

## Pre-Drilling Water Sampling Submittal Review Checklist

Permit No.: 34-013-2-0970-00-00 Well Name: Wassmann Unit B 5H

Owner: XTO Energy INC. Pad Name: Wassmann

Township/County: Pultney / Belmont

Latitude/Longitude: 39.989732 / -80.791739

Sampling Company: Rettew North Canton, OH

Laboratory: Fairway Laboratories Pennsdale, PA

Yes  No Ohio EPA or NELAP/NELAC Certified Lab

Submittal date(s): 9/10/2015

Via:  eMail  Flash Drive  Paper  CD  Other: \_\_\_\_\_

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Required/Actual Sampling Radius (feet) 1500/2500+

Yes  No Any Building Clusters or Potential Residences Identified within Required Sampling Radius

Yes  No  NA All Building Clusters or Potential Residences within Required Sampling Radius Accounted for

Sample Date(s): June - Aug 2015

Yes  No Sample Location, Sampling Radius and Oil & Gas Well/Pad Shown on Scaled Aerial Photo/Map

Yes  No Latitude/Longitude or Address of Sample Locations Provided

Yes  No Lab Reports Submitted

Yes  No Chain of Custody Forms Submitted

Yes  No Results Submitted for All Parameters Required in September 20, 2012 BMP

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Additional Information Requested: N/A

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Additional Information Received: N/A

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Other Items of Note: Additional data for ponds, springs, and streams within 2,500ft. was included in the report.

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DOGRM Reviewer: Colby Schwaderer Date: 6/16/2016



We answer to you.

5143 Stoneham Rd. Ste 100, North Canton, OH 44720 • Phone: (330) 818-9770  
E-mail: rettew@rettew.com • Web site: rettew.com

Engineers

Planners

Surveyors

Landscape

Architects

Environmental

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September 10, 2015

Rick Trippel, Hydrogeologist  
Ohio Department of Natural Resources  
Division of Oil and Gas Resources Management  
2045 Morse Road, F-2  
Columbus, OH 43229-6693

RE: Pre-Drill Baseline Water Sampling Summary  
Wassmann A and Wassmann B Units Well Pad  
Pultney Township, Belmont County, Ohio  
RETTEW Project No. 091322071

Dear Mr. Trippel:

RETTEW Associates, Inc. (RETTEW) is pleased to submit this summary of pre-drill baseline water sampling performed prior to drilling at the Wassmann A and Wassmann B Units Well Pad (the Site) on behalf of XTO Energy, Inc. (XTO). The sampling activities included identification of private surface and groundwater supplies within a 2,500' radius of the Site, contacting property owners, and collecting water samples at those locations authorized by the property owners.

Private groundwater and surface water supplies were identified at 11 locations within the 2,500' radius as depicted on the Pre-Drill Baseline Water Sample Locations figure and Facility Location Map (see **Attachment 1**). Three water samples were collected within the 1,500' radius. A complete list of sample locations and landowner communications is provided in **Attachment 2**. The samples collected by RETTEW were submitted under Chain-of-Custody handling procedures to Fairway Laboratories, Inc. for analysis of Tier 1 - 3 (ODNR form) water sampling parameters and Ohio Environmental Protection Agency's (OEPA) recommended list. Copies of the analytical results are provided in **Attachment 3**. No Source Refusals are provided in **Attachment 4** for landowners that do not have a water source or have inoperable wells on a given parcel.

If you have any questions or require additional information, please do not hesitate to contact me at (330) 818-9770 ext. 4422 or via email at joe.biaglow@rettew.com.

Sincerely,

Joe Biaglow  
Project Manager

Enclosure(s)

copy: Melissa Breitenbach – XTO Energy Inc.  
Dan Kitchen – JWCI  
Brian Spray – RETTEW

I:\Projects\09132\091322071\GS\Pre-Drill Baseline\ODNR Deliverable\Ltr-Wassmann BWQS Summary ODNR

**ATTACHMENT 1**

**Parcel Key**

- 1 - 26-01530.000 - M&E LEGACY GROUP LLC
- 2 - 26-00865.000 - VOGLER JAMES E & RUBY H
- 3 - 26-00615.001 - HUSEK JOSEPH W JR & MARY K
- 4 - 26-01180.000 - SITAR RONALD J & GEORGIA A
- 5 - 26-00971.000 - PASSMORE MARY ANN
- 6 - 26-01706.000 - MATTOZZI JOSEPH A JR & JULIANNE
- 7 - 26-01450.000 - CROZIER ERIC W & ROSALEE M
- 8 - 26-00615.000 - HUSEK WILLIAM J & JEANIE C
- 9 - 26-00616.000 - HUSEK WILLIAM J & JEANIE C
- 10 - 26-00552.000 - HARTLIEB DOUGLAS J & CYNTHIA L
- 11 - 26-01849.000 - CROZIER, ERIC W & ROSALEE M
- 12 - 26-01531.000 - M&E LEGACY GROUP LLC
- 13 - 26-01849.001 - DELONG, CECILIA A & ROBERT P
- 14 - 26-01528.000 - M&E LEGACY GROUP LLC
- 15 - 26-01741.000 - PASSMORE MARY ANN
- 16 - 26-01323.000 - TRIGG DWANE E
- 17 - 26-01740.000 - PASSMORE MARY ANN
- 18 - 26-00606.000 - VICKERS CHAS A JR
- 19 - 26-01254.000 - HEATHERINGTON HAROLD
- 20 - 26-03105.000 - GREENWOOD SAMUEL T & SHARISSA L
- 21 - 26-02509.000 - WINIESDORFFER DANNA LOU & JEFFREY JOE WATT
- 22 - 26-02502.000 - CLEGG DON A & CYNTHIA L
- 23 - 26-02503.000 - FRY CYNTHIA L (1) ETAL
- 24 - 26-02501.000 - SALL ROBERT L & MARGARET E
- 25 - 26-02510.000 - PUGH CYNTHIA L
- 26 - 26-02504.000 - AMERICAN COAL SALES COMPANY
- 27 - 26-01078.000 - VAN DERHEYDEN STEPHANIE
- 28 - 26-02505.000 - WILSON TERRI J JP MORGAN CHASE BANK
- 29 - 26-02506.000 - NOLAN SANDRA K
- 30 - 26-02507.000 - WILSON TERRI J JP MORGAN CHASE BANK
- 31 - 26-02508.000 - SCHREINER JODY W & TAMMI L SURV
- 32 - 26-01532.000 - M&E LEGACY GROUP LLC
- 33 - 26-01533.000 - M&E LEGACY GROUP LLC
- 34 - 26-02923.000 - SWOYER ROGER D & CHARLEEN L
- 35 - 26-01649.000 - HIGGINS JAMES D & BRENDA K
- 36 - 26-01670.000 - SADLOWSKI FRANK J & MELISSA A
- 37 - 26-03054.000 - RICHARDS JOHN H & APRIL A
- 38 - 26-01670.006 - DELONG CECILIA
- 39 - 26-02911.000 - SCOTT KIM A
- 40 - 26-01670.005 - VERNET WILMA JO
- 41 - 26-01670.004 - VERNET W JOAN
- 42 - 26-01670.003 - KERNIK RYAN K & JILL A
- 43 - 26-01670.001 - DELONG ROBERT P
- 44 - 26-01670.002 - HELT JEFFREY C & ELIZABETH A
- 45 - 26-01156.000 - MEIGH VICKY (6) ETAL
- 46 - 26-03055.000 - RICHARDS JOHN H & APRIL A
- 47 - 26-02926.000 - ABEREGG RYAN J & MANDY S
- 48 - 26-00520.000 - DOWLING JASON & AUBREY
- 49 - 26-01876.000 - WASSMANN-WINN MARTHA
- 50 - 26-02915.000 - CHAPLIN HEIDI L
- 51 - 26-02912.000 - SICKLES KATHY JO C/O KATHY JO SICKLES VERNET
- 52 - 26-01091.000 - RIGGS JERRY LEE
- 53 - 26-02925.000 - TOMLAN JOSEPH J & RACHEL
- 54 - 26-00983.000 - HIGGINS JAMES D & BRENDA K
- 55 - 26-01801.000 - MILLER IVAN A & MARY H
- 56 - 26-00014.000 - AMOS PAUL E
- 57 - 26-01278.000 - TRAILER CLUB OF BROOKS RUN THE C/O PAUL AMOS
- 58 - 26-01670.007 - DELONG CECILIA
- 59 - 26-01876.000 - WASSMANN-WINN MARTHA
- 60 - 26-03105.000 - GREENWOOD SAMUEL T & SHARISSA L
- 61 - 26-00672.000 - GROSSENBACH MARY J (1) ETAL
- 62 - 26-01847.000 - PATTERSON MARK S & VICTORIA
- 63 - 26-01336.000 - AMOS, PAUL E
- 64 - 26-01801.000 - MILLER IVAN A & MARY H
- 65 - 26-01846.000 - PATTERSON MARK & VICTORIA
- 66 - 26-00122.000 - GILL ROGER D & LORI A
- 67 - 26-60169.000 - STATE OF OHIO
- 68 - 26-00271.000 - KRUPINSKI ROBERT A
- 69 - 26-00975.000 - PATT JOHN R
- 70 - 26-03107.000 - KOONCE MICHAEL B
- 71 - 26-01000.000 - BLUTHARDT THOMAS P & CAROL S
- 72 - 26-03107.001 - DELONG ROBERT P
- 73 - 26-00125.000 - BLUTHARDT THOMAS P
- 74 - 26-01653.000 - HUGHES NANCY L
- 75 - 26-00580.000 - DOTY SHANE
- 76 - 26-01879.000 - WENCKOSKI JAMES F & ROSALIE A



