



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5 CHICAGO REGIONAL LABORATORY
536 SOUTH CLARK STREET
CHICAGO, ILLINOIS 60605

Date: 6/1/2018
Subject: Review of Region 5 Data for Central Sands
To: Water Division, WECA Region 5
77 West Jackson Boulevard
Chicago, IL 60604
From: Anna Knoebel, Chemist
US EPA Region 5 Chicago Regional Laboratory

The data transmitted under this cover memo successfully passed CRL's data review procedures as documented in the current Quality Management Plan and applicable Standard Operating Procedures. In accordance with the EPA QA/G-8 *Guidance on Environmental Data Verification and Data Validation* and the U.S. EPA Region 5 RMD QMP, CRL performs data verification on all the data generated internally. CRL does not perform data validation or quality assessment procedures.

This report was reviewed and the information provided herein accurately represents the analysis performed.

A handwritten signature in black ink, which appears to read "Anna Knoebel", is positioned above a horizontal line.

Please contact the analyst with any technical report issues, Robert Thompson at (312)-353-9078 for sample project concerns, and Sylvia Griffin at (312)-353-9073 with data transmittal questions. Thank you.

Attached are Results for: Central Sands

Analyses included in this report:

Ammonia N DA, Distilled

Report Name: 1805005,1805007 Ammonia N DA, Distilled FINAL Jun 01 18 1034



Environmental Protection Agency Region 5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

Water Division, WECA Region 5
77 West Jackson Boulevard
Chicago IL, 60604

Project: Central Sands
Project Number: CB022018
Project Manager: Cheryl Burdett

Reported:
Jun-01-18 10:34

Accredited Analyses included in this Report



Method: *SM 4500 - H- B in Water*
Analysis: *Ammonia N DA, Distilled*
Analyte

Certifications

Ammonia as N	ISO/IEC 17025:2005
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Analytes not listed above are not accredited by ANAB.



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Project: Central Sands
Project Number: CB022018
Project Manager: Cheryl Burdett

Reported:
Jun-01-18 10:34

ANALYSIS CASE NARRATIVE – Distilled Ammonia Nitrogen in Water

Work Order: 1805005, 1805007

Analyst: Anna Knoebel

Phone #: (312) 353-9467

General Information

Ninety-eight water samples for Ammonia Nitrogen were received on May 2, 2018 and May 4, 2018. All holding times were met. The samples in the table below were underpreserved. These samples were qualified “J” (The identification of the analyte is acceptable; the reported value is an estimate).

LIMS ID	Sample Name
1805005-01	A1a
1805005-04	A2b
1805005-12	B1a
1805005-14	Bsa
1805005-17	B3b
1805005-19	B4b
1805005-24	C3a
1805005-29	C6b
1805005-41	C11a
1805005-45	C13a
1805005-48	D1b
1805005-49	D2a
1805005-54	D4b

Sample Analysis and Results

The samples were distilled on May 22 – 29, 2018 and analyzed on May 24, 2018 and May 30, 2018 for Ammonia Nitrogen in water using CRL SOP AIG029B, Version # 6 (based on method 4500 – NH₃- B & H). The data reported herein meets any laboratory specifications referenced in the sampling QAPP “*FINAL_2018 GW Sampling Plan4_27_2018.pdf*” and the requirements referenced in CRL SOP AIG029B, Version # 6 (based on method 4500 – NH₃- B & H).

Quality Control

All quality control audits were within CRL limits or did not result in qualification of the data.



Environmental Protection Agency Region 5 Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

WORK ORDER

Printed: 5/3/2018 3:33:25PM

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Report To:

Cheryl Burdett
Water Division, WECA Region 5

77 West Jackson Boulevard
Chicago, IL 60604

Phone: (312) 886-1463
Fax: (312) 886-2001

Date Due: Jun-04-18 15:00 (32 day TAT)
Received By: Colin Breslin
Logged In By: Robert Snyder

Date Received: May-02-18 09:55
Date Logged In: May-03-18 09:30

Samples Received at:

Sample tags/labels **Yes**
Seals Intact **Yes**
Received on ice **Yes**
Paperwork Included **Yes**

Work Order Comments:

Anions: Chloride and nitrate as NO3
Full List metals

Sample ID: [1805005-01](#) **Sampled:** [Apr-30-18 07:19](#) **Matrix:** [Water](#)

Sample Name: [A1a](#) **Sample Location/Comments:** [1st Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 07:19	pH = 2
Anions by IC	28	May-28-18 07:19	pH = 7
Metals ICP-AES (w)	180	Oct-27-18 07:19	pH = 3
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 07:19	pH = 2
Solids, TDS	7	May-07-18 07:19	pH = 7
TKN DA	28	May-28-18 07:19	pH = 2
TOC	28	May-28-18 07:19	pH = 2
Total Phosphorus DA	28	May-28-18 07:19	pH = 2

Sample ID: [1805005-02](#) **Sampled:** [Apr-30-18 07:32](#) **Matrix:** [Water](#)

Sample Name: [A1b](#) **Sample Location/Comments:** [1st Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 07:32	pH = 2
Anions by IC	28	May-28-18 07:32	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 07:32	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 07:32	pH = 2

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-02](#) Sampled: [Apr-30-18 07:32](#) Matrix: [Water](#)

Sample Name: [A1b](#)

Sample Location/Comments: [1st Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Solids, TDS	7	May-07-18 07:32	pH = 5
TKN DA	28	May-28-18 07:32	pH = 2
TOC	28	May-28-18 07:32	pH = 2
Total Phosphorus DA	28	May-28-18 07:32	pH = 2

Sample ID: [1805005-03](#) Sampled: [Apr-30-18 08:15](#) Matrix: [Water](#)

Sample Name: [A2a](#)

Sample Location/Comments: [22nd Avenue North](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 08:15	pH = 2
Anions by IC	28	May-28-18 08:15	pH = 6
Metals ICP-AES (w)	180	Oct-27-18 08:15	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 08:15	pH = 2
Solids, TDS	7	May-07-18 08:15	pH = 6
TKN DA	28	May-28-18 08:15	pH = 2
TOC	28	May-28-18 08:15	pH = 2
Total Phosphorus DA	28	May-28-18 08:15	pH = 2

Sample ID: [1805005-04](#) Sampled: [Apr-30-18 08:24](#) Matrix: [Water](#)

Sample Name: [A2b](#)

Sample Location/Comments: [22nd Avenue North](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 08:24	pH = 2
Anions by IC	28	May-28-18 08:24	pH = 6
Metals ICP-AES (w)	180	Oct-27-18 08:24	pH = 5
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 08:24	pH = 2
Solids, TDS	7	May-07-18 08:24	pH = 6
TKN DA	28	May-28-18 08:24	pH = 2
TOC	28	May-28-18 08:24	pH = 2
Total Phosphorus DA	28	May-28-18 08:24	pH = 2

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-05](#) Sampled: [Apr-30-18 09:06](#) Matrix: [Water](#) [QC Source Sample MS/MSD](#)

Sample Name: [A3a](#) Sample Location/Comments: [2nd Street](#)

Sample Comments: [MS/MSD](#)

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 09:06	pH = 2
Anions by IC	28	May-28-18 09:06	pH = 6
Metals ICP-AES (w)	180	Oct-27-18 09:06	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 09:06	pH = 2
Solids, TDS	7	May-07-18 09:06	pH = 6
TKN DA	28	May-28-18 09:06	pH = 2
TOC	28	May-28-18 09:06	pH = 2
Total Phosphorus DA	28	May-28-18 09:06	pH = 2

Sample ID: [1805005-06](#) Sampled: [Apr-30-18 09:14](#) Matrix: [Water](#)

Sample Name: [A3b](#) Sample Location/Comments: [2nd Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 09:14	pH = 2
Anions by IC	28	May-28-18 09:14	pH = 6
Metals ICP-AES (w)	180	Oct-27-18 09:14	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 09:14	pH = 2
Solids, TDS	7	May-07-18 09:14	pH = 6
TKN DA	28	May-28-18 09:14	pH = 2
TOC	28	May-28-18 09:14	pH = 2
Total Phosphorus DA	28	May-28-18 09:14	pH = 2

Sample ID: [1805005-07](#) Sampled: [Apr-30-18 09:38](#) Matrix: [Water](#)

Sample Name: [A4 Equip](#) Sample Location/Comments: [Cranberry Rock Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 09:38	pH = 2
Anions by IC	28	May-28-18 09:38	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 09:38	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 09:38	pH = 2
Solids, TDS	7	May-07-18 09:38	pH = 5
TKN DA	28	May-28-18 09:38	pH = 2
TOC	28	May-28-18 09:38	pH = 2

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-07](#) Sampled: [Apr-30-18 09:38](#) Matrix: [Water](#)

Sample Name: [A4 Equip](#) Sample Location/Comments: [Cranberry Rock Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-28-18 09:38	pH = 2

Sample ID: [1805005-08](#) Sampled: [Apr-30-18 09:06](#) Matrix: [Water](#)

Sample Name: [A3a \(Dup\)](#) Sample Location/Comments: [2nd Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 09:06	pH = 2
Anions by IC	28	May-28-18 09:06	pH = 6
Metals ICP-AES (w)	180	Oct-27-18 09:06	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 09:06	pH = 2
Solids, TDS	7	May-07-18 09:06	pH = 6
TKN DA	28	May-28-18 09:06	pH = 2
TOC	28	May-28-18 09:06	pH = 2
Total Phosphorus DA	28	May-28-18 09:06	pH = 2

Sample ID: [1805005-09](#) Sampled: [Apr-30-18 09:49](#) Matrix: [Water](#)

Sample Name: [FB1](#) Sample Location/Comments: [Cranberry Rock Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 09:49	pH = 2
Anions by IC	28	May-28-18 09:49	pH = 4
Metals ICP-AES (w)	180	Oct-27-18 09:49	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 09:49	pH = 2
Solids, TDS	7	May-07-18 09:49	pH = 4
TKN DA	28	May-28-18 09:49	pH = 2
TOC	28	May-28-18 09:49	pH = 2
Total Phosphorus DA	28	May-28-18 09:49	pH = 2

Sample ID: [1805005-10](#) Sampled: [Apr-30-18 09:58](#) Matrix: [Water](#)

Sample Name: [A4a](#) Sample Location/Comments: [Cranberry Rock Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 09:58	pH = 2
Anions by IC	28	May-28-18 09:58	pH = 6

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-10](#) Sampled: [Apr-30-18 09:58](#) Matrix: [Water](#)

