



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CHICAGO REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605

Date: 6/12/2018

Subject: Review of Region 5 Data for Central Sands

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

From: Nidia Fuentes, 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 blue ink that reads "Nidia Fuentes".

---

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:

TKN DA

Total Phosphorus DA

Report Name: 1805007 TKN DA Total Phosphorus DA FINAL Jun 12 18 1048



# 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-12-18 10:48

## Accredited Analyses included in this Report



**Method:** EPA 351.2 in Water

**Analysis:** TKN DA

**Analyte**

**Certifications**

Total Kjeldahl Nitrogen ISO/IEC 17025:2005

**Method:** EPA 365.4 in Water

**Analysis:** Total Phosphorus DA

**Analyte**

**Certifications**

Total Phosphorus ISO/IEC 17025:2005

Analytes not listed above are not accredited by ANAB.



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 NO<sub>3</sub>

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:**

<b>Analysis</b>	<b>Hold time (days)</b>	<b>Expires</b>	<b>Comments</b>
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:**

<b>Analysis</b>	<b>Hold time (days)</b>	<b>Expires</b>	<b>Comments</b>
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

**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**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

**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

**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

**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

**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

**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

**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

## **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

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

**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

**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

**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

**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

## **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

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

**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

**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

## **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

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

**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

**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

**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

**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

**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

**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

**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

**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

**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

**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

**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

**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

**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

PROJECT COMMENTS: Anions: Chloride, fluoride, bromide, sulfide.

Full List metals

**REVIEWED**

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



# 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-12-18 10:48

## Phosphorus, Colorimetric, EPA 365.4 (modified) US EPA Region 5 Chicago Regional Laboratory

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
Total Phosphorus	1.80		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

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
Total Phosphorus	2.90		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

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
Total Phosphorus	1.14		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

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
Total Phosphorus	1.59		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

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
Total Phosphorus	U		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

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
Total Phosphorus	U		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

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
Total Phosphorus	0.77		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

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
Total Phosphorus	0.55	J	0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18



# 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-12-18 10:48

## Phosphorus, Colorimetric, EPA 365.4 (modified) US EPA Region 5 Chicago Regional Laboratory

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
Total Phosphorus	2.27		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

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
Total Phosphorus	2.01		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

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
Total Phosphorus	2.17	J	0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

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
Total Phosphorus	1.15		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

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
Total Phosphorus	3.48		0.40	1.50	mg/L	10	B18E036	May-14-18	May-23-18

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
Total Phosphorus	0.85		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

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
Total Phosphorus	0.64		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

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
Total Phosphorus	1.65		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18



# 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-12-18 10:48

## Phosphorus, Colorimetric, EPA 365.4 (modified) US EPA Region 5 Chicago Regional Laboratory

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
Total Phosphorus	2.42		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

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
Total Phosphorus	1.28		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

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
Total Phosphorus	1.73		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

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
Total Phosphorus	0.95		0.04	0.15	mg/L	1	B18E036	May-14-18	May-23-18

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
Total Phosphorus	4.07	J	0.40	1.50	mg/L	10	B18E064	May-25-18	May-29-18

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
Total Phosphorus	0.94		0.04	0.15	mg/L	1	B18E064	May-25-18	May-29-18

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
Total Phosphorus	3.55		0.40	1.50	mg/L	10	B18E064	May-25-18	May-29-18

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
Total Phosphorus	1.23		0.04	0.15	mg/L	1	B18E064	May-25-18	May-29-18



# 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-12-18 10:48

## Phosphorus, Colorimetric, EPA 365.4 (modified) US EPA Region 5 Chicago Regional Laboratory

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
Total Phosphorus	3.20		0.40	1.50	mg/L	10	B18E064	May-25-18	May-29-18

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
Total Phosphorus	1.85		0.04	0.15	mg/L	1	B18E064	May-25-18	May-29-18

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
Total Phosphorus	1.79	J	0.04	0.15	mg/L	1	B18E062	May-24-18	May-29-18

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
Total Phosphorus	3.57		0.40	1.50	mg/L	10	B18E062	May-24-18	May-29-18

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
Total Phosphorus	4.44		0.40	1.50	mg/L	10	B18E062	May-24-18	May-29-18