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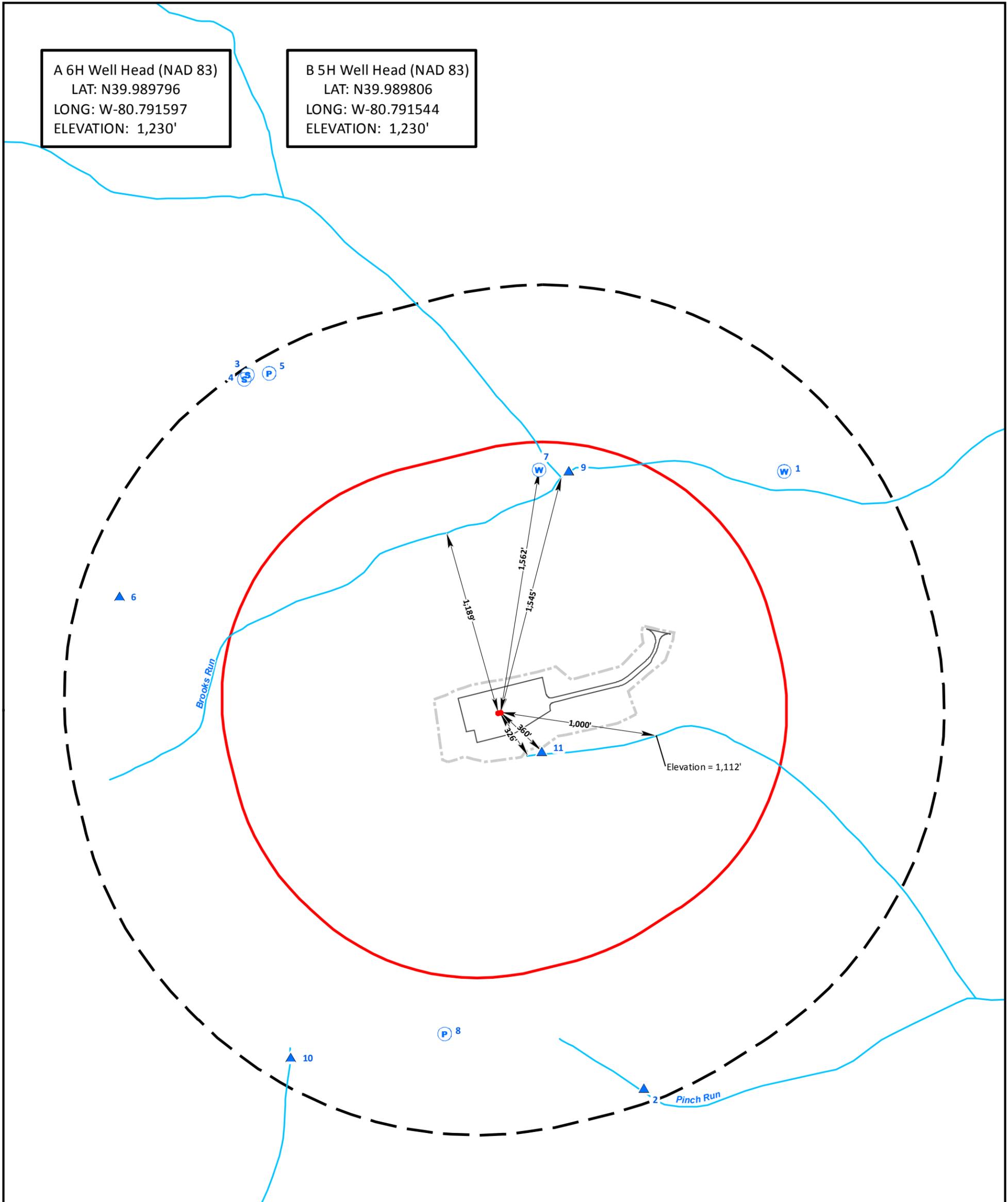
**XTO Energy, Inc.**  
**Wassmann A and Wassmann B Units Well Pad**  
 Baseline Water Sample Locations Map  
 Project No: 091322071  
 Pultney Township, Belmont County, OH  
 9/3/2015

Pond Sample	Well Pad	1,500' Well Pad Buffer	First Attempt at Contact & Certified Mailing
Spring Sample	No Source to be Sampled	2,500' Well Pad Buffer	Second Attempt at Contact
Stream Sample	Road	Pad and Access Road Boundary	Parcel Boundary
Water Well Sample	Stream	Subject Parcel	

0 600 1,200 Feet  
 1 inch = 600 feet

A 6H Well Head (NAD 83)  
 LAT: N39.989796  
 LONG: W-80.791597  
 ELEVATION: 1,230'

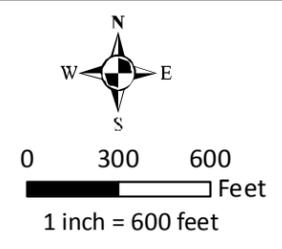
B 5H Well Head (NAD 83)  
 LAT: N39.989806  
 LONG: W-80.791544  
 ELEVATION: 1,230'



SURFACE OWNER/WATER PURVEYOR w/ WATER SUPPLY WITHIN 2,500'