Sample Name: [A4a](#) Sample Location/Comments: [Cranberry Rock Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-27-18 09:58	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 09:58	pH = 2
Solids, TDS	7	May-07-18 09:58	pH = 6
TKN DA	28	May-28-18 09:58	pH = 2
TOC	28	May-28-18 09:58	pH = 2
Total Phosphorus DA	28	May-28-18 09:58	pH = 2

Sample ID: [1805005-11](#) Sampled: [Apr-30-18 10:09](#) Matrix: [Water](#)

Sample Name: [A4b](#) Sample Location/Comments: [Cranberry Rock Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 10:09	pH = 2
Anions by IC	28	May-28-18 10:09	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 10:09	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 10:09	pH = 2
Solids, TDS	7	May-07-18 10:09	pH = 5
TKN DA	28	May-28-18 10:09	pH = 2
TOC	28	May-28-18 10:09	pH = 2
Total Phosphorus DA	28	May-28-18 10:09	pH = 2

Sample ID: [1805005-12](#) Sampled: [Apr-30-18 10:51](#) Matrix: [Water](#)

Sample Name: [B1a](#) Sample Location/Comments: [20th Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 10:51	pH = 3
Anions by IC	28	May-28-18 10:51	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 10:51	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 10:51	pH = 3
Solids, TDS	7	May-07-18 10:51	pH = 5
TKN DA	28	May-28-18 10:51	pH = 3
TOC	28	May-28-18 10:51	pH = 3
Total Phosphorus DA	28	May-28-18 10:51	pH = 3

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-13](#) Sampled: [Apr-30-18 10:58](#) Matrix: [Water](#)

Sample Name: [B1b](#) Sample Location/Comments: [20th Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 10:58	pH = 2
Anions by IC	28	May-28-18 10:58	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 10:58	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 10:58	pH = 2
Solids, TDS	7	May-07-18 10:58	pH = 5
TKN DA	28	May-28-18 10:58	pH = 2
TOC	28	May-28-18 10:58	pH = 2
Total Phosphorus DA	28	May-28-18 10:58	pH = 2

Sample ID: [1805005-14](#) Sampled: [Apr-30-18 11:40](#) Matrix: [Water](#)

Sample Name: [B2a](#) Sample Location/Comments: [3rd Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 11:40	pH = 2
Anions by IC	28	May-28-18 11:40	pH = 7
Metals ICP-AES (w)	180	Oct-27-18 11:40	pH = 4
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 11:40	pH = 2
Solids, TDS	7	May-07-18 11:40	pH = 7
TKN DA	28	May-28-18 11:40	pH = 2
TOC	28	May-28-18 11:40	pH = 2
Total Phosphorus DA	28	May-28-18 11:40	pH = 2

Sample ID: [1805005-15](#) Sampled: [Apr-30-18 11:48](#) Matrix: [Water](#)

Sample Name: [B2b](#) Sample Location/Comments: [3rd Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 11:48	pH = 2
Anions by IC	28	May-28-18 11:48	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 11:48	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 11:48	pH = 2
Solids, TDS	7	May-07-18 11:48	pH = 5
TKN DA	28	May-28-18 11:48	pH = 2
TOC	28	May-28-18 11:48	pH = 2

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-15](#) Sampled: [Apr-30-18 11:48](#) Matrix: [Water](#)

Sample Name: [B2b](#) Sample Location/Comments: [3rd Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-28-18 11:48	pH = 2

Sample ID: [1805005-16](#) Sampled: [Apr-30-18 12:29](#) Matrix: [Water](#)

Sample Name: [B3a](#) Sample Location/Comments: [3rd Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 12:29	pH = 2
Anions by IC	28	May-28-18 12:29	pH = 6
Metals ICP-AES (w)	180	Oct-27-18 12:29	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 12:29	pH = 2
Solids, TDS	7	May-07-18 12:29	pH = 6
TKN DA	28	May-28-18 12:29	pH = 2
TOC	28	May-28-18 12:29	pH = 2
Total Phosphorus DA	28	May-28-18 12:29	pH = 2

Sample ID: [1805005-17](#) Sampled: [Apr-30-18 12:36](#) Matrix: [Water](#)

Sample Name: [B3b](#) Sample Location/Comments: [3rd Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 12:36	pH = 2
Anions by IC	28	May-28-18 12:36	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 12:36	pH = 3
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 12:36	pH = 2
Solids, TDS	7	May-07-18 12:36	pH = 5
TKN DA	28	May-28-18 12:36	pH = 2
TOC	28	May-28-18 12:36	pH = 2
Total Phosphorus DA	28	May-28-18 12:36	pH = 2

Sample ID: [1805005-18](#) Sampled: [Apr-30-18 13:10](#) Matrix: [Water](#)

Sample Name: [B4a](#) Sample Location/Comments: [3rd Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 13:10	pH = 2
Anions by IC	28	May-28-18 13:10	pH = 5

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-18](#) Sampled: [Apr-30-18 13:10](#) Matrix: [Water](#)

Sample Name: [B4a](#) Sample Location/Comments: [3rd Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-27-18 13:10	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 13:10	pH = 2
Solids, TDS	7	May-07-18 13:10	pH = 5
TKN DA	28	May-28-18 13:10	pH = 2
TOC	28	May-28-18 13:10	pH = 2
Total Phosphorus DA	28	May-28-18 13:10	pH = 2

Sample ID: [1805005-19](#) Sampled: [Apr-30-18 13:41](#) Matrix: [Water](#)

Sample Name: [B4b](#) Sample Location/Comments: [3rd Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 13:41	pH = 2
Anions by IC	28	May-28-18 13:41	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 13:41	pH = 4
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 13:41	pH = 2
Solids, TDS	7	May-07-18 13:41	pH = 5
TKN DA	28	May-28-18 13:41	pH = 2
TOC	28	May-28-18 13:41	pH = 2
Total Phosphorus DA	28	May-28-18 13:41	pH = 2

Sample ID: [1805005-20](#) Sampled: [Apr-30-18 15:02](#) Matrix: [Water](#)

Sample Name: [C1a](#) Sample Location/Comments: [2nd Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 15:02	pH = 2
Anions by IC	28	May-28-18 15:02	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 15:02	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 15:02	pH = 2
Solids, TDS	7	May-07-18 15:02	pH = 5
TKN DA	28	May-28-18 15:02	pH = 2
TOC	28	May-28-18 15:02	pH = 2
Total Phosphorus DA	28	May-28-18 15:02	pH = 2

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-21](#) Sampled: [Apr-30-18 15:27](#) Matrix: [Water](#)

Sample Name: [C1b](#) Sample Location/Comments: [2nd Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 15:27	pH = 2
Anions by IC	28	May-28-18 15:27	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 15:27	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 15:27	pH = 2
Solids, TDS	7	May-07-18 15:27	pH = 5
TKN DA	28	May-28-18 15:27	pH = 2
TOC	28	May-28-18 15:27	pH = 2
Total Phosphorus DA	28	May-28-18 15:27	pH = 2

Sample ID: [1805005-22](#) Sampled: [Apr-30-18 16:06](#) Matrix: [Water](#)

Sample Name: [C2a](#) Sample Location/Comments: [Nelson Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 16:06	pH = 2
Anions by IC	28	May-28-18 16:06	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 16:06	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 16:06	pH = 2
Solids, TDS	7	May-07-18 16:06	pH = 5
TKN DA	28	May-28-18 16:06	pH = 2
TOC	28	May-28-18 16:06	pH = 2
Total Phosphorus DA	28	May-28-18 16:06	pH = 2

Sample ID: [1805005-23](#) Sampled: [Apr-30-18 16:14](#) Matrix: [Water](#)

Sample Name: [C2b](#) Sample Location/Comments: [Nelson Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 16:14	pH = 2
Anions by IC	28	May-28-18 16:14	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 16:14	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 16:14	pH = 2
Solids, TDS	7	May-07-18 16:14	pH = 5
TKN DA	28	May-28-18 16:14	pH = 2
TOC	28	May-28-18 16:14	pH = 2

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-23](#) Sampled: [Apr-30-18 16:14](#) Matrix: [Water](#)

Sample Name: [C2b](#) Sample Location/Comments: [Nelson Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-28-18 16:14	pH = 2

Sample ID: [1805005-24](#) Sampled: [Apr-30-18 14:16](#) Matrix: [Water](#)

Sample Name: [C3a](#) Sample Location/Comments: [3rd Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 14:16	pH = 2
Anions by IC	28	May-28-18 14:16	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 14:16	pH = 3
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 14:16	pH = 2
Solids, TDS	7	May-07-18 14:16	pH = 5
TKN DA	28	May-28-18 14:16	pH = 2
TOC	28	May-28-18 14:16	pH = 2
Total Phosphorus DA	28	May-28-18 14:16	pH = 2

Sample ID: [1805005-25](#) Sampled: [Apr-30-18 14:26](#) Matrix: [Water](#)

Sample Name: [C3b](#) Sample Location/Comments: [3rd Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-28-18 14:26	pH = 2
Anions by IC	28	May-28-18 14:26	pH = 5
Metals ICP-AES (w)	180	Oct-27-18 14:26	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-28-18 14:26	pH = 2
Solids, TDS	7	May-07-18 14:26	pH = 5
TKN DA	28	May-28-18 14:26	pH = 2
TOC	28	May-28-18 14:26	pH = 2
Total Phosphorus DA	28	May-28-18 14:26	pH = 2

Sample ID: [1805005-26](#) Sampled: [May-01-18 06:29](#) Matrix: [Water](#)

Sample Name: [C5Aa](#) Sample Location/Comments: [CR G \(Nelson Road\)](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 06:29	pH = 2
Anions by IC	28	May-29-18 06:29	pH = 5

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-26](#) Sampled: [May-01-18 06:29](#) Matrix: [Water](#)

Sample Name: [C5Aa](#) Sample Location/Comments: [CR G \(Nelson Road\)](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-28-18 06:29	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 06:29	pH = 2
Solids, TDS	7	May-08-18 06:29	pH = 5
TKN DA	28	May-29-18 06:29	pH = 2
TOC	28	May-29-18 06:29	pH = 2
Total Phosphorus DA	28	May-29-18 06:29	pH = 2

Sample ID: [1805005-27](#) Sampled: [May-01-18 06:43](#) Matrix: [Water](#)

