo: SW6010B		Analysis Date: 1/18/2018	SeqNo: 1658683						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	48.9	0.500	50.00	0	97.9	80	120	50.77	3.67	20	

Sample ID: 18010454-002AMS	SampType: MS	TestCode: 6010_W	Units: mg/L	Prep Date: 1/15/2018	RunNo: 66864						
Client ID: ZZZZZZ	Batch ID: 25444	TestNo: SW6010B		Analysis Date: 1/18/2018	SeqNo: 1658689						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	144	0.500	50.00	93.89	99.8	75	125				

Qualifiers: H Holding times for preparation or analysis exceeded
RL Reporting Limit
U Analyte not detected

M Matrix Interference
S Spike Recovery outside accepted recovery limits
W Sample container temperature is out of limit as specified at testcode

ND Not Detected at the Reporting Limit
SDL Sample detection limit



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QC SUMMARY REPORT

WO#: 18010444
18-Jan-18

Client: Pivotal Engineering LLC
Project: CADL CCR 15-125

BatchID: 25444

Sample ID: 18010454-002AMSD	SampType: MSD	TestCode: 6010_W	Units: mg/L	Prep Date: 1/15/2018	RunNo: 66864						
Client ID: ZZZZZZ	Batch ID: 25444	TestNo: SW6010B		Analysis Date: 1/18/2018	SeqNo: 1658690						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	142	0.500	50.00	93.89	96.8	75	125	143.8	1.05	20	

Qualifiers:

H	Holding times for preparation or analysis exceeded	M	Matrix Interference
RL	Reporting Limit	S	Spike Recovery outside accepted recovery limits
U	Analyte not detected	W	Sample container temperature is out of limit as specified at testcode

ND Not Detected at the Reporting Limit
SDL Sample detection limit



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QC SUMMARY REPORT

WO#: **18010444**
18-Jan-18

Client: Pivotal Engineering LLC
Project: CADL CCR 15-125

BatchID: R66864

Sample ID: MB-25438	SampType: MBLK	TestCode: 6010-D	Units: mg/L	Prep Date:	RunNo: 66864						
Client ID: PBW	Batch ID: R66864	TestNo: SW6010B		Analysis Date: 1/18/2018	SeqNo: 1658670						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	< 0.500	0.500									

Sample ID: LCS-25438	SampType: LCS	TestCode: 6010-D	Units: mg/L	Prep Date:	RunNo: 66864						
Client ID: LCSW	Batch ID: R66864	TestNo: SW6010B		Analysis Date: 1/18/2018	SeqNo: 1658671						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	48.8	0.500	50.00	0	97.7	80	120				

Sample ID: LCSD-25438	SampType: LCSD	TestCode: 6010-D	Units: mg/L	Prep Date:	RunNo: 66864						
Client ID: LCSS02	Batch ID: R66864	TestNo: SW6010B		Analysis Date: 1/18/2018	SeqNo: 1658672						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	49.3	0.500	50.00	0	98.5	80	120	48.85	0.836	20	

Sample ID: 18010444-001BMS		SampType: MS		TestCode: 6010-D		Units: mg/L		Prep Date:		RunNo: 66864	
Client ID: CCR-5		Batch ID: R66864		TestNo: SW6010B				Analysis Date: 1/18/2018		SeqNo: 1658674	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	79.1	0.500	50.00	30.98	96.2	75	125				

Qualifiers: H Holding times for preparation or analysis exceeded
RL Reporting Limit
U Analyte not detected

M Matrix Interference
S Spike Recovery outside accepted recovery limits
W Sample container temperature is out of limit as specified at testcode

ND Not Detected at the Reporting Limit
SDL Sample detection limit



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QC SUMMARY REPORT

WO#: **18010444**
18-Jan-18

Client: Pivotal Engineering LLC
Project: CADL CCR 15-125

BatchID: R66864

Sample ID: 18010444-001BMSD	SampType: MSD	TestCode: 6010-D	Units: mg/L	Prep Date:	RunNo: 66864						
Client ID: CCR-5	Batch ID: R66864	TestNo: SW6010B		Analysis Date: 1/18/2018	SeqNo: 1658675						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	79.7	0.500	50.00	30.98	97.5	75	125	79.07	0.806	20	