OWNER	MAP ID	TYPE OF SAMPLE	PARCEL ID	ADDRESS	PHONE NUMBER	WELL #	DEPTH OF WELL (ft.)	LATITUDE/LONGITUDE
Doty, Shane	1	Water Well	26-00580.000	55360 Key-Bellaire Rd	Unknown	Unknown	Unknown	39.993914, -80.785016
Greenwood, Samuel T. & Sharissa L.	2	Stream	26-03105.000	55535 New Cut Rd	H:740-325-1657 C:740-359-5183	N/A	N/A	39.983196, -80.788456
M&E Legacy Group LLC	3	Spring	26-01528.000	Behind SR 147	740-676-5397	N/A	N/A	39.995781, -80.797129
M&E Legacy Group LLC	4	Spring	26-01528.000	Behind SR 147	740-676-5397	N/A	N/A	39.995700, -80.797203
M&E Legacy Group LLC	5	Pond	26-01528.000	Behind SR 147	740-676-5397	N/A	N/A	39.995797, -80.796646
M&E Legacy Group LLC	6	Stream	26-01531.000	54334 Key-Bellaire Rd	740-676-5397	N/A	N/A	39.991960, -80.800132
Riggs, Jerry Lee	7	Water Well	26-01091.000	55182 Key-Bellaire Rd	H:740-676-0494 C:740-676-8693	Unknown	35-40	39.994026, -80.790563
Sadlowski, Frank J. & Melissa A.	8	Pond	26-01670.000	55279 New Cut Rd	740-671-3016	N/A	N/A	39.984206, -80.792955
The Trailer Club of Brooks Run C/O Paul Amos	9	Stream	26-01278.000	Brown Hollow Rd	H:740-676-0016 C:740-359-6893	N/A	N/A	39.994007, -80.789890
Van Derheyden, Stephanie	10	Stream	26-01078.000	55270 New Cut Rd	740-296-1532	N/A	N/A	39.983849, -80.796444
Wassmann-Winn, Martha	11	Stream	26-01876.000	55014 Winding Hill Rd	H:740-676-6455 C:304-281-7384	N/A	N/A	39.989110, -80.790630

- P Pond Sample
- S Spring Sample
- W Water Well Sample
- ▲ Stream Sample
- Wellhead
- National Hydrography Dataset Stream
- Pad & Access Road Boundary
- Limits of Disturbance
- 1,500' Well Pad Buffer
- 2,500' Well Pad Buffer



**RETTEW** XTO Energy Inc.

**Wassmann A and Wassmann B Units Well Pad**

**Facility Location Map**

Pultney Township, Belmont County, OH

Project No: 091322071

8/31/2015

## **ATTACHMENT 2**





**ATTACHMENT 3**



We answer to you.

5143 Stoneham Road, Suite 100

North Canton, Ohio 44720

Phone: (330) 818-9770

Fax: (330) 818-9760

SAMPLING DATA SHEET

Source Information

Date: 8-10-15 Water Sample Collection Time: 12:15 Parcel No.: 26-00580.000

Source ID: GWS-Vassmann Unit - Doty - well-01

Address: 55360 Key Bellaire Rd, Bellaire, OH 43906

Source Latitude: 39.993914 Longitude: -80.785016

RETTEW Personnel: Haake/Zoller

Stray Gas Sweep (Structure)

CO: 0 ppm H2S: 0 ppm

LEL: 0 % Oxy: 20.9 %

Well Head Gas Screening

CO: 0 ppm H2S: 0 ppm

LEL: 0 % Oxy: 20.9 %

Source Type

Well [X] Spring [ ] Stream [ ] Pond [ ] If pond: spring fed [ ] man-made [ ]

Well Information (if applicable)

Top of Casing: PVC [ ] STEEL [ ]

Total Depth (ft):

Diameter of Casing (in):

Water Quality Observations:

Well Condition: Good Color: None

Turbidity (Qualitative): None Odor: None

Additional Notes:

Field Measurements

Table with 8 columns: Time, DO (%), ORP (mV), pH, Temperature (°C), Conductivity (mS/cm), Turbidity (NTUs). Rows show measurements at 0, 3, 6, 9, 12, and 15 minutes.



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SAMPLING DATA SHEET

Source Information

Date: 7-8-15 Water Sample Collection Time: 14:30 Parcel No.: 26-03105,000  
SourceID: SW5-WASSMANNA waft - Greenwood - Stream - DB  
Address: 55535 New Cut Rd, Shadyside, OH 43947  
Source Latitude: 39.983196 Longitude: -80.788456  
RETTEW Personnel: Huke/Zoller

Stray Gas Sweep (Structure)

CO: 0 ppm H<sub>2</sub>S: 0 ppm  
LEL: 0 % Oxy: 20.9 %

Well Head Gas Screening

CO: 0 ppm H<sub>2</sub>S: 0 ppm  
LEL: 0 % Oxy: 20.9 %

Source Type

Well  Spring   
Stream  Pond   
If pond: spring fed  man-made

Well Information (if applicable)

Top of Casing: PVC  STEEL   
Total Depth (ft): \_\_\_\_\_  
Diameter of Casing (in): \_\_\_\_\_

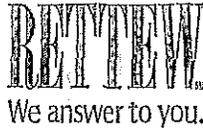
Water Quality Observations:

Well Condition: N/A Color: Light brown  
Turbidity (Qualitative): Slight Odor: None

Additional Notes: \_\_\_\_\_

Field Measurements

	Time	DO (%)	ORP (mV)	pH	Temperature (°C)	Conductivity (mS/cm)	Turbidity (NTUs)
0 min	14:25	9.74	179	7.72	19.17	0.282	112
3 min							
6 min							
9 min							
12 min							
15 min							



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**SAMPLING DATA SHEET**

**Source Information**

Date: 7-16-15 Water Sample Collection Time: 12:00 Parcel No.: 26-01528.000  
 Source ID: JWS-Wassmann Unit - M&E Legacy - Spring - 01  
 Address: Behind SR 147 / 54334 Key-Bellaire Rd, Bellaire, OH 43906  
 Source Latitude: 39.995781 Longitude: -80.797129  
 RETTEW Personnel: ZSH / JAB

**Stray Gas Sweep (Structure)**

CO: 0 ppm H<sub>2</sub>S: 0 ppm  
 LEL: 0 % Oxy: 21.0 %

**Well Head Gas Screening**

CO: 0 ppm H<sub>2</sub>S: 0 ppm  
 LEL: 0 % Oxy: 21.0 %

**Source Type**

Well  Spring   
 Stream  Pond   
 If pond: spring fed  man-made

**Well Information (if applicable)**

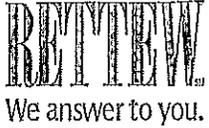
Top of Casing: PVC  STEEL   
 Total Depth (ft): \_\_\_\_\_  
 Diameter of Casing (in): \_\_\_\_\_

Water Quality Observations: Well Condition: N/A Color: None  
 Turbidity (Qualitative): Clear Odor: None

Additional Notes: \_\_\_\_\_  
 \_\_\_\_\_

**Field Measurements**

	Time	DO (%)	ORP (mV)	pH	Temperature (°C)	Conductivity (mS/cm)	Turbidity (NTUs)
0 min	11:55	7.63	234	7.44	20.02	0.460	10.6
3 min							
6 min							
9 min							
12 min							
15 min							



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**SAMPLING DATA SHEET**

**Source Information**

Date: 7/16/15 Water Sample Collection Time: 1230 Parcel No.: 26-01528.000  
 Source ID: SWS - Wassmann Unit - M415 Legacy - Spring - 02  
 Address: Behind SR 147 / 54334 Key - Bellaire Rd, Bellaire, OH 43906  
 Source Latitude: 39.9957 Longitude: -80.797203  
 RETTEW Personnel: ZJH/JAR