Sample Name: [C5Ab](#) Sample Location/Comments: [CR G \(Nelson Road\)](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 06:43	pH = 2
Anions by IC	28	May-29-18 06:43	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 06:43	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 06:43	pH = 2
Solids, TDS	7	May-08-18 06:43	pH = 5
TKN DA	28	May-29-18 06:43	pH = 2
TOC	28	May-29-18 06:43	pH = 2
Total Phosphorus DA	28	May-29-18 06:43	pH = 2

Sample ID: [1805005-28](#) Sampled: [May-01-18 07:06](#) Matrix: [Water](#)

Sample Name: [C6a](#) Sample Location/Comments: [CR G \(Nelson Road\)](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 07:06	pH = 2
Anions by IC	28	May-29-18 07:06	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 07:06	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 07:06	pH = 2
Solids, TDS	7	May-08-18 07:06	pH = 6
TKN DA	28	May-29-18 07:06	pH = 2
TOC	28	May-29-18 07:06	pH = 2
Total Phosphorus DA	28	May-29-18 07:06	pH = 2

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-29](#) Sampled: [May-01-18 07:15](#) Matrix: [Water](#)

Sample Name: [C6b](#) Sample Location/Comments: [CR G \(Nelson Road\)](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 07:15	pH = 3
Anions by IC	28	May-29-18 07:15	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 07:15	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 07:15	pH = 3
Solids, TDS	7	May-08-18 07:15	pH = 5
TKN DA	28	May-29-18 07:15	pH = 3
TOC	28	May-29-18 07:15	pH = 3
Total Phosphorus DA	28	May-29-18 07:15	pH = 3

Sample ID: [1805005-30](#) Sampled: [May-01-18 07:48](#) Matrix: [Water](#)

Sample Name: [C7a](#) Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 07:48	pH = 2
Anions by IC	28	May-29-18 07:48	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 07:48	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 07:48	pH = 2
Solids, TDS	7	May-08-18 07:48	pH = 6
TKN DA	28	May-29-18 07:48	pH = 2
TOC	28	May-29-18 07:48	pH = 2
Total Phosphorus DA	28	May-29-18 07:48	pH = 2

Sample ID: [1805005-31](#) Sampled: [May-01-18 08:02](#) Matrix: [Water](#)

Sample Name: [C7b](#) Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 08:02	pH = 2
Anions by IC	28	May-29-18 08:02	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 08:02	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 08:02	pH = 2
Solids, TDS	7	May-08-18 08:02	pH = 5
TKN DA	28	May-29-18 08:02	pH = 2
TOC	28	May-29-18 08:02	pH = 2

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-31](#) Sampled: [May-01-18 08:02](#) Matrix: [Water](#)

Sample Name: [C7b](#) Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-29-18 08:02	pH = 2

Sample ID: [1805005-32](#) Sampled: [May-01-18 07:39](#) Matrix: [Water](#)

Sample Name: [FB2](#) Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 07:39	pH = 2
Anions by IC	28	May-29-18 07:39	pH = 4
Metals ICP-AES (w)	180	Oct-28-18 07:39	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 07:39	pH = 2
Solids, TDS	7	May-08-18 07:39	pH = 4
TKN DA	28	May-29-18 07:39	pH = 2
TOC	28	May-29-18 07:39	pH = 2
Total Phosphorus DA	28	May-29-18 07:39	pH = 2

Sample ID: [1805005-33](#) Sampled: [May-01-18 07:38](#) Matrix: [Water](#)

Sample Name: [C7 equip](#) Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 07:38	pH = 2
Anions by IC	28	May-29-18 07:38	pH = 4
Metals ICP-AES (w)	180	Oct-28-18 07:38	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 07:38	pH = 2
Solids, TDS	7	May-08-18 07:38	pH = 4
TKN DA	28	May-29-18 07:38	pH = 2
TOC	28	May-29-18 07:38	pH = 2
Total Phosphorus DA	28	May-29-18 07:38	pH = 2

Sample ID: [1805005-34](#) Sampled: [May-01-18 08:02](#) Matrix: [Water](#)

Sample Name: [C7 Dup](#) Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 08:02	pH = 2
Anions by IC	28	May-29-18 08:02	pH = 5

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-34](#) Sampled: [May-01-18 08:02](#) Matrix: [Water](#)

Sample Name: [C7 Dup](#) Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-28-18 08:02	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 08:02	pH = 2
Solids, TDS	7	May-08-18 08:02	pH = 5
TKN DA	28	May-29-18 08:02	pH = 2
TOC	28	May-29-18 08:02	pH = 2
Total Phosphorus DA	28	May-29-18 08:02	pH = 2

Sample ID: [1805005-35](#) Sampled: [May-01-18 08:35](#) Matrix: [Water](#)

Sample Name: [C8a](#) Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 08:35	pH = 2
Anions by IC	28	May-29-18 08:35	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 08:35	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 08:35	pH = 2
Solids, TDS	7	May-08-18 08:35	pH = 5
TKN DA	28	May-29-18 08:35	pH = 2
TOC	28	May-29-18 08:35	pH = 2
Total Phosphorus DA	28	May-29-18 08:35	pH = 2

Sample ID: [1805005-36](#) Sampled: [May-01-18 08:42](#) Matrix: [Water](#)

Sample Name: [C8b](#) Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 08:42	pH = 2
Anions by IC	28	May-29-18 08:42	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 08:42	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 08:42	pH = 2
Solids, TDS	7	May-08-18 08:42	pH = 5
TKN DA	28	May-29-18 08:42	pH = 2
TOC	28	May-29-18 08:42	pH = 2
Total Phosphorus DA	28	May-29-18 08:42	pH = 2

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-37](#) Sampled: [May-01-18 10:00](#) Matrix: [Water](#)

Sample Name: [C9a](#) Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 10:00	pH = 2
Anions by IC	28	May-29-18 10:00	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 10:00	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 10:00	pH = 2
Solids, TDS	7	May-08-18 10:00	pH = 5
TKN DA	28	May-29-18 10:00	pH = 2
TOC	28	May-29-18 10:00	pH = 2
Total Phosphorus DA	28	May-29-18 10:00	pH = 2

Sample ID: [1805005-38](#) Sampled: [May-01-18 10:21](#) Matrix: [Water](#)

Sample Name: [C9b](#) Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 10:21	pH = 2
Anions by IC	28	May-29-18 10:21	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 10:21	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 10:21	pH = 2
Solids, TDS	7	May-08-18 10:21	pH = 5
TKN DA	28	May-29-18 10:21	pH = 2
TOC	28	May-29-18 10:21	pH = 2
Total Phosphorus DA	28	May-29-18 10:21	pH = 2

Sample ID: [1805005-39](#) Sampled: [May-01-18 11:05](#) Matrix: [Water](#)

Sample Name: [C10a](#) Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 11:05	pH = 2
Anions by IC	28	May-29-18 11:05	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 11:05	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 11:05	pH = 2
Solids, TDS	7	May-08-18 11:05	pH = 6
TKN DA	28	May-29-18 11:05	pH = 2
TOC	28	May-29-18 11:05	pH = 2

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-39](#) Sampled: [May-01-18 11:05](#) Matrix: [Water](#)

Sample Name: [C10a](#) Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-29-18 11:05	pH = 2

Sample ID: [1805005-40](#) Sampled: [May-01-18 11:12](#) Matrix: [Water](#)

Sample Name: [C10b](#) Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 11:12	pH = 2
Anions by IC	28	May-29-18 11:12	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 11:12	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 11:12	pH = 2
Solids, TDS	7	May-08-18 11:12	pH = 5
TKN DA	28	May-29-18 11:12	pH = 2
TOC	28	May-29-18 11:12	pH = 2
Total Phosphorus DA	28	May-29-18 11:12	pH = 2

Sample ID: [1805005-41](#) Sampled: [May-01-18 11:46](#) Matrix: [Water](#)

Sample Name: [C11a](#) Sample Location/Comments: [20th Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 11:46	pH = 3
Anions by IC	28	May-29-18 11:46	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 11:46	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 11:46	pH = 3
Solids, TDS	7	May-08-18 11:46	pH = 6
TKN DA	28	May-29-18 11:46	pH = 3
TOC	28	May-29-18 11:46	pH = 3
Total Phosphorus DA	28	May-29-18 11:46	pH = 3

Sample ID: [1805005-42](#) Sampled: [May-01-18 11:52](#) Matrix: [Water](#)

Sample Name: [C11b](#) Sample Location/Comments: [20th Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 11:52	pH = 2
Anions by IC	28	May-29-18 11:52	pH = 5

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-42](#) Sampled: [May-01-18 11:52](#) Matrix: [Water](#)

Sample Name: [C11b](#) Sample Location/Comments: [20th Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-28-18 11:52	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 11:52	pH = 2
Solids, TDS	7	May-08-18 11:52	pH = 5
TKN DA	28	May-29-18 11:52	pH = 2
TOC	28	May-29-18 11:52	pH = 2
Total Phosphorus DA	28	May-29-18 11:52	pH = 2

Sample ID: [1805005-43](#) Sampled: [May-01-18 12:41](#) Matrix: [Water](#)

Sample Name: [C12a](#) Sample Location/Comments: [19th Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 12:41	pH = 2
Anions by IC	28	May-29-18 12:41	pH = 7
Metals ICP-AES (w)	180	Oct-28-18 12:41	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 12:41	pH = 2
Solids, TDS	7	May-08-18 12:41	pH = 7
TKN DA	28	May-29-18 12:41	pH = 2
TOC	28	May-29-18 12:41	pH = 2
Total Phosphorus DA	28	May-29-18 12:41	pH = 2

Sample ID: [1805005-44](#) Sampled: [May-01-18 12:47](#) Matrix: [Water](#)

Sample Name: [C12b](#) Sample Location/Comments: [19th Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 12:47	pH = 2
Anions by IC	28	May-29-18 12:47	pH = 7
Metals ICP-AES (w)	180	Oct-28-18 12:47	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 12:47	pH = 2
Solids, TDS	7	May-08-18 12:47	pH = 7
TKN DA	28	May-29-18 12:47	pH = 2
TOC	28	May-29-18 12:47	pH = 2
Total Phosphorus DA	28	May-29-18 12:47	pH = 2

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-45](#) Sampled: [May-01-18 13:30](#) Matrix: [Water](#)

Sample Name: [C13a](#)

Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 13:30	pH = 3
Anions by IC	28	May-29-18 13:30	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 13:30	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 13:30	pH = 3
Solids, TDS	7	May-08-18 13:30	pH = 6
TKN DA	28	May-29-18 13:30	pH = 3
TOC	28	May-29-18 13:30	pH = 3
Total Phosphorus DA	28	May-29-18 13:30	pH = 3