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
Total Phosphorus	0.99		0.04	0.15	mg/L	1	B18E062	May-24-18	May-29-18

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
Total Phosphorus	2.80		0.04	0.15	mg/L	1	B18E062	May-24-18	May-29-18

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
Total Phosphorus	1.76		0.04	0.15	mg/L	1	B18E062	May-24-18	May-29-18



# 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-12-18 10:48

## Phosphorus, Colorimetric, EPA 365.4 (modified) US EPA Region 5 Chicago Regional Laboratory

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
Total Phosphorus	5.41		0.40	1.50	mg/L	10	B18E062	May-24-18	May-29-18

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
Total Phosphorus	1.47		0.04	0.15	mg/L	1	B18E062	May-24-18	May-29-18

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
Total Phosphorus	2.06		0.04	0.15	mg/L	1	B18E062	May-24-18	May-29-18

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
Total Phosphorus	1.42		0.04	0.15	mg/L	1	B18E062	May-24-18	May-29-18

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
Total Phosphorus	2.91	J	0.04	0.15	mg/L	1	B18E062	May-24-18	May-29-18

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
Total Phosphorus	1.09		0.04	0.15	mg/L	1	B18E062	May-24-18	May-29-18

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
Total Phosphorus	1.12		0.04	0.15	mg/L	1	B18E062	May-24-18	May-29-18

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
Total Phosphorus	2.96		0.04	0.15	mg/L	1	B18E062	May-24-18	May-29-18



# 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-12-18 10:48

## Phosphorus, Colorimetric, EPA 365.4 (modified) US EPA Region 5 Chicago Regional Laboratory

**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
Total Phosphorus	U		0.04	0.15	mg/L	1	B18E062	May-24-18	May-29-18

**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
Total Phosphorus	U		0.04	0.15	mg/L	1	B18E062	May-24-18	May-29-18

**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
Total Phosphorus	0.92		0.04	0.15	mg/L	1	B18E062	May-24-18	May-29-18

**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
Total Phosphorus	2.90		0.04	0.15	mg/L	1	B18E062	May-24-18	May-29-18



# 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-12-18 10:48

## Total Kjeldahl Nitrogen, EPA 351.2 (modified) US EPA Region 5 Chicago Regional Laboratory

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
Total Kjeldahl Nitrogen	0.68		0.20	0.50	mg/L	1	B18E060	May-23-18	May-23-18

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
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L	1	B18E060	May-23-18	May-23-18

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
Total Kjeldahl Nitrogen	0.68		0.20	0.50	mg/L	1	B18E060	May-23-18	May-23-18

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
Total Kjeldahl Nitrogen	0.79		0.20	0.50	mg/L	1	B18E060	May-23-18	May-23-18

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
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L	1	B18E060	May-23-18	May-23-18

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
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L	1	B18E060	May-23-18	May-23-18

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
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L	1	B18E060	May-23-18	May-23-18

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
Total Kjeldahl Nitrogen	U	J	0.20	0.50	mg/L	1	B18E060	May-23-18	May-23-18



# 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-12-18 10:48

## Total Kjeldahl Nitrogen, EPA 351.2 (modified) US EPA Region 5 Chicago Regional Laboratory

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
Total Kjeldahl Nitrogen	1.14		0.20	0.50	mg/L	1	B18E060	May-23-18	May-23-18

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
Total Kjeldahl Nitrogen	1.28		0.20	0.50	mg/L	1	B18E060	May-23-18	May-23-18

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
Total Kjeldahl Nitrogen	1.18	J	0.20	0.50	mg/L	1	B18E060	May-23-18	May-23-18

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
Total Kjeldahl Nitrogen	0.50		0.20	0.50	mg/L	1	B18E060	May-23-18	May-23-18

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
Total Kjeldahl Nitrogen	1.10		0.20	0.50	mg/L	1	B18E060	May-23-18	May-23-18

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
Total Kjeldahl Nitrogen	0.57		0.20	0.50	mg/L	1	B18E060	May-23-18	May-23-18

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
Total Kjeldahl Nitrogen	0.52		0.20	0.50	mg/L	1	B18E060	May-23-18	May-29-18