**Stray Gas Sweep (Structure)**

CO: 0 ppm H<sub>2</sub>S: 0 ppm  
 LEL: 0 % Oxy: 20.9 %

**Well Head Gas Screening**

CO: 0 ppm H<sub>2</sub>S: 0 ppm  
 LEL: 0 % Oxy: 20.9 %

**Source Type**

Well  Spring   
 Stream  Pond   
 If pond: spring fed  man-made

**Well Information (if applicable)**

Top of Casing: PVC  STEEL   
 Total Depth (ft): \_\_\_\_\_  
 Diameter of Casing (in): \_\_\_\_\_

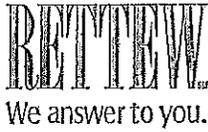
**Water Quality Observations:**

Well Condition: N/A Color: None  
 Turbidity (Qualitative): Clear Odor: None

Additional Notes: \_\_\_\_\_

**Field Measurements**

	Time	DO (%)	ORP (mV)	pH	Temperature (°C)	Conductivity (mS/cm)	Turbidity (NTUs)
0 min	<u>1223</u>	<u>4.47</u>	<u>201</u>	<u>7.66</u>	<u>24.76</u>	<u>0.307</u>	<u>3.2</u>
3 min							
6 min							
9 min							
12 min							
15 min							



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**SAMPLING DATA SHEET**

**Source Information**

Date: 7/16/15 Water Sample Collection Time: 13:15 Parcel No.: 26-01529.000  
 SourceID: SWS-Wassmann Unit - M+E Legacy - Pond-01  
 Address: Behind S.R. 147 / 54334 Key - Bellaire Rd, Bellaire, OH 43906  
 Source Latitude: 39.995797 Longitude: -80.796646  
 RETTEW Personnel: STH/JNB

**Stray Gas Sweep (Structure)**

CO: 0 ppm H<sub>2</sub>S: 0 ppm  
 LEL: 0 % Oxy: 20.9 %

**Well Head Gas Screening**

CO: 0 ppm H<sub>2</sub>S: 0 ppm  
 LEL: 0 % Oxy: 21.0 %

**Source Type**

Well  Spring   
 Stream  Pond   
 If pond: spring fed  man-made

**Well Information (if applicable)**

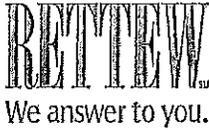
Top of Casing: PVC  STEEL   
 Total Depth (ft): \_\_\_\_\_  
 Diameter of Casing (in): \_\_\_\_\_

Water Quality Observations: Well Condition: N/A Color: None  
 Turbidity (Qualitative): Slight Odor: None

Additional Notes: \_\_\_\_\_  
 \_\_\_\_\_

**Field Measurements**

	Time	DO (%)	ORP (mV)	pH	Temperature (°C)	Conductivity (mS/cm)	Turbidity (NTUs)
0 min	<u>13:05</u> <del>13:15</del>	<u>8.32</u>	<u>170</u>	<u>7.9</u>	<u>28.62</u>	<u>0.324</u>	<u>31.7</u>
3 min							
6 min							
9 min							
12 min							
15 min							



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**SAMPLING DATA SHEET**

**Source Information**

Date: 7-16-15 Water Sample Collection Time: 14:10 Parcel No.: 26-01531.000  
 SourceID: SWS-Wassman Unit - M&E Legacy - Stream - 01  
 Address: 54334 Key - Bellaire Rd, Bellaire, OH 43906  
 Source Latitude: 39.99196 Longitude: -80.800132  
 RETTEW Personnel: Haake / Bisson

**Stray Gas Sweep (Structure)**

CO: 0 ppm H<sub>2</sub>S: 0 ppm  
 LEL: 0 % Oxy: 20.9 %

**Well Head Gas Screening**

CO: 0 ppm H<sub>2</sub>S: 0 ppm  
 LEL: 0 % Oxy: 20.9 %

**Source Type**

Well  Spring   
 Stream  Pond   
 If pond: spring fed  man-made

**Well Information (if applicable)**

Top of Casing: PVC  STEEL   
 Total Depth (ft): \_\_\_\_\_  
 Diameter of Casing (in): \_\_\_\_\_

Water Quality Observations: Well Condition: N/A Color: None  
 Turbidity (Qualitative): Slight Odor: None

Additional Notes: \_\_\_\_\_  
 \_\_\_\_\_

**Field Measurements**

	Time	DO (%)	ORP (mV)	pH	Temperature (°C)	Conductivity (mS/cm)	Turbidity (NTUs)
0 min	14:00	10.88	160	8.44	25.52	0.425	86.3
3 min							
6 min							
9 min							
12 min							
15 min							



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**SAMPLING DATA SHEET**

**Source Information**

Date: 6/18/15 Water Sample Collection Time: 12:10 Parcel No.: 26-01091.000  
 Source ID: GWS-Wassmann Unit - Riggs - Well - 01  
 Address: 55200 Key Bellaire Road, Bellaire, OH 43906  
 Source Latitude: 39.994026 Longitude: -80.792955  
 RETTEW Personnel: Joe Biaglow / Kevin Zoller

Stray Gas Sweep (Structure) - Garage

Well Head Gas Screening (Headspace)

CO: 3 ppm H<sub>2</sub>S: 0 ppm CO: 2 H<sub>2</sub>S: 0 CO: 0 ppm H<sub>2</sub>S: 0 ppm CO: 0 ppm H<sub>2</sub>S: 0 ppm  
 LEL: 0 % Oxy: 20.9 % LEL: 0 Oxy: 18.8 % LEL: 3 % Oxy: 21.0 % LEL: 0 % Oxy: 21.0 %  
 (after 15 min of purging)

**Source Type**

Well  Spring   
 Stream  Pond   
 If pond: spring fed  man-made

inside well casing

**Well Information (if applicable)**

Top of Casing: PVC  STEEL   
 Total Depth (ft): 27  
 Diameter of Casing (in): 8

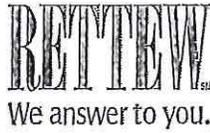
Water Quality Observations: Well Condition: Good Color: None

Turbidity (Qualitative): Clear Odor: Hydrogen sulfide odor

Additional Notes: Strong exhaust fume smell in garage where well is located & LO works on cars

**Field Measurements**

	Time	DO (%)	ORP (mV)	pH	Temperature (°C)	Conductivity (mS/cm)	Turbidity (NTUs)
0 min	1150	3.27	-319	7.62	17.02	0.836	0.0
3 min	1153	2.75	-375	7.53	13.67	0.835	0.0
6 min	1156	2.38	-373	7.64	13.57	0.827	0.0
9 min	1159	2.42	-385	7.74	13.21	0.831	0.0
12 min	1202	2.16	-382	7.65	13.31	0.823	0.0
15 min	1205	2.23	-391	7.74	13.24	0.828	0.0



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**SAMPLING DATA SHEET**

**Source Information**

Date: 8-6-15 Water Sample Collection Time: 11:45 Parcel No.: 26-01670.000  
 Source ID: SUS- Wassmann Unit - Sadlowski - Pond - 01  
 Address: 55279 New Cut Rd, Bellaire, OH 43906  
 Source Latitude: 32.984206 Longitude: -80.792955  
 RETTEW Personnel: ZJH / KMZ