Sample ID: [1805005-46](#) Sampled: [May-01-18 13:39](#) Matrix: [Water](#)

Sample Name: [C13b](#)

Sample Location/Comments: [4th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 13:39	pH = 2
Anions by IC	28	May-29-18 13:39	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 13:39	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 13:39	pH = 2
Solids, TDS	7	May-08-18 13:39	pH = 5
TKN DA	28	May-29-18 13:39	pH = 2
TOC	28	May-29-18 13:39	pH = 2
Total Phosphorus DA	28	May-29-18 13:39	pH = 2

Sample ID: [1805005-47](#) Sampled: [May-01-18 14:19](#) Matrix: [Water](#)

Sample Name: [D1a](#)

Sample Location/Comments: [5th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 14:19	pH = 2
Anions by IC	28	May-29-18 14:19	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 14:19	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 14:19	pH = 2
Solids, TDS	7	May-08-18 14:19	pH = 6
TKN DA	28	May-29-18 14:19	pH = 2
TOC	28	May-29-18 14:19	pH = 2

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-47](#) Sampled: [May-01-18 14:19](#) Matrix: [Water](#)

Sample Name: [D1a](#) Sample Location/Comments: [5th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-29-18 14:19	pH = 2

Sample ID: [1805005-48](#) Sampled: [May-01-18 14:26](#) Matrix: [Water](#)

Sample Name: [D1b](#) Sample Location/Comments: [5th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 14:26	pH = 3
Anions by IC	28	May-29-18 14:26	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 14:26	pH = 3
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 14:26	pH = 3
Solids, TDS	7	May-08-18 14:26	pH = 5
TKN DA	28	May-29-18 14:26	pH = 3
TOC	28	May-29-18 14:26	pH = 3
Total Phosphorus DA	28	May-29-18 14:26	pH = 3

Sample ID: [1805005-49](#) Sampled: [May-01-18 15:00](#) Matrix: [Water](#)

Sample Name: [D2a](#) Sample Location/Comments: [5th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 15:00	pH = 3
Anions by IC	28	May-29-18 15:00	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 15:00	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 15:00	pH = 3
Solids, TDS	7	May-08-18 15:00	pH = 6
TKN DA	28	May-29-18 15:00	pH = 3
TOC	28	May-29-18 15:00	pH = 3
Total Phosphorus DA	28	May-29-18 15:00	pH = 3

Sample ID: [1805005-50](#) Sampled: [May-01-18 15:06](#) Matrix: [Water](#)

Sample Name: [D2b](#) Sample Location/Comments: [5th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 15:06	pH = 2
Anions by IC	28	May-29-18 15:06	pH = 6

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: [1805005-50](#) Sampled: [May-01-18 15:06](#) Matrix: [Water](#)

Sample Name: [D2b](#) Sample Location/Comments: [5th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-28-18 15:06	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 15:06	pH = 2
Solids, TDS	7	May-08-18 15:06	pH = 6
TKN DA	28	May-29-18 15:06	pH = 2
TOC	28	May-29-18 15:06	pH = 2
Total Phosphorus DA	28	May-29-18 15:06	pH = 2

Sample ID: [1805005-51](#) Sampled: [May-01-18 15:41](#) Matrix: [Water](#)

Sample Name: [D3a](#) Sample Location/Comments: [5th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 15:41	pH = 2
Anions by IC	28	May-29-18 15:41	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 15:41	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 15:41	pH = 2
Solids, TDS	7	May-08-18 15:41	pH = 6
TKN DA	28	May-29-18 15:41	pH = 2
TOC	28	May-29-18 15:41	pH = 2
Total Phosphorus DA	28	May-29-18 15:41	pH = 2

Sample ID: [1805005-52](#) Sampled: [May-01-18 15:48](#) Matrix: [Water](#)

Sample Name: [D3b](#) Sample Location/Comments: [5th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 15:48	pH = 2
Anions by IC	28	May-29-18 15:48	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 15:48	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 15:48	pH = 2
Solids, TDS	7	May-08-18 15:48	pH = 5
TKN DA	28	May-29-18 15:48	pH = 2
TOC	28	May-29-18 15:48	pH = 2
Total Phosphorus DA	28	May-29-18 15:48	pH = 2

1805005

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: [none]

Sample ID: 1805005-53 Sampled: May-01-18 16:19 Matrix: Water

Sample Name: D4a Sample Location/Comments: 5th Street

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 16:19	pH = 2
Anions by IC	28	May-29-18 16:19	pH = 6
Metals ICP-AES (w)	180	Oct-28-18 16:19	pH = 2
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 16:19	pH = 2
Solids, TDS	7	May-08-18 16:19	pH = 6
TKN DA	28	May-29-18 16:19	pH = 2
TOC	28	May-29-18 16:19	pH = 2
Total Phosphorus DA	28	May-29-18 16:19	pH = 2

Sample ID: 1805005-54 Sampled: May-01-18 16:26 Matrix: Water

Sample Name: D4b Sample Location/Comments: 5th Street

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-29-18 16:26	pH = 2
Anions by IC	28	May-29-18 16:26	pH = 5
Metals ICP-AES (w)	180	Oct-28-18 16:26	pH = 3
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-29-18 16:26	pH = 2
Solids, TDS	7	May-08-18 16:26	pH = 5
TKN DA	28	May-29-18 16:26	pH = 2
TOC	28	May-29-18 16:26	pH = 2
Total Phosphorus DA	28	May-29-18 16:26	pH = 2

WORK ORDER MEMO: NCR 14118

PROJECT COMMENTS: Anions: Chloride, fluoride, bromide, sulfate.
Full List metals

REVIEWED

By Amanda Wroble at 3:35 pm, May 03, 2018

Reviewed By

Date



Environmental Protection Agency Region 5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

WORK ORDER

Printed: 5/7/2018 9:53:28AM

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: CB022018

Report To:

Cheryl Burdett
Water Division, WECA Region 5

77 West Jackson Boulevard
Chicago, IL 60604

Phone: (312) 886-1463
Fax: (312) 886-2001

Date Due: Jun-04-18 15:00 (30 day TAT)

Received By: Robert Snyder

Logged In By: Robert Snyder

Date Received: May-04-18 10:00

Date Logged In: May-07-18 07:38

Samples Received at:

Sample tags/labels **Yes**
Seals Intact **Yes**
Received on ice **Yes**
Paperwork Included **Yes**

Work Order Comments:

Copy/Relog from 1805005. Anions: Chloride and nitrate as NO3
Full List metals
pH paper used in SC 16H2601

Sample ID: 1805007-01 **Sampled:** May-02-18 06:38 **Matrix:** Water

Sample Name: D5a **Sample Location/Comments:** 5th Street

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 06:38	pH = 1
Anions by IC	28	May-30-18 06:38	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 06:38	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 06:38	pH = 1
Solids, TDS	7	May-09-18 06:38	pH = 6
TKN DA	28	May-30-18 06:38	pH = 1
TOC	28	May-30-18 06:38	pH = 1
Total Phosphorus DA	28	May-30-18 06:38	pH = 1

Sample ID: 1805007-02 **Sampled:** May-02-18 06:46 **Matrix:** Water

Sample Name: D5b **Sample Location/Comments:** 5th Street

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 06:46	pH = 1
Anions by IC	28	May-30-18 06:46	pH = 5
Metals ICP-AES (w)	180	Oct-29-18 06:46	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 06:46	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: CB022018

Sample ID: 1805007-02 Sampled: May-02-18 06:46 Matrix: Water

Sample Name: D5b Sample Location/Comments: 5th Street

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Solids, TDS	7	May-09-18 06:46	pH = 5
TKN DA	28	May-30-18 06:46	pH = 1
TOC	28	May-30-18 06:46	pH = 1
Total Phosphorus DA	28	May-30-18 06:46	pH = 1

Sample ID: 1805007-03 Sampled: May-02-18 07:17 Matrix: Water

Sample Name: D6a Sample Location/Comments: 5th Street

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 07:17	pH = 1
Anions by IC	28	May-30-18 07:17	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 07:17	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 07:17	pH = 1
Solids, TDS	7	May-09-18 07:17	pH = 6
TKN DA	28	May-30-18 07:17	pH = 1
TOC	28	May-30-18 07:17	pH = 1
Total Phosphorus DA	28	May-30-18 07:17	pH = 1

Sample ID: 1805007-04 Sampled: May-02-18 07:29 Matrix: Water

Sample Name: D6b Sample Location/Comments: 5th Street

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 07:29	pH = 1
Anions by IC	28	May-30-18 07:29	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 07:29	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 07:29	pH = 1
Solids, TDS	7	May-09-18 07:29	pH = 6
TKN DA	28	May-30-18 07:29	pH = 1
TOC	28	May-30-18 07:29	pH = 1
Total Phosphorus DA	28	May-30-18 07:29	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: CB022018

Sample ID: [1805007-05](#) Sampled: [May-02-18 08:01](#) Matrix: [Water](#)

Sample Name: [D7 equip](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 08:01	pH = 1
Anions by IC	28	May-30-18 08:01	pH = 5
Metals ICP-AES (w)	180	Oct-29-18 08:01	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 08:01	pH = 1
Solids, TDS	7	May-09-18 08:01	pH = 5
TKN DA	28	May-30-18 08:01	pH = 1
TOC	28	May-30-18 08:01	pH = 1
Total Phosphorus DA	28	May-30-18 08:01	pH = 1

Sample ID: [1805007-06](#) Sampled: [May-02-18 08:03](#) Matrix: [Water](#)

Sample Name: [FB3](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 08:03	pH = 1
Anions by IC	28	May-30-18 08:03	pH = 4
Metals ICP-AES (w)	180	Oct-29-18 08:03	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 08:03	pH = 1
Solids, TDS	7	May-09-18 08:03	pH = 4
TKN DA	28	May-30-18 08:03	pH = 1
TOC	28	May-30-18 08:03	pH = 1
Total Phosphorus DA	28	May-30-18 08:03	pH = 1

Sample ID: [1805007-07](#) Sampled: [May-02-18 08:12](#) Matrix: [Water](#)

Sample Name: [D7a Dup](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 08:12	pH = 1
Anions by IC	28	May-30-18 08:12	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 08:12	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 08:12	pH = 1
Solids, TDS	7	May-09-18 08:12	pH = 6
TKN DA	28	May-30-18 08:12	pH = 1
TOC	28	May-30-18 08:12	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: CB022018