Qualifiers:

H Holding times for preparation or analysis exceeded
RL Reporting Limit
U Analyte not detected

M Matrix Interference
S Spike Recovery outside accepted recovery limits
W Sample container temperature is out of limit as specified at testcode

ND Not Detected at the Reporting Limit
SDL Sample detection limit

Sample Log-In Check List

Client Name: **PIVOTAL_ENGINEERIN**

Work Order Number: **18010444**

RcptNo: **1**

Logged by: **Danielle Hollier** **1/12/2018 12:00:00 PM**

Completed By: **Danielle Hollier** **1/12/2018 12:49:20 PM**

Reviewed By: **Cristina Thibeaux** **1/16/2018 8:38:24 AM**

Danielle Hollier
Danielle Hollier
Cristina Thibeaux

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Element

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
4. Shipping container/cooler in good condition? Yes ☒ No ☐
Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒
No. Seal Date: Signed By:
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm? Yes ☐ No ☐ No VOA Vials ☒
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels? Yes ☒ No ☐
(Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. Were all holding times able to be met? Yes ☒ No ☐
(If no, notify customer for authorization.)

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

18. Additional remarks:

Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.2	Good	Not Present			



element™

Chain of Custody

Laboratory
Number:

16010444

Company Name:	PIVOTAL ENG.	Billing Information:	SAKE	PO Number:	Project Name/Number:	Page 1 of 1
Contact Name:	TERRY ELNAGGAR			Quote Number:	CADL CCR 15-125	Matrix Code
Address:	1515 BOYDRAS ST. STE 1875			Required QC Level	Sampler's Signature	DW = Drinking Water WW = Waste Water GW = Ground Water AQ = Aqueous OT = Other SL = Sludge SOL = Solid O = Oil SO = Soil F = Food SW = Swab NG = Natural Gas NGL = Natural Gas Liquid PW = Produced Water CF = Completion Fluid
City, State Zip:	NO, LA 70112			Bill Monthly	Shipping Method:	
Phone Number:	504-799-3653	Ext:		☐ Yes	UPS / FedEx / NOW	
Fax Number:				☐ No	DHL / <u>Element</u> Hand / Mail	
E-mail Address:						

Which Regulations Apply:		Turn Time	(Rush turn times will incur a surcharge and must be pre-approved by lab.)		Container	Pres.	Requested Tests		Comments	
☐ RCRA	☒ Drinking Water	☐ Standard			Quantity	Type P=Plastic, G=Glass, V=Vial	HCl, HNO ₃ , H ₂ SO ₄ , NaOH, Na ₂ S ₂ O ₃	TOTAL CA DISS. CA		
☐ POTW	☐ Distribution	RUSH							FIELD FILTERED	
☐ NPDES	☐ Special	☒ 1 Day								
☐ USDA/FDA	☐ State	☐ 2 Day								
☐ RECAP/RISC	☒ Other	☐ Other								
Sample ID/Description		Date	Time	Grab / Composite	Matrix	Quantity	Type	Pres.	TOTAL CA	DISS. CA
CCR-5		1/11/18	1240	GRAB	GW	2	P	HNO ₃	X	X
DUPLICATE		1/11/18		GRAB	GW	2	P	HNO ₃	X	X

Relinquished by	Date/Time	Received by	Date/Time	Field Notes:
1	1/11/18 1250	John Hebert	1/12/18 0909	Received at lab on ice?
2				☒ Yes ☐ No Temp: 2.2 g
3 John Hebert	1/12/18 1200		1-12-18 1206	

All samples submitted to Element Materials Technology for analysis are accepted on a custodial basis only. Ownership of the material remains with the client submitting the samples. Element Materials Technology reserves the right to return unused sample portions.

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47334-0569 USA
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F 765-378-4109

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Columbus, IN
47201-6231 USA
P 812-375-0531
F 812-375-0731

328 Ley Road, Suite 100
Fort Wayne, IN
46825 USA
P 260-471-7000
F 260-471-7777

909 Executive Dr
Warsaw, IN
46580-2368 USA
P 574-267-3305
F 574-269-6569

3371 Cleveland Road, Suite 100A
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