**Stray Gas Sweep (Structure)**

CO: 0 ppm H<sub>2</sub>S: 0 ppm  
 LEL: 0 % Oxy: 20.9 %

**Well Head Gas Screening**

CO: 0 ppm H<sub>2</sub>S: 0 ppm  
 LEL: 0 % Oxy: 20.9 %

**Source Type**

Well  Spring   
 Stream  Pond   
 If pond: spring fed  man-made

**Well Information (if applicable)**

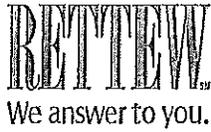
Top of Casing: PVC  STEEL   
 Total Depth (ft): \_\_\_\_\_  
 Diameter of Casing (in): \_\_\_\_\_

Water Quality Observations: Well Condition: N/A Color: Greenish brown  
 Turbidity (Qualitative): Murky Odor: Slight organic

Additional Notes: \_\_\_\_\_  
 \_\_\_\_\_

**Field Measurements**

	Time	DO (%)	ORP (mV)	pH	Temperature (°C)	Conductivity (mS/cm)	Turbidity (NTUs)
0 min	<u>1140</u>	<u>10.42</u>	<u>-75</u>	<u>7.43</u>	<u>19.15</u>	<u>0.359</u>	<u>630</u>
3 min							
6 min							
9 min							
12 min							
15 min							



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**SAMPLING DATA SHEET**

**Source Information**

Date: 7-8-15 Water Sample Collection Time: 13:00 Parcel No.: 26-012.78.000  
 Source ID: SWS-Wassmann Unit - Traver Club - Stream - 01  
 Address: Brown Hollow Rd., Bellairs, OH 43906  
 Source Latitude: 39.994007 Longitude: -80.78989  
 RETTEW Personnel: Hacke / Zoller

**Stray Gas Sweep (Structure)**

CO: 0 ppm H<sub>2</sub>S: 0 ppm  
 LEL: 0 % Oxy: 20.9 %

**Well Head Gas Screening**

CO: 0 ppm H<sub>2</sub>S: 0 ppm  
 LEL: 0 % Oxy: 21.0 %

**Source Type**

Well  Spring   
 Stream  Pond   
 If pond: spring fed  man-made

**Well Information (if applicable)**

Top of Casing: PVC  STEEL   
 Total Depth (ft): \_\_\_\_\_  
 Diameter of Casing (in): \_\_\_\_\_

Water Quality Observations: Well Condition: N/A Color: None  
 Turbidity (Qualitative): Clear Odor: None

Additional Notes: \_\_\_\_\_  
 \_\_\_\_\_

**Field Measurements**

	Time	DO (%)	ORP (mV)	pH	Temperature (°C)	Conductivity (mS/cm)	Turbidity (NTUs)
0 min	<u>12:55</u>	<u>11.44</u>	<u>207</u>	<u>7.62</u>	<u>19.68</u>	<u>0.464</u>	<u>156</u>
3 min							
6 min							
9 min							
12 min							
15 min							



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SAMPLING DATA SHEET

Source Information

Date: 7-30-15 Water Sample Collection Time: 11:45 Parcel No.: 26-01078,000  
Source ID: SWS-Wassmann Unit-Van Derheyden-Stream-01  
Address: 55270 New Cut Rd, Bellaire, OH 43906  
Source Latitude: 39.983849 Longitude: -80.796444  
RETTEW Personnel: ZSH / KMZ

Stray Gas Sweep (Structure)

CO: 0 ppm H<sub>2</sub>S: 0 ppm  
LEL: 0 % Oxy: 20.9 %

Well Head Gas Screening

CO: 0 ppm H<sub>2</sub>S: 0 ppm  
LEL: 0 % Oxy: 20.9 %

Source Type

Well  Spring   
Stream  Pond   
If pond: spring fed  man-made

Well Information (if applicable)

Top of Casing: PVC  STEEL   
Total Depth (ft): \_\_\_\_\_  
Diameter of Casing (in): \_\_\_\_\_

Water Quality Observations: Well Condition: N/A Color: None  
Turbidity (Qualitative): Slight Odor: None

Additional Notes: \_\_\_\_\_  
\_\_\_\_\_

Field Measurements

	Time	DO (%)	ORP (mV)	pH	Temperature (°C)	Conductivity (mS/cm)	Turbidity (NTUs)
0 min	<u>11:40</u>	<u>5.75</u>	<u>179</u>	<u>7.96</u>	<u>21.99</u>	<u>0.467</u>	<u>38.1</u>
3 min							
6 min							
9 min							
12 min							
15 min							



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SAMPLING DATA SHEET

Source Information

Date: 7-8-15 Water Sample Collection Time: 11:45 Parcel No.: 26-01876.000  
Source ID: SUS - Wassmann Unit - Wassmann - Stream-0  
Address: 55014 Winding Hill Rd., Bellaire, OH 43906  
Source Latitude: 39.99911 Longitude: -80.79063  
RETTEW Personnel: Haake / Zeder

Stray Gas Sweep (Structure)

CO: 0 ppm H<sub>2</sub>S: 0 ppm  
LEL: 0 % Oxy: 20.1 %

Well Head Gas Screening

CO: 0 ppm H<sub>2</sub>S: 0 ppm  
LEL: 0 % Oxy: 20.9 %

Source Type

Well  Spring   
Stream  Pond   
If pond: spring fed  man-made

Well Information (if applicable)

Top of Casing: PVC  STEEL   
Total Depth (ft): \_\_\_\_\_  
Diameter of Casing (in): \_\_\_\_\_

Water Quality Observations: Well Condition: N/A Color: Light brown  
Turbidity (Qualitative): Slight Odor: None

Additional Notes: \_\_\_\_\_  
\_\_\_\_\_

Field Measurements

	Time	DO (%)	ORP (mV)	pH	Temperature (°C)	Conductivity (mS/cm)	Turbidity (NTUs)
0 min	11:40	13.64	253	5.92	20.20	0.316	107
3 min							
6 min							
9 min							
12 min							
15 min							



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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: Rettew 08/17/15 15:14  
 Number of Containers: 11

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
GWS_Wassmann Unit-Doty-Well-01	5H11122-01	Water	Grab	08/10/15 12:15	08/11/15 18:30
TRIP BLANK	5H11122-02	Water	Trip Blank	07/16/15 06:29	08/11/15 18:30

Location: Wassmann Unit  
 Shane Doty  
 55360 Key Bellaire Rd.  
 Bellaire, OH. 43906

Fairway Laboratories, Inc.

Reviewed and Submitted by:

Michael P. Tyler  
 Laboratory Director

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 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: Rettew  
 Number of Containers: 11

**Reported:**  
 08/17/15 15:14

**Client Sample ID:** GWS\_Wassmann Unit-Doty-Well-01

**Date/Time Sampled:** 08/10/15 12:15

**Laboratory Sample ID:** 5H11122-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Calculated Analytes**

Hardness	102	0.255	2.07	mg/l	08/14/15 13:19	SM2340B	rab	
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**Metals by EPA 200 Series Methods**