Sample ID: [1805007-07](#) Sampled: [May-02-18 08:12](#) Matrix: [Water](#)

Sample Name: [D7a Dup](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-30-18 08:12	pH = 1

Sample ID: [1805007-08](#) Sampled: [May-02-18 08:12](#) Matrix: [Water](#)

[QC Source Sample MS/MSD](#)

Sample Name: [D7a](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments: [MS/MSD](#)

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 08:12	pH = 1
Anions by IC	28	May-30-18 08:12	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 08:12	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 08:12	pH = 1
Solids, TDS	7	May-09-18 08:12	pH = 6
TKN DA	28	May-30-18 08:12	pH = 1
TOC	28	May-30-18 08:12	pH = 1
Total Phosphorus DA	28	May-30-18 08:12	pH = 1

Sample ID: [1805007-09](#) Sampled: [May-02-18 08:19](#) Matrix: [Water](#)

Sample Name: [D7b](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 08:19	pH = 1
Anions by IC	28	May-30-18 08:19	pH = 5
Metals ICP-AES (w)	180	Oct-29-18 08:19	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 08:19	pH = 1
Solids, TDS	7	May-09-18 08:19	pH = 5
TKN DA	28	May-30-18 08:19	pH = 1
TOC	28	May-30-18 08:19	pH = 1
Total Phosphorus DA	28	May-30-18 08:19	pH = 1

Sample ID: [1805007-10](#) Sampled: [May-02-18 08:55](#) Matrix: [Water](#)

Sample Name: [D8a](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 08:55	pH = 1
Anions by IC	28	May-30-18 08:55	pH = 6

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: CB022018

Sample ID: [1805007-10](#) Sampled: [May-02-18 08:55](#) Matrix: [Water](#)

Sample Name: [D8a](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-29-18 08:55	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 08:55	pH = 1
Solids, TDS	7	May-09-18 08:55	pH = 6
TKN DA	28	May-30-18 08:55	pH = 1
TOC	28	May-30-18 08:55	pH = 1
Total Phosphorus DA	28	May-30-18 08:55	pH = 1

Sample ID: [1805007-11](#) Sampled: [May-02-18 09:11](#) Matrix: [Water](#)

Sample Name: [D8b](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 09:11	pH = 1
Anions by IC	28	May-30-18 09:11	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 09:11	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 09:11	pH = 1
Solids, TDS	7	May-09-18 09:11	pH = 6
TKN DA	28	May-30-18 09:11	pH = 1
TOC	28	May-30-18 09:11	pH = 1
Total Phosphorus DA	28	May-30-18 09:11	pH = 1

Sample ID: [1805007-12](#) Sampled: [May-02-18 09:45](#) Matrix: [Water](#)

Sample Name: [D9a](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 09:45	pH = 1
Anions by IC	28	May-30-18 09:45	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 09:45	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 09:45	pH = 1
Solids, TDS	7	May-09-18 09:45	pH = 6
TKN DA	28	May-30-18 09:45	pH = 1
TOC	28	May-30-18 09:45	pH = 1
Total Phosphorus DA	28	May-30-18 09:45	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: CB022018

Sample ID: [1805007-13](#) Sampled: [May-02-18 09:54](#) Matrix: [Water](#)

Sample Name: [D9b](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 09:54	pH = 1
Anions by IC	28	May-30-18 09:54	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 09:54	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 09:54	pH = 1
Solids, TDS	7	May-09-18 09:54	pH = 6
TKN DA	28	May-30-18 09:54	pH = 1
TOC	28	May-30-18 09:54	pH = 1
Total Phosphorus DA	28	May-30-18 09:54	pH = 1

Sample ID: [1805007-14](#) Sampled: [May-02-18 10:29](#) Matrix: [Water](#)

Sample Name: [D10a](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 10:29	pH = 1
Anions by IC	28	May-30-18 10:29	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 10:29	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 10:29	pH = 1
Solids, TDS	7	May-09-18 10:29	pH = 6
TKN DA	28	May-30-18 10:29	pH = 1
TOC	28	May-30-18 10:29	pH = 1
Total Phosphorus DA	28	May-30-18 10:29	pH = 1

Sample ID: [1805007-15](#) Sampled: [May-02-18 10:29](#) Matrix: [Water](#)

Sample Name: [D10a Dup](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 10:29	pH = 1
Anions by IC	28	May-30-18 10:29	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 10:29	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 10:29	pH = 1
Solids, TDS	7	May-09-18 10:29	pH = 6
TKN DA	28	May-30-18 10:29	pH = 1
TOC	28	May-30-18 10:29	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: CB022018

Sample ID: [1805007-15](#) Sampled: [May-02-18 10:29](#) Matrix: [Water](#)

Sample Name: [D10a Dup](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-30-18 10:29	pH = 1

Sample ID: [1805007-16](#) Sampled: [May-02-18 10:41](#) Matrix: [Water](#)

Sample Name: [D10b](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 10:41	pH = 1
Anions by IC	28	May-30-18 10:41	pH = 5
Metals ICP-AES (w)	180	Oct-29-18 10:41	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 10:41	pH = 1
Solids, TDS	7	May-09-18 10:41	pH = 5
TKN DA	28	May-30-18 10:41	pH = 1
TOC	28	May-30-18 10:41	pH = 1
Total Phosphorus DA	28	May-30-18 10:41	pH = 1

Sample ID: [1805007-17](#) Sampled: [May-02-18 10:41](#) Matrix: [Water](#)

Sample Name: [D10b Dup](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 10:41	pH = 1
Anions by IC	28	May-30-18 10:41	pH = 5
Metals ICP-AES (w)	180	Oct-29-18 10:41	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 10:41	pH = 1
Solids, TDS	7	May-09-18 10:41	pH = 5
TKN DA	28	May-30-18 10:41	pH = 1
TOC	28	May-30-18 10:41	pH = 1
Total Phosphorus DA	28	May-30-18 10:41	pH = 1

Sample ID: [1805007-18](#) Sampled: [May-02-18 11:19](#) Matrix: [Water](#)

Sample Name: [D11a](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 11:19	pH = 1
Anions by IC	28	May-30-18 11:19	pH = 6

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: CB022018

Sample ID: [1805007-18](#) Sampled: [May-02-18 11:19](#) Matrix: [Water](#)

Sample Name: [D11a](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-29-18 11:19	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 11:19	pH = 1
Solids, TDS	7	May-09-18 11:19	pH = 6
TKN DA	28	May-30-18 11:19	pH = 1
TOC	28	May-30-18 11:19	pH = 1
Total Phosphorus DA	28	May-30-18 11:19	pH = 1

Sample ID: [1805007-19](#) Sampled: [May-02-18 11:42](#) Matrix: [Water](#)

Sample Name: [D11b](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 11:42	pH = 1
Anions by IC	28	May-30-18 11:42	pH = 5
Metals ICP-AES (w)	180	Oct-29-18 11:42	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 11:42	pH = 1
Solids, TDS	7	May-09-18 11:42	pH = 5
TKN DA	28	May-30-18 11:42	pH = 1
TOC	28	May-30-18 11:42	pH = 1
Total Phosphorus DA	28	May-30-18 11:42	pH = 1

Sample ID: [1805007-20](#) Sampled: [May-02-18 12:41](#) Matrix: [Water](#)

Sample Name: [E1a](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 12:41	pH = 1
Anions by IC	28	May-30-18 12:41	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 12:41	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 12:41	pH = 1
Solids, TDS	7	May-09-18 12:41	pH = 6
TKN DA	28	May-30-18 12:41	pH = 1
TOC	28	May-30-18 12:41	pH = 1
Total Phosphorus DA	28	May-30-18 12:41	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: CB022018

Sample ID: [1805007-21](#) Sampled: [May-02-18 12:58](#) Matrix: [Water](#)

Sample Name: [E1b](#) Sample Location/Comments: [23rd Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 12:58	pH = 1
Anions by IC	28	May-30-18 12:58	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 12:58	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 12:58	pH = 1
Solids, TDS	7	May-09-18 12:58	pH = 6
TKN DA	28	May-30-18 12:58	pH = 1
TOC	28	May-30-18 12:58	pH = 1
Total Phosphorus DA	28	May-30-18 12:58	pH = 1

Sample ID: [1805007-22](#) Sampled: [May-02-18 13:28](#) Matrix: [Water](#)

Sample Name: [E2a](#) Sample Location/Comments: [Porter Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 13:28	pH = 1
Anions by IC	28	May-30-18 13:28	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 13:28	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 13:28	pH = 1
Solids, TDS	7	May-09-18 13:28	pH = 6
TKN DA	28	May-30-18 13:28	pH = 1
TOC	28	May-30-18 13:28	pH = 1
Total Phosphorus DA	28	May-30-18 13:28	pH = 1

Sample ID: [1805007-23](#) Sampled: [May-02-18 13:37](#) Matrix: [Water](#)

Sample Name: [E2b](#) Sample Location/Comments: [Porter Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 13:37	pH = 1
Anions by IC	28	May-30-18 13:37	pH = 5
Metals ICP-AES (w)	180	Oct-29-18 13:37	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 13:37	pH = 1
Solids, TDS	7	May-09-18 13:37	pH = 5
TKN DA	28	May-30-18 13:37	pH = 1
TOC	28	May-30-18 13:37	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: CB022018

Sample ID: [1805007-23](#) Sampled: [May-02-18 13:37](#) Matrix: [Water](#)

Sample Name: [E2b](#) Sample Location/Comments: [Porter Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-30-18 13:37	pH = 1

Sample ID: [1805007-24](#) Sampled: [May-02-18 13:28](#) Matrix: [Water](#)

Sample Name: [E2a Dup](#) Sample Location/Comments: [Porter Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 13:28	pH = 1
Anions by IC	28	May-30-18 13:28	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 13:28	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 13:28	pH = 1
Solids, TDS	7	May-09-18 13:28	pH = 6
TKN DA	28	May-30-18 13:28	pH = 1
TOC	28	May-30-18 13:28	pH = 1
Total Phosphorus DA	28	May-30-18 13:28	pH = 1

Sample ID: [1805007-25](#) Sampled: [May-02-18 13:37](#) Matrix: [Water](#)