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
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L	1	B18E060	May-23-18	May-29-18



# 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-12-18 10:48

## Total Kjeldahl Nitrogen, EPA 351.2 (modified) US EPA Region 5 Chicago Regional Laboratory

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
Total Kjeldahl Nitrogen	0.97		0.20	0.50	mg/L	1	B18E060	May-23-18	May-29-18

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
Total Kjeldahl Nitrogen	0.51		0.20	0.50	mg/L	1	B18E060	May-23-18	May-29-18

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
Total Kjeldahl Nitrogen	0.83		0.20	0.50	mg/L	1	B18E060	May-23-18	May-29-18

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
Total Kjeldahl Nitrogen	0.72		0.20	0.50	mg/L	1	B18E060	May-23-18	May-29-18

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
Total Kjeldahl Nitrogen	1.76		0.20	0.50	mg/L	1	B18E065	May-25-18	May-29-18

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
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L	1	B18E065	May-25-18	May-29-18

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
Total Kjeldahl Nitrogen	1.40		0.20	0.50	mg/L	1	B18E065	May-25-18	May-29-18

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
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L	1	B18E065	May-25-18	May-29-18



# 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-12-18 10:48

## Total Kjeldahl Nitrogen, EPA 351.2 (modified) US EPA Region 5 Chicago Regional Laboratory

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
Total Kjeldahl Nitrogen	1.31		0.20	0.50	mg/L	1	B18E065	May-25-18	May-29-18

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
Total Kjeldahl Nitrogen	0.53		0.20	0.50	mg/L	1	B18E065	May-25-18	May-29-18

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
Total Kjeldahl Nitrogen	0.74		0.20	0.50	mg/L	1	B18E063	May-24-18	May-29-18

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
Total Kjeldahl Nitrogen	1.11		0.20	0.50	mg/L	1	B18E063	May-24-18	May-29-18

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
Total Kjeldahl Nitrogen	2.17		0.20	0.50	mg/L	1	B18E063	May-24-18	May-29-18

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
Total Kjeldahl Nitrogen	0.64		0.20	0.50	mg/L	1	B18E063	May-24-18	May-29-18

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
Total Kjeldahl Nitrogen	1.42		0.20	0.50	mg/L	1	B18E063	May-24-18	May-29-18

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
Total Kjeldahl Nitrogen	0.52		0.20	0.50	mg/L	1	B18E063	May-24-18	May-29-18



# 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-12-18 10:48

## Total Kjeldahl Nitrogen, EPA 351.2 (modified) US EPA Region 5 Chicago Regional Laboratory

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
Total Kjeldahl Nitrogen	1.23		0.20	0.50	mg/L	1	B18E063	May-24-18	May-29-18

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
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L	1	B18E063	May-24-18	May-29-18

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
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L	1	B18E063	May-24-18	May-29-18

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
Total Kjeldahl Nitrogen	0.59		0.20	0.50	mg/L	1	B18E063	May-24-18	May-29-18

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
Total Kjeldahl Nitrogen	1.64		0.20	0.50	mg/L	1	B18E063	May-24-18	May-29-18

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
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L	1	B18E063	May-24-18	May-29-18

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
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L	1	B18E063	May-24-18	May-29-18

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
Total Kjeldahl Nitrogen	1.09		0.20	0.50	mg/L	1	B18E063	May-24-18	May-29-18



# 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-12-18 10:48

## Total Kjeldahl Nitrogen, EPA 351.2 (modified) US EPA Region 5 Chicago Regional Laboratory

**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
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L	1	B18E063	May-24-18	May-29-18

**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
Total Kjeldahl Nitrogen	U		0.20	0.50	mg/L	1	B18E063	May-24-18	May-29-18

**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
Total Kjeldahl Nitrogen	0.53		0.20	0.50	mg/L	1	B18E063	May-24-18	May-29-18

**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
Total Kjeldahl Nitrogen	1.85		0.20	0.50	mg/L	1	B18E063	May-24-18	May-29-18



# 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-12-18 10:48

### Notes and Definitions

J The identification of the analyte is acceptable; the reported value is an estimate.

U Not Detected

NR Not Reported

Q QC limit Exceeded