Arsenic	0.0118		0.00800	mg/l	08/14/15 13:21	EPA 200.7/4.4	rab	
Barium, Dissolved	0.0281		0.0100	mg/l	08/12/15 19:21	EPA 200.7/4.4	rab	
Barium	0.0210		0.0100	mg/l	08/14/15 13:20	EPA 200.7/4.4	rab	
Calcium	29.5		0.500	mg/l	08/14/15 13:19	EPA 200.7/4.4	rab	
Chromium	<0.00500		0.00500	mg/l	08/14/15 13:21	EPA 200.7/4.4	rab	
Iron, Dissolved	<0.0400		0.0400	mg/l	08/12/15 19:21	EPA 200.7/4.4	rab	
Iron	<0.0400		0.0400	mg/l	08/14/15 13:20	EPA 200.7/4.4	rab	
Potassium	2.59		0.200	mg/l	08/14/15 13:19	EPA 200.7/4.4	rab	
Magnesium	6.84		0.200	mg/l	08/14/15 13:19	EPA 200.7/4.4	rab	
Manganese	<0.0100		0.0100	mg/l	08/14/15 13:21	EPA 200.7/4.4	rab	
Sodium	31.7		1.00	mg/l	08/14/15 13:19	EPA 200.7/4.4	rab	
Lead	<0.00800		0.00800	mg/l	08/14/15 13:21	EPA 200.7/4.4	rab	
Selenium	<0.0200		0.0200	mg/l	08/14/15 13:21	EPA 200.7/4.4	rab	
Strontium	0.173		0.0200	mg/l	08/14/15 13:19	EPA 200.7/4.4	rab	

**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	08/12/15 19:40	EPA 8260B	mtc	
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 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: Rettew  
 Number of Containers: 11

**Reported:**  
 08/17/15 15:14

**Client Sample ID:** GWS\_Wassmann Unit-Doty-Well-01

**Date/Time Sampled:** 08/10/15 12:15

**Laboratory Sample ID:** 5H1122-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Volatile Organic Compounds by EPA Method 8260B**

Ethylbenzene	<1.00		1.00	ug/l	08/12/15 19:40	EPA 8260B	mtc	
Toluene	<1.00		1.00	ug/l	08/12/15 19:40	EPA 8260B	mtc	
Xylenes (total)	<2.00		2.00	ug/l	08/12/15 19:40	EPA 8260B	mtc	
<i>Surrogate: 4-Bromofluorobenzene</i>		100 %			08/12/15 19:40	EPA 8260B	mtc	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		113 %			08/12/15 19:40	EPA 8260B	mtc	
<i>Surrogate: Fluorobenzene</i>		92.0 %			08/12/15 19:40	EPA 8260B	mtc	

**Conventional Chemistry Parameters by SM/EPA Methods**

<b>Total Alkalinity to pH 4.5</b>	24.0		20.0	mg CaCO3/L	08/13/15 09:55	SM20-2320B	jlf	
Bromide	<0.200		0.200	mg/l	08/12/15 10:17	EPA 300.0/2.1	bdw	
<b>Chloride</b>	38.2		5.00	mg/l	08/15/15 06:06	EPA 300.0/2.1	bdw	
<b>Specific Conductance (EC)</b>	376		2.00	umhos/cm	08/12/15 08:30	SM20-2510B	spt	
Methylene Blue Active Substances	<0.0250		0.0250	mg/l	08/12/15 08:34	SM 5540 C-11	elb	
Nitrate as N	<1.000		1.000	mg/l	08/12/15 10:17	EPA 300.0/2.1	bdw	
Oil & Grease	<6.25		6.25	mg/l	08/13/15 14:31	EPA 1664A	SR	
<b>pH @ 14°C</b>	9.79			pH Units	08/12/15 08:30	SM 4500-H+B-11	spt	
<b>Total Dissolved Solids</b>	186		20.0	mg/l	08/12/15 15:15	SM 2540 C-97	arr	
Total Suspended Solids	<4.00		4.00	mg/l	08/12/15 09:23	SM 2540 D-97	arr	

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 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: Rettew 08/17/15 15:14  
 Number of Containers: 11

**Client Sample ID:** GWS\_Wassmann Unit-Doty-Well-01

**Date/Time Sampled:** 08/10/15 12:15

**Laboratory Sample ID:** 5H11122-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Conventional Chemistry Parameters by SM/EPA Methods**

Sulfate as SO4	82.4		5.00	mg/l	08/15/15 06:06	EPA 300.0/2.1	bdw	
Turbidity	<1.00		1.00	NTU	08/12/15 08:15	SM 2130 B-11	nal	

**Dissolved Gases by RSK 175**

Ethane	<0.0100		0.0100	mg/l	08/12/15 10:53	RSK 175	bag	
Methane	<0.0250		0.0250	mg/l	08/12/15 10:53	RSK 175	bag	
Propane	<0.0150		0.0150	mg/l	08/12/15 10:53	RSK 175	bag	

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 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: Rettew 08/17/15 15:14  
 Number of Containers: 11

**Client Sample ID: TRIP BLANK**

**Date/Time Sampled: 07/16/15 06:29**

**Laboratory Sample ID: 5H11122-02 (Water/Trip Blank)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	08/12/15 19:14	EPA 8260B	mtc	
Ethylbenzene	<1.00		1.00	ug/l	08/12/15 19:14	EPA 8260B	mtc	
Toluene	<1.00		1.00	ug/l	08/12/15 19:14	EPA 8260B	mtc	
Xylenes (total)	<2.00		2.00	ug/l	08/12/15 19:14	EPA 8260B	mtc	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>99.1 %</i>		<i>70-130</i>		<i>08/12/15 19:14</i>	<i>EPA 8260B</i>	<i>mtc</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>114 %</i>		<i>70-130</i>		<i>08/12/15 19:14</i>	<i>EPA 8260B</i>	<i>mtc</i>	
<i>Surrogate: Fluorobenzene</i>	<i>93.4 %</i>		<i>70-130</i>		<i>08/12/15 19:14</i>	<i>EPA 8260B</i>	<i>mtc</i>	

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Rettew as agent for XTO  
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 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: Rettew  
 Number of Containers: 11

**Reported:**  
 08/17/15 15:14

**Definitions**

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory.

MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

- \* P indicates analysis performed by Fairway Laboratories, Inc. at the Pennsdale location. This location is PaDEP Chapter 252 certified.
- < Represents "less than" - indicates that the result was less than the reporting limit.
- MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values.
- RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.
- [CALC] Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.



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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: Rettew 08/17/15 15:14  
 Number of Containers: 11

**Terms & Conditions**

Services provided by Fairway Laboratories Inc. are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

**CHAIN OF CUSTODY** Fairway Laboratories Inc. ("Fairway," "us" or "we") will initiate a chain-of-custody/request for analysis upon sample receipt unless the client includes a completed form with the received sample(s). Upon request, Fairway will provide chain-of-custody forms for use.

**CONFIDENTIALITY** Fairway maintains confidentiality in all of our client interactions. The client's consent will be required before releasing information about the services provided.

**CONTRACTS** All contracts are subject to review and approval by Fairway's legal council. Each contract must be signed by a corporate officer.

**PAYMENT/BILLING** Unless otherwise set forth in a signed contract or purchase order, terms of payment are "NET 30 Days." The time allowed for payment shall begin based on the invoice date. A 1.5% per month service charge may be added to all unpaid balances beyond the initial 30 days. In its sole discretion, Fairway reserves the right to request payment before services and hold sample results for payment of due balances. We will not bill a third party without prior agreement among all parties acknowledging and accepting responsibility for payment.

**SAMPLE COLLECTION AND SUBMISSION** Clients not requesting collection services from Fairway are responsible for proper collection, preservation, packaging, and delivery of samples to the laboratory in accordance with current law and commercial practice. Fairway shall have no responsibility for sample integrity prior to the receipt of the sample(s) and/or for any inaccuracy in test or analyses results as a result of the failure of the client or any third party to maintain the integrity of samples prior to delivery to Fairway. All samples submitted must be accompanied by a completed chain of custody or similar document clearly noting the requested analyses, dates/time sampled, client contact information, and trail of custody.