Sample Name: [E2b Dup](#) Sample Location/Comments: [Porter Road](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 13:37	pH = 1
Anions by IC	28	May-30-18 13:37	pH = 5
Metals ICP-AES (w)	180	Oct-29-18 13:37	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 13:37	pH = 1
Solids, TDS	7	May-09-18 13:37	pH = 5
TKN DA	28	May-30-18 13:37	pH = 1
TOC	28	May-30-18 13:37	pH = 1
Total Phosphorus DA	28	May-30-18 13:37	pH = 1

Sample ID: [1805007-26](#) Sampled: [May-02-18 14:03](#) Matrix: [Water](#)

Sample Name: [E3a](#) Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 14:03	pH = 1
Anions by IC	28	May-30-18 14:03	pH = 6

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: CB022018

Sample ID: [1805007-26](#) Sampled: [May-02-18 14:03](#) Matrix: [Water](#)

Sample Name: [E3a](#) Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-29-18 14:03	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 14:03	pH = 1
Solids, TDS	7	May-09-18 14:03	pH = 6
TKN DA	28	May-30-18 14:03	pH = 1
TOC	28	May-30-18 14:03	pH = 1
Total Phosphorus DA	28	May-30-18 14:03	pH = 1

Sample ID: [1805007-27](#) Sampled: [May-02-18 14:09](#) Matrix: [Water](#)

Sample Name: [E3b](#) Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 14:09	pH = 1
Anions by IC	28	May-30-18 14:09	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 14:09	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 14:09	pH = 1
Solids, TDS	7	May-09-18 14:09	pH = 6
TKN DA	28	May-30-18 14:09	pH = 1
TOC	28	May-30-18 14:09	pH = 1
Total Phosphorus DA	28	May-30-18 14:09	pH = 1

Sample ID: [1805007-28](#) Sampled: [May-02-18 14:37](#) Matrix: [Water](#)

Sample Name: [E4a](#) Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 14:37	pH = 1
Anions by IC	28	May-30-18 14:37	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 14:37	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 14:37	pH = 1
Solids, TDS	7	May-09-18 14:37	pH = 6
TKN DA	28	May-30-18 14:37	pH = 1
TOC	28	May-30-18 14:37	pH = 1
Total Phosphorus DA	28	May-30-18 14:37	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: CB022018

Sample ID: [1805007-29](#) Sampled: [May-02-18 14:43](#) Matrix: [Water](#)

Sample Name: [E4b](#) Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 14:43	pH = 1
Anions by IC	28	May-30-18 14:43	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 14:43	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 14:43	pH = 1
Solids, TDS	7	May-09-18 14:43	pH = 6
TKN DA	28	May-30-18 14:43	pH = 1
TOC	28	May-30-18 14:43	pH = 1
Total Phosphorus DA	28	May-30-18 14:43	pH = 1

Sample ID: [1805007-30](#) Sampled: [May-02-18 15:08](#) Matrix: [Water](#)

Sample Name: [E5a](#) Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 15:08	pH = 1
Anions by IC	28	May-30-18 15:08	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 15:08	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 15:08	pH = 1
Solids, TDS	7	May-09-18 15:08	pH = 6
TKN DA	28	May-30-18 15:08	pH = 1
TOC	28	May-30-18 15:08	pH = 1
Total Phosphorus DA	28	May-30-18 15:08	pH = 1

Sample ID: [1805007-31](#) Sampled: [May-02-18 15:13](#) Matrix: [Water](#)

Sample Name: [E5b](#) Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 15:13	pH = 1
Anions by IC	28	May-30-18 15:13	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 15:13	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 15:13	pH = 1
Solids, TDS	7	May-09-18 15:13	pH = 6
TKN DA	28	May-30-18 15:13	pH = 1
TOC	28	May-30-18 15:13	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: CB022018

Sample ID: [1805007-31](#) Sampled: [May-02-18 15:13](#) Matrix: [Water](#)

Sample Name: [E5b](#) Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-30-18 15:13	pH = 1

Sample ID: [1805007-32](#) Sampled: [May-02-18 15:38](#) Matrix: [Water](#)

Sample Name: [E6a](#) Sample Location/Comments: [20th Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 15:38	pH = 1
Anions by IC	28	May-30-18 15:38	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 15:38	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 15:38	pH = 1
Solids, TDS	7	May-09-18 15:38	pH = 6
TKN DA	28	May-30-18 15:38	pH = 1
TOC	28	May-30-18 15:38	pH = 1
Total Phosphorus DA	28	May-30-18 15:38	pH = 1

Sample ID: [1805007-33](#) Sampled: [May-02-18 15:44](#) Matrix: [Water](#)

Sample Name: [E6b](#) Sample Location/Comments: [20th Avenue](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 15:44	pH = 1
Anions by IC	28	May-30-18 15:44	pH = 6
Metals ICP-AES (w)	180	Oct-29-18 15:44	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 15:44	pH = 1
Solids, TDS	7	May-09-18 15:44	pH = 6
TKN DA	28	May-30-18 15:44	pH = 1
TOC	28	May-30-18 15:44	pH = 1
Total Phosphorus DA	28	May-30-18 15:44	pH = 1

Sample ID: [1805007-34](#) Sampled: [May-02-18 16:09](#) Matrix: [Water](#)

Sample Name: [E7a](#) Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 16:09	pH = 1
Anions by IC	28	May-30-18 16:09	pH = 5

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: CB022018

Sample ID: [1805007-34](#) Sampled: [May-02-18 16:09](#) Matrix: [Water](#)

Sample Name: [E7a](#) Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-29-18 16:09	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 16:09	pH = 1
Solids, TDS	7	May-09-18 16:09	pH = 5
TKN DA	28	May-30-18 16:09	pH = 1
TOC	28	May-30-18 16:09	pH = 1
Total Phosphorus DA	28	May-30-18 16:09	pH = 1

Sample ID: [1805007-35](#) Sampled: [May-02-18 16:35](#) Matrix: [Water](#)

Sample Name: [E7b](#) Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-30-18 16:35	pH = 1
Anions by IC	28	May-30-18 16:35	pH = 5
Metals ICP-AES (w)	180	Oct-29-18 16:35	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-30-18 16:35	pH = 1
Solids, TDS	7	May-09-18 16:35	pH = 5
TKN DA	28	May-30-18 16:35	pH = 1
TOC	28	May-30-18 16:35	pH = 1
Total Phosphorus DA	28	May-30-18 16:35	pH = 1

Sample ID: [1805007-36](#) Sampled: [May-03-18 08:40](#) Matrix: [Water](#)

Sample Name: [E8a](#) Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-31-18 08:40	pH = 1
Anions by IC	28	May-31-18 08:40	pH = 5
Metals ICP-AES (w)	180	Oct-30-18 08:40	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-31-18 08:40	pH = 1
Solids, TDS	7	May-10-18 08:40	pH = 5
TKN DA	28	May-31-18 08:40	pH = 1
TOC	28	May-31-18 08:40	pH = 1
Total Phosphorus DA	28	May-31-18 08:40	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: CB022018

Sample ID: [1805007-37](#) Sampled: [May-03-18 08:48](#) Matrix: [Water](#)

Sample Name: [E8b](#) Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-31-18 08:48	pH = 1
Anions by IC	28	May-31-18 08:48	pH = 6
Metals ICP-AES (w)	180	Oct-30-18 08:48	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-31-18 08:48	pH = 1
Solids, TDS	7	May-10-18 08:48	pH = 6
TKN DA	28	May-31-18 08:48	pH = 1
TOC	28	May-31-18 08:48	pH = 1
Total Phosphorus DA	28	May-31-18 08:48	pH = 1

Sample ID: [1805007-38](#) Sampled: [May-03-18 07:15](#) Matrix: [Water](#)

Sample Name: [E10a](#) Sample Location/Comments: [8th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-31-18 07:15	pH = 1
Anions by IC	28	May-31-18 07:15	pH = 6
Metals ICP-AES (w)	180	Oct-30-18 07:15	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-31-18 07:15	pH = 1
Solids, TDS	7	May-10-18 07:15	pH = 6
TKN DA	28	May-31-18 07:15	pH = 1
TOC	28	May-31-18 07:15	pH = 1
Total Phosphorus DA	28	May-31-18 07:15	pH = 1

Sample ID: [1805007-39](#) Sampled: [May-03-18 07:15](#) Matrix: [Water](#)

Sample Name: [E10a Dup](#) Sample Location/Comments: [8th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-31-18 07:15	pH = 1
Anions by IC	28	May-31-18 07:15	pH = 6
Metals ICP-AES (w)	180	Oct-30-18 07:15	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-31-18 07:15	pH = 1
Solids, TDS	7	May-10-18 07:15	pH = 6
TKN DA	28	May-31-18 07:15	pH = 1
TOC	28	May-31-18 07:15	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: CB022018

Sample ID: [1805007-39](#) Sampled: [May-03-18 07:15](#) Matrix: [Water](#)

Sample Name: [E10a Dup](#) Sample Location/Comments: [8th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Total Phosphorus DA	28	May-31-18 07:15	pH = 1

Sample ID: [1805007-40](#) Sampled: [May-03-18 07:27](#) Matrix: [Water](#)

Sample Name: [E10b](#) Sample Location/Comments: [8th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-31-18 07:27	pH = 1
Anions by IC	28	May-31-18 07:27	pH = 6
Metals ICP-AES (w)	180	Oct-30-18 07:27	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-31-18 07:27	pH = 1
Solids, TDS	7	May-10-18 07:27	pH = 6
TKN DA	28	May-31-18 07:27	pH = 1
TOC	28	May-31-18 07:27	pH = 1
Total Phosphorus DA	28	May-31-18 07:27	pH = 1

Sample ID: [1805007-41](#) Sampled: [May-03-18 07:36](#) Matrix: [Water](#)

Sample Name: [FB4](#) Sample Location/Comments: [8th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-31-18 07:36	pH = 1
Anions by IC	28	May-31-18 07:36	pH = 4
Metals ICP-AES (w)	180	Oct-30-18 07:36	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-31-18 07:36	pH = 1
Solids, TDS	7	May-10-18 07:36	pH = 4
TKN DA	28	May-31-18 07:36	pH = 1
TOC	28	May-31-18 07:36	pH = 1
Total Phosphorus DA	28	May-31-18 07:36	pH = 1

Sample ID: [1805007-42](#) Sampled: [May-03-18 07:13](#) Matrix: [Water](#)

Sample Name: [E10 Equip](#) Sample Location/Comments: [8th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-31-18 07:13	pH = 1
Anions by IC	28	May-31-18 07:13	pH = 4

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: CB022018

Sample ID: [1805007-42](#) Sampled: [May-03-18 07:13](#) Matrix: [Water](#)

Sample Name: [E10 Equip](#) Sample Location/Comments: [8th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Metals ICP-AES (w)	180	Oct-30-18 07:13	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-31-18 07:13	pH = 1
Solids, TDS	7	May-10-18 07:13	pH = 4
TKN DA	28	May-31-18 07:13	pH = 1
TOC	28	May-31-18 07:13	pH = 1
Total Phosphorus DA	28	May-31-18 07:13	pH = 1

Sample ID: [1805007-43](#) Sampled: [May-03-18 09:53](#) Matrix: [Water](#)

Sample Name: [E9a](#) Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-31-18 09:53	pH = 1
Anions by IC	28	May-31-18 09:53	pH = 5
Metals ICP-AES (w)	180	Oct-30-18 09:53	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-31-18 09:53	pH = 1
Solids, TDS	7	May-10-18 09:53	pH = 5
TKN DA	28	May-31-18 09:53	pH = 1
TOC	28	May-31-18 09:53	pH = 1
Total Phosphorus DA	28	May-31-18 09:53	pH = 1

Sample ID: [1805007-44](#) Sampled: [May-03-18 10:02](#) Matrix: [Water](#)

Sample Name: [E9b](#) Sample Location/Comments: [7th Street](#)

Sample Comments:

Analysis	Hold time (days)	Expires	Comments
Ammonia N DA, Distilled	28	May-31-18 10:02	pH = 1
Anions by IC	28	May-31-18 10:02	pH = 5
Metals ICP-AES (w)	180	Oct-30-18 10:02	pH = 1
Nitrate-Nitrite N DA, Enzymatic reduction	28	May-31-18 10:02	pH = 1
Solids, TDS	7	May-10-18 10:02	pH = 5
TKN DA	28	May-31-18 10:02	pH = 1
TOC	28	May-31-18 10:02	pH = 1
Total Phosphorus DA	28	May-31-18 10:02	pH = 1

1805007

US EPA Region 5 Chicago Regional Laboratory

Client: Water Division, WECA Region 5
Project: Central Sands

Project Manager: Angela Ockrassa Davis
Project Number: CB022018

PROJECT COMMENTS: Anions: Chloride, fluoride, bromide, sulfate.
Full List metals

REVIEWED*By Robert Thompson at 9:54 am, May 07, 2018*

Reviewed By

Date



Environmental Protection Agency Region 5
Chicago Regional Laboratory

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Water Division, WECA Region 5
77 West Jackson Boulevard
Chicago IL, 60604

Project: Central Sands
Project Number: CB022018
Project Manager: Cheryl Burdett

Reported:
Jun-01-18 10:34

Ammonia Nitrogen, SM4500B & H (modified)
US EPA Region 5 Chicago Regional Laboratory

A1a (1805005-01) Matrix: Water Sampled: Apr-30-18 07:19 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.25	J	0.18	0.20	mg/L	1	B18E052	May-22-18	May-24-18

A1b (1805005-02) Matrix: Water Sampled: Apr-30-18 07:32 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.36		0.18	0.20	mg/L	1	B18E052	May-22-18	May-24-18

A2a (1805005-03) Matrix: Water Sampled: Apr-30-18 08:15 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.31		0.18	0.20	mg/L	1	B18E052	May-22-18	May-24-18

A2b (1805005-04) Matrix: Water Sampled: Apr-30-18 08:24 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.29	J	0.18	0.20	mg/L	1	B18E052	May-22-18	May-24-18

A3a (1805005-05) Matrix: Water Sampled: Apr-30-18 09:06 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E052	May-22-18	May-24-18

A3b (1805005-06) Matrix: Water Sampled: Apr-30-18 09:14 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E052	May-22-18	May-24-18

A4 Equip (1805005-07) Matrix: Water Sampled: Apr-30-18 09:38 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E052	May-22-18	May-24-18

A3a (Dup) (1805005-08) Matrix: Water Sampled: Apr-30-18 09:06 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E052	May-22-18	May-24-18



Environmental Protection Agency Region 5
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Water Division, WECA Region 5
77 West Jackson Boulevard
Chicago IL, 60604

Project: Central Sands
Project Number: CB022018
Project Manager: Cheryl Burdett

Reported:
Jun-01-18 10:34

Ammonia Nitrogen, SM4500B & H (modified)
US EPA Region 5 Chicago Regional Laboratory

FB1 (1805005-09)

Matrix: Water

Sampled: Apr-30-18 09:49

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E052	May-22-18	May-24-18

A4a (1805005-10)

Matrix: Water

Sampled: Apr-30-18 09:58

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E052	May-22-18	May-24-18

A4b (1805005-11)

Matrix: Water

Sampled: Apr-30-18 10:09

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.25		0.18	0.20	mg/L	1	B18E052	May-22-18	May-24-18

B1a (1805005-12)

Matrix: Water

Sampled: Apr-30-18 10:51

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.25	J	0.18	0.20	mg/L	1	B18E052	May-22-18	May-24-18

B1b (1805005-13)

Matrix: Water

Sampled: Apr-30-18 10:58

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.21		0.18	0.20	mg/L	1	B18E052	May-22-18	May-24-18

B2a (1805005-14)

Matrix: Water

Sampled: Apr-30-18 11:40

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U	J	0.18	0.20	mg/L	1	B18E052	May-22-18	May-24-18

B2b (1805005-15)

Matrix: Water

Sampled: Apr-30-18 11:48

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E052	May-22-18	May-24-18

B3a (1805005-16)

Matrix: Water

Sampled: Apr-30-18 12:29

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.62		0.18	0.20	mg/L	1	B18E053	May-22-18	May-24-18



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Project: Central Sands
Project Number: CB022018
Project Manager: Cheryl Burdett

Reported:
Jun-01-18 10:34

Ammonia Nitrogen, SM4500B & H (modified)
US EPA Region 5 Chicago Regional Laboratory

B3b (1805005-17) Matrix: Water Sampled: Apr-30-18 12:36 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.37	J	0.18	0.20	mg/L	1	B18E053	May-22-18	May-24-18

B4a (1805005-18) Matrix: Water Sampled: Apr-30-18 13:10 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.61		0.18	0.20	mg/L	1	B18E053	May-22-18	May-24-18

B4b (1805005-19) Matrix: Water Sampled: Apr-30-18 13:41 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	3.56	J	0.18	0.20	mg/L	1	B18E053	May-22-18	May-24-18

C1a (1805005-20) Matrix: Water Sampled: Apr-30-18 15:02 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E053	May-22-18	May-24-18

C1b (1805005-21) Matrix: Water Sampled: Apr-30-18 15:27 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E053	May-22-18	May-24-18

C2a (1805005-22) Matrix: Water Sampled: Apr-30-18 16:06 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.25		0.18	0.20	mg/L	1	B18E053	May-22-18	May-24-18

C2b (1805005-23) Matrix: Water Sampled: Apr-30-18 16:14 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.81		0.18	0.20	mg/L	1	B18E053	May-22-18	May-24-18

C3a (1805005-24) Matrix: Water Sampled: Apr-30-18 14:16 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	1.19	J	0.18	0.20	mg/L	1	B18E053	May-22-18	May-24-18



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Reported:
Jun-01-18 10:34

Ammonia Nitrogen, SM4500B & H (modified)
US EPA Region 5 Chicago Regional Laboratory

C3b (1805005-25)

Matrix: Water

Sampled: Apr-30-18 14:26

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.24		0.18	0.20	mg/L	1	B18E053	May-22-18	May-24-18

C5Aa (1805005-26)

Matrix: Water

Sampled: May-01-18 06:29

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.60		0.18	0.20	mg/L	1	B18E053	May-22-18	May-24-18

C5Ab (1805005-27)

Matrix: Water

Sampled: May-01-18 06:43

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	2.13		0.18	0.20	mg/L	1	B18E053	May-22-18	May-24-18

C6a (1805005-28)

Matrix: Water

Sampled: May-01-18 07:06

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.71		0.18	0.20	mg/L	1	B18E053	May-22-18	May-24-18

C6b (1805005-29)

Matrix: Water

Sampled: May-01-18 07:15

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	3.96	J	1.80	2.00	mg/L	10	B18E053	May-22-18	May-24-18

C7a (1805005-30)

Matrix: Water

Sampled: May-01-18 07:48

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E053	May-22-18	May-24-18

C7b (1805005-31)

Matrix: Water

Sampled: May-01-18 08:02

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.27		0.18	0.20	mg/L	1	B18E055	May-23-18	May-24-18

FB2 (1805005-32)

Matrix: Water

Sampled: May-01-18 07:39

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E055	May-23-18	May-24-18



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Reported:
Jun-01-18 10:34

Ammonia Nitrogen, SM4500B & H (modified)
US EPA Region 5 Chicago Regional Laboratory

C7 equip (1805005-33)

Matrix: Water Sampled: May-01-18 07:38 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E055	May-23-18	May-24-18

C7b Dup (1805005-34)

Matrix: Water Sampled: May-01-18 08:02 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.48		0.18	0.20	mg/L	1	B18E055	May-23-18	May-24-18

C8a (1805005-35)

Matrix: Water Sampled: May-01-18 08:35 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.25		0.18	0.20	mg/L	1	B18E055	May-23-18	May-24-18

C8b (1805005-36)

Matrix: Water Sampled: May-01-18 08:42 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.26		0.18	0.20	mg/L	1	B18E055	May-23-18	May-24-18

C9a (1805005-37)

Matrix: Water Sampled: May-01-18 10:00 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.20		0.18	0.20	mg/L	1	B18E055	May-23-18	May-24-18

C9b (1805005-38)

Matrix: Water Sampled: May-01-18 10:21 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.20		0.18	0.20	mg/L	1	B18E055	May-23-18	May-24-18

C10a (1805005-39)

Matrix: Water Sampled: May-01-18 11:05 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.76		0.18	0.20	mg/L	1	B18E055	May-23-18	May-24-18

C10b (1805005-40)

Matrix: Water Sampled: May-01-18 11:12 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	3.91		0.18	0.20	mg/L	1	B18E055	May-23-18	May-24-18



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Reported:
Jun-01-18 10:34

Ammonia Nitrogen, SM4500B & H (modified) US EPA Region 5 Chicago Regional Laboratory

C11a (1805005-41) Matrix: Water Sampled: May-01-18 11:46 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.41	J	0.18	0.20	mg/L	1	B18E055	May-23-18	May-24-18