**SUBCONTRACTING** Some analyses may require subcontracting to another laboratory. Unless the client indicates otherwise, this decision will be made by Fairway. Subcontracted work will be identified on the final report in accordance with NELAC requirements.

**RETURN OF RESULTS** Fairway routinely provides faxed or verbal results within 10 working days of receipt of sample(s) and a hard copy of the data results is routinely received via US Postal Service within 15 working days. At the request of the client, Fairway may offer expedited return of sample results. Surcharges may apply to rush requests. All rush requests must be pre-approved by Fairway. We reserve the right to charge an archive retrieval fee for results older than one (1) year from the date of the request. All records will be maintained by Fairway for 5 years, after which, they will be destroyed.

**SAMPLE DISPOSAL** Fairway will maintain samples for four (4) weeks after the sample receipt date. Fairway will dispose of samples which are not and/or do not contain hazardous wastes (as such term is defined by applicable federal or state law), unless prior arrangements have been made for long-term storage. Fairway reserves the right to charge a disposal fee for the proper disposal of samples found or suspected to contain hazardous waste. A return shipping charge will be invoiced for samples returned to the client at their request.

**HAZARD COMMUNICATION** The client has the responsibility to inform the laboratory of any hazardous characteristics known or suspected about the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

**WARRANTY AND LIMITATION OF LIABILITY** For services rendered, Fairway warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Fairway does not accept any legal responsibility for the purposes for which client uses the test results.

**LITIGATION** All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Fairway Laboratories, Inc. shall be invoiced by Fairway and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

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Please print. See back of COC for instructions/terms and conditions.

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COC #

Page 1 of 2

<b>Client Name:</b> <u>LETTEW as agent of XTO</u> <b>Address:</b> <u>5143 Stoneham Rd</u> <u>North Canton, OH, 44720</u> <b>Contact:</b> <u>Joe Biaglow</u> <b>Phone #:</b> <u>(330) 818-9770</u> <b>Fax #:</b> _____ <b>Project Name:</b> <u>XTO Basebae Sampling</u> <b>Quote/PO #:</b> <u>091322071</u>		Received on ice? Y N Sample Temp: _____ Reportable to PADEP? Yes <input type="checkbox"/> PWSID # _____		<b>Analyses Requested</b>						<b>LAB USE ONLY</b> FedEx <input type="checkbox"/> USPS <input type="checkbox"/> UPS <input type="checkbox"/> Other <input type="checkbox"/> Tracking # _____	
TAT: Normal <input type="checkbox"/> Rush <input checked="" type="checkbox"/> Rush TAT subject to pre-approval and surcharge. <b>Date Required:</b> <u>8/10/15</u>		<b>Composite Start</b>		<b>GRAB -or- Composite End</b>		<b>Matrix</b> Solid _____ Water _____ Other _____		# of Containers <u>XTO Analyte List</u>		Bottle Type/Comments	
<b>Sample Description/Location</b>		GRAB <input type="checkbox"/> Composite <input type="checkbox"/>		Start Date Start Time End Date End Time		Solid Water Other		# of Containers		XTO Analyte List	
<u>GWS-Wassmann Unit</u> <u>- Doty - Well - 01</u>		<input checked="" type="checkbox"/>		8-10-15 12:15		<input checked="" type="checkbox"/>		10		<input checked="" type="checkbox"/>	
<u>Trip Blank</u>		<input checked="" type="checkbox"/>		7-16-15 06:29		<input checked="" type="checkbox"/>		1		<input checked="" type="checkbox"/>	
<b>Sampled by:</b> <u>Zb Hrk</u> Date: <u>8-10-15</u> Time: <u>14:25</u>		<b>Received by:</b> <u>Valerie Bryan</u> Date: <u>8/10/15</u> Time: <u>14:25</u>		<b>Relinquished by:</b> <u>Valerie Bryan</u> Date: <u>8/11/15</u> Time: <u>10:25</u>		<b>Received by:</b> _____ Date: <u>8/11/15</u> Time: <u>15:15</u>		<b>Relinquished by:</b> _____ Date: <u>8/11/15</u> Time: <u>18:30</u>		<b>Remarks:</b> <u>DH</u> <u>Header on lab report needs to include:</u> <u>Location: Wassmann Unit</u> <u>Shane Doty</u> <u>55360 Key Bellaire Rd</u> <u>Bellaire, OH, 43906</u>	
<b>Relinquished by:</b> _____ Date: _____ Time: _____		<b>Received by:</b> <u>Allo...</u> Date: <u>8/11/15</u> Time: <u>18:30</u>									

**Chain of Custody Receiving Document**

Receiver: AL

Page 2 of 2

#2

Date/Time of this check: 8-11-15 19:25 Client: Reffew Lab # 5H11122

Received on ICE? 4  \* Sample Temperature when delivered to the Lab: 18 Acceptable? 4  \* or In cool down process?  \*

Custody Seals? 4 Intact? 4

COC/Labels on bottles agree? 4  \* Correct containers for all the analysis requested? 4  \* Matrix: Water

COC #	Number and Type of BOTTLES										Comments
	Poly Non-Pres.	Poly H2SO4	Poly HNO3	Amber H2SO4	Amber Non-Pres.	Poly NaOH	VOCS (Head space?)	Other <input type="checkbox"/> *	Properly Preserved <input checked="" type="checkbox"/> *	Bacti	
<u>1</u> <u>TB2</u>	<u>2</u>		<u>2</u>	<u>1</u>			<u>2</u> <u>400</u> <u>144</u>	<u>250ml</u>			

<p><b>* DEVIATION PRESENT:</b></p> <p><input checked="" type="checkbox"/> No Ice ( )</p> <p><input checked="" type="checkbox"/> Not at Proper Temperature ( )</p> <p><input checked="" type="checkbox"/> Wrong Container ( )</p> <p><input checked="" type="checkbox"/> Missing Information: ( )</p>	<p><b>CLIENT CALLED:</b></p> <p>YES ( )</p> <p>By Whom: _____</p> <p>Date: _____</p>	<p><b>CLIENT RESPONSE:</b></p> <p>Proceed with analysis; qualify data ( )</p> <p>Will Resample ( )</p> <p>Provided Information ( )</p> <p>No Response; Proceed and qualified ( )</p> <p>Client Contact: _____ Date: _____</p>
--	--	---

\* Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# RETTEW

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Nate Fela

Project Manager

5143 Stoneham Road

Suite 100

North Canton, Oh. 44720

Office: 330.818.9770

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5H11122

#3

## XTO: Baseline Sampling

Alkalinity
Arsenic
Barium
Barium (Dissolved)
Benzene
Bromide
Calcium
Chloride
Chromium
Ethane
Ethylbenzene
Field pH
HEM
Iron
Iron (Dissolved)
Lead
Magnesium
Manganese
MBAS
Methane
Nitrate as N
Potassium
Propane
Selenium
Sodium
Specific Conductance
Strontium
Sulfate
Toluene
Total Dissolved Solids
Total Hardness
Total Suspended Solids
Turbidity
Xylenes, Total

1



2019 Ninth Avenue  
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 PaDEP: PA 41-04684



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State Certifications: MD 275, WV 364

Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11  
**Reported:**  
 07/28/15 15:54

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
SWS-WASSMANN UNIT-GREENWOOD-STREAM-01	5G09032-01	Water	Grab	07/08/15 14:30	07/08/15 20:35
TRIP BLANK	5G09032-02	Water	Trip Blank	11/18/14 08:45	07/08/15 20:35

5G09032 -01 Sample ID revised. This report replaces report issued on 07/21/15 16:31. 07/28/15smc

Location: Wassmann Unit  
 Samuel T. & Sharissa L. Greenwood  
 55535 New Cut Rd.  
 Shadyside, OH 43947

Fairway Laboratories, Inc.