C11b (1805005-42) Matrix: Water Sampled: May-01-18 11:52 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	1.08		0.18	0.20	mg/L	1	B18E055	May-23-18	May-24-18

C12a (1805005-43) Matrix: Water Sampled: May-01-18 12:41 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	1.22		0.18	0.20	mg/L	1	B18E055	May-23-18	May-24-18

C12b (1805005-44) Matrix: Water Sampled: May-01-18 12:47 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	1.51		0.18	0.20	mg/L	1	B18E055	May-23-18	May-24-18

C13a (1805005-45) Matrix: Water Sampled: May-01-18 13:30 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.26	J	0.18	0.20	mg/L	1	B18E055	May-23-18	May-24-18

C13b (1805005-46) Matrix: Water Sampled: May-01-18 13:39 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	1.32		0.18	0.20	mg/L	1	B18E056	May-23-18	May-24-18

D1a (1805005-47) Matrix: Water Sampled: May-01-18 14:19 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.26		0.18	0.20	mg/L	1	B18E056	May-23-18	May-24-18

D1b (1805005-48) Matrix: Water Sampled: May-01-18 14:26 Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.68	J	0.18	0.20	mg/L	1	B18E056	May-23-18	May-24-18



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Reported:
Jun-01-18 10:34

Ammonia Nitrogen, SM4500B & H (modified)
US EPA Region 5 Chicago Regional Laboratory

D2a (1805005-49)

Matrix: Water

Sampled: May-01-18 15:00

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U	J	0.18	0.20	mg/L	1	B18E056	May-23-18	May-24-18

D2b (1805005-50)

Matrix: Water

Sampled: May-01-18 15:06

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	1.33		0.18	0.20	mg/L	1	B18E056	May-23-18	May-24-18

D3a (1805005-51)

Matrix: Water

Sampled: May-01-18 15:41

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.85		0.18	0.20	mg/L	1	B18E056	May-23-18	May-24-18

D3b (1805005-52)

Matrix: Water

Sampled: May-01-18 15:48

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	1.12		0.18	0.20	mg/L	1	B18E056	May-23-18	May-24-18

D4a (1805005-53)

Matrix: Water

Sampled: May-01-18 16:19

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.41		0.18	0.20	mg/L	1	B18E056	May-23-18	May-24-18

D4b (1805005-54)

Matrix: Water

Sampled: May-01-18 16:26

Received: May-02-18 09:55

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	2.82	J	0.18	0.20	mg/L	1	B18E056	May-23-18	May-24-18

D5a (1805007-01)

Matrix: Water

Sampled: May-02-18 06:38

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.50		0.18	0.20	mg/L	1	B18E056	May-23-18	May-24-18

D5b (1805007-02)

Matrix: Water

Sampled: May-02-18 06:46

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.23		0.18	0.20	mg/L	1	B18E056	May-23-18	May-24-18



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Reported:
Jun-01-18 10:34

Ammonia Nitrogen, SM4500B & H (modified)
US EPA Region 5 Chicago Regional Laboratory

D6a (1805007-03)

Matrix: Water

Sampled: May-02-18 07:17

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.49		0.18	0.20	mg/L	1	B18E056	May-23-18	May-24-18

D6b (1805007-04)

Matrix: Water

Sampled: May-02-18 07:29

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.67		0.18	0.20	mg/L	1	B18E056	May-23-18	May-24-18

D7 equip (1805007-05)

Matrix: Water

Sampled: May-02-18 08:01

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E056	May-23-18	May-24-18

FB3 (1805007-06)

Matrix: Water

Sampled: May-02-18 08:03

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E056	May-23-18	May-24-18

D7a Dup (1805007-07)

Matrix: Water

Sampled: May-02-18 08:12

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E057	May-23-18	May-24-18

D7a (1805007-08)

Matrix: Water

Sampled: May-02-18 08:12

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E057	May-23-18	May-24-18

D7b (1805007-09)

Matrix: Water

Sampled: May-02-18 08:19

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.49		0.18	0.20	mg/L	1	B18E057	May-23-18	May-30-18

D8a (1805007-10)

Matrix: Water

Sampled: May-02-18 08:55

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.77		0.18	0.20	mg/L	1	B18E057	May-23-18	May-24-18



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Reported:
Jun-01-18 10:34

Ammonia Nitrogen, SM4500B & H (modified) US EPA Region 5 Chicago Regional Laboratory

D8b (1805007-11)

Matrix: Water

Sampled: May-02-18 09:11

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.68		0.18	0.20	mg/L	1	B18E057	May-23-18	May-24-18

D9a (1805007-12)

Matrix: Water

Sampled: May-02-18 09:45

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.21		0.18	0.20	mg/L	1	B18E057	May-23-18	May-24-18

D9b (1805007-13)

Matrix: Water

Sampled: May-02-18 09:54

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.34		0.18	0.20	mg/L	1	B18E057	May-23-18	May-24-18

D10a (1805007-14)

Matrix: Water

Sampled: May-02-18 10:29

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.22		0.18	0.20	mg/L	1	B18E057	May-23-18	May-24-18

D10a Dup (1805007-15)

Matrix: Water

Sampled: May-02-18 10:29

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.21		0.18	0.20	mg/L	1	B18E057	May-23-18	May-24-18

D10b (1805007-16)

Matrix: Water

Sampled: May-02-18 10:41

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.31		0.18	0.20	mg/L	1	B18E057	May-23-18	May-24-18

D10b Dup (1805007-17)

Matrix: Water

Sampled: May-02-18 10:41

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.42		0.18	0.20	mg/L	1	B18E057	May-23-18	May-24-18

D11a (1805007-18)

Matrix: Water

Sampled: May-02-18 11:19

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E057	May-23-18	May-24-18



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Reported:
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D11b (1805007-19)

Matrix: Water

Sampled: May-02-18 11:42

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E057	May-23-18	May-24-18

E1a (1805007-20)

Matrix: Water

Sampled: May-02-18 12:41

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E057	May-23-18	May-24-18

E1b (1805007-21)

Matrix: Water

Sampled: May-02-18 12:58

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	1.02		0.18	0.20	mg/L	1	B18E057	May-23-18	May-24-18

E2a (1805007-22)

Matrix: Water

Sampled: May-02-18 13:28

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E058	May-29-18	May-30-18

E2b (1805007-23)

Matrix: Water

Sampled: May-02-18 13:37

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.73		0.18	0.20	mg/L	1	B18E058	May-29-18	May-30-18

E2a Dup (1805007-24)

Matrix: Water

Sampled: May-02-18 13:28

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E058	May-29-18	May-30-18

E2b Dup (1805007-25)

Matrix: Water

Sampled: May-02-18 13:37

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.69		0.18	0.20	mg/L	1	B18E058	May-29-18	May-30-18

E3a (1805007-26)

Matrix: Water

Sampled: May-02-18 14:03

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.21		0.18	0.20	mg/L	1	B18E058	May-29-18	May-30-18



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Project: Central Sands
Project Number: CB022018
Project Manager: Cheryl Burdett

Reported:
Jun-01-18 10:34

Ammonia Nitrogen, SM4500B & H (modified)
US EPA Region 5 Chicago Regional Laboratory

E3b (1805007-27) Matrix: Water Sampled: May-02-18 14:09 Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.35		0.18	0.20	mg/L	1	B18E058	May-29-18	May-30-18

E4a (1805007-28) Matrix: Water Sampled: May-02-18 14:37 Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.87		0.18	0.20	mg/L	1	B18E058	May-29-18	May-30-18

E4b (1805007-29) Matrix: Water Sampled: May-02-18 14:43 Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	1.37		0.18	0.20	mg/L	1	B18E058	May-29-18	May-30-18

E5a (1805007-30) Matrix: Water Sampled: May-02-18 15:08 Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.22		0.18	0.20	mg/L	1	B18E058	May-29-18	May-30-18

E5b (1805007-31) Matrix: Water Sampled: May-02-18 15:13 Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.73		0.18	0.20	mg/L	1	B18E058	May-29-18	May-30-18

E6a (1805007-32) Matrix: Water Sampled: May-02-18 15:38 Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.26		0.18	0.20	mg/L	1	B18E058	May-29-18	May-30-18

E6b (1805007-33) Matrix: Water Sampled: May-02-18 15:44 Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.39		0.18	0.20	mg/L	1	B18E058	May-29-18	May-30-18

E7a (1805007-34) Matrix: Water Sampled: May-02-18 16:09 Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E058	May-29-18	May-30-18



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Reported:
Jun-01-18 10:34

Ammonia Nitrogen, SM4500B & H (modified) US EPA Region 5 Chicago Regional Laboratory

E7b (1805007-35)

Matrix: Water

Sampled: May-02-18 16:35

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E058	May-29-18	May-30-18

E8a (1805007-36)

Matrix: Water

Sampled: May-03-18 08:40

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E058	May-29-18	May-30-18

E8b (1805007-37)

Matrix: Water

Sampled: May-03-18 08:48

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.46		0.18	0.20	mg/L	1	B18E059	May-29-18	May-30-18

E10a (1805007-38)

Matrix: Water

Sampled: May-03-18 07:15

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E059	May-29-18	May-30-18

E10a Dup (1805007-39)

Matrix: Water

Sampled: May-03-18 07:15

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E059	May-29-18	May-30-18

E10b (1805007-40)

Matrix: Water

Sampled: May-03-18 07:27

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E059	May-29-18	May-30-18

FB4 (1805007-41)

Matrix: Water

Sampled: May-03-18 07:36

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E059	May-29-18	May-30-18

E10 Equip (1805007-42)

Matrix: Water

Sampled: May-03-18 07:13

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E059	May-29-18	May-30-18



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Reported:
Jun-01-18 10:34

Ammonia Nitrogen, SM4500B & H (modified)
US EPA Region 5 Chicago Regional Laboratory

E9a (1805007-43)

Matrix: Water

Sampled: May-03-18 09:53

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	U		0.18	0.20	mg/L	1	B18E059	May-29-18	May-30-18

E9b (1805007-44)

Matrix: Water

Sampled: May-03-18 10:02

Received: May-04-18 10:00

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed
Ammonia as N	0.34		0.18	0.20	mg/L	1	B18E059	May-29-18	May-30-18



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Reported:
Jun-01-18 10:34

Notes and Definitions

- J The identification of the analyte is acceptable; the reported value is an estimate.
- * This Quality Control measure meets the requirements of the CRL SOP for this analyte.
- U Not Detected
- NR Not Reported
- Q QC limit Exceeded