Reviewed and Submitted by:

Michael P. Tyler  
 Laboratory Director

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*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



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 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11

**Reported:**  
 07/28/15 15:54

**Client Sample ID: SWS-WASSMANN  
 UNIT-GREENWOOD-STREAM-01**

**Date/Time Sampled: 07/08/15 14:30**

**Laboratory Sample ID: 5G09032-01 (Water/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Calculated Analytes**

Hardness	123	0.255	2.07	mg/l	07/17/15 13:48	SM2340B	rab	
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**Metals by EPA 200 Series Methods**

Arsenic	<0.00800		0.00800	mg/l	07/17/15 13:50	EPA 200.7/4.4	rab	
Barium, Dissolved	0.0446		0.0100	mg/l	07/17/15 13:48	EPA 200.7/4.4	rab	
Barium	0.0446		0.0100	mg/l	07/17/15 13:48	EPA 200.7/4.4	rab	
Calcium	38.0		0.500	mg/l	07/17/15 13:48	EPA 200.7/4.4	rab	
Chromium	<0.00500		0.00500	mg/l	07/17/15 13:50	EPA 200.7/4.4	rab	
Iron, Dissolved	<0.0400		0.0400	mg/l	07/17/15 13:48	EPA 200.7/4.4	rab	
Iron	<0.0400		0.0400	mg/l	07/17/15 13:48	EPA 200.7/4.4	rab	
Potassium	1.54		0.200	mg/l	07/17/15 13:48	EPA 200.7/4.4	rab	
Magnesium	6.74		0.200	mg/l	07/17/15 13:48	EPA 200.7/4.4	rab	
Manganese	0.0111		0.0100	mg/l	07/17/15 13:50	EPA 200.7/4.4	rab	
Sodium	15.5		1.00	mg/l	07/17/15 13:48	EPA 200.7/4.4	rab	
Lead	<0.00800		0.00800	mg/l	07/17/15 13:50	EPA 200.7/4.4	rab	
Selenium	<0.0200		0.0200	mg/l	07/17/15 13:50	EPA 200.7/4.4	rab	
Strontium	0.140		0.0200	mg/l	07/17/15 13:48	EPA 200.7/4.4	rab	

**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	07/11/15 12:06	EPA 8260B	mtc	
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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11  
**Reported:**  
 07/28/15 15:54

**Client Sample ID: SWS-WASSMANN  
 UNIT-GREENWOOD-STREAM-01**

**Date/Time Sampled: 07/08/15 14:30**

**Laboratory Sample ID: 5G09032-01 (Water/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
---------	--------	-----	----	-------	----------------------	--------	-----------	------

**Volatile Organic Compounds by EPA Method 8260B**

Ethylbenzene	<1.00		1.00	ug/l	07/11/15 12:06	EPA 8260B	mtc	
Toluene	<1.00		1.00	ug/l	07/11/15 12:06	EPA 8260B	mtc	
Xylenes (total)	<2.00		2.00	ug/l	07/11/15 12:06	EPA 8260B	mtc	
<i>Surrogate: 4-Bromofluorobenzene</i>		92.5 %			07/11/15 12:06	EPA 8260B	mtc	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		80.7 %			07/11/15 12:06	EPA 8260B	mtc	
<i>Surrogate: Fluorobenzene</i>		86.8 %			07/11/15 12:06	EPA 8260B	mtc	

**Conventional Chemistry Parameters by SM/EPA Methods**

<b>Total Alkalinity to pH 4.5</b>	72.0		20.0	mg CaCO3/L	07/14/15 13:55	SM20-2320B	adb	
Bromide	<0.200		0.200	mg/l	07/09/15 18:39	EPA 300.0/2.1	bdw	
<b>Chloride</b>	23.8		5.00	mg/l	07/10/15 23:51	EPA 300.0/2.1	bdw	
<b>Specific Conductance (EC)</b>	323		2.00	umhos/cm	07/09/15 10:25	SM20-2510B	spt	
Methylene Blue Active Substances	<0.0250		0.0250	mg/l	07/10/15 07:49	SM 5540 C-11	elb	
<b>Nitrate as N</b>	1.044		1.000	mg/l	07/09/15 18:39	EPA 300.0/2.1	bdw	
Oil & Grease	<6.25		6.25	mg/l	07/13/15 15:29	EPA 1664A	SR	
<b>pH @ 16°C</b>	7.89			pH Units	07/09/15 10:19	SM 4500-H+B-11	spt	
<b>Total Dissolved Solids</b>	194		20.0	mg/l	07/10/15 15:23	SM 2540 C-97	arr	
<b>Total Suspended Solids</b>	91.0		4.00	mg/l	07/09/15 13:51	SM 2540 D-97	arr	

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 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11  
**Reported:**  
 07/28/15 15:54

**Client Sample ID:** SWS-WASSMANN  
 UNIT-GREENWOOD-STREAM-01

**Date/Time Sampled:** 07/08/15 14:30

**Laboratory Sample ID:** 5G09032-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
---------	--------	-----	----	-------	----------------------	--------	-----------	------

**Conventional Chemistry Parameters by SM/EPA Methods**

Sulfate as SO4	32.7		1.00	mg/l	07/09/15 18:39	EPA 300.0/2.1	bdw	
Turbidity	71.3		1.00	NTU	07/10/15 08:55	SM 2130 B-11	nal	

**Dissolved Gases by RSK 175**

Ethane	<0.0100		0.0100	mg/l	07/09/15 16:31	RSK 175	bag	
Methane	<0.0250		0.0250	mg/l	07/09/15 16:31	RSK 175	bag	
Propane	<0.0150		0.0150	mg/l	07/09/15 16:31	RSK 175	bag	

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 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11  
**Reported:**  
 07/28/15 15:54

**Client Sample ID: TRIP BLANK**

**Date/Time Sampled:** 11/18/14 08:45

**Laboratory Sample ID: 5G09032-02 (Water/Trip Blank)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	07/11/15 10:50	EPA 8260B	mtc	
Ethylbenzene	<1.00		1.00	ug/l	07/11/15 10:50	EPA 8260B	mtc	
Toluene	<1.00		1.00	ug/l	07/11/15 10:50	EPA 8260B	mtc	
Xylenes (total)	<2.00		2.00	ug/l	07/11/15 10:50	EPA 8260B	mtc	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>92.9 %</i>		<i>70-130</i>		<i>07/11/15 10:50</i>	<i>EPA 8260B</i>	<i>mtc</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>81.5 %</i>		<i>70-130</i>		<i>07/11/15 10:50</i>	<i>EPA 8260B</i>	<i>mtc</i>	
<i>Surrogate: Fluorobenzene</i>	<i>87.3 %</i>		<i>70-130</i>		<i>07/11/15 10:50</i>	<i>EPA 8260B</i>	<i>mtc</i>	

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 5143 Stoneham Rd. Ste 100  
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Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11

**Reported:**  
 07/28/15 15:54

**Definitions**

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory.

MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

- \* P indicates analysis performed by Fairway Laboratories, Inc. at the Pennsdale location. This location is PaDEP Chapter 252 certified.
- < Represents "less than" - indicates that the result was less than the reporting limit.
- MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values.
- RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.
- [CALC] Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.



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 07/28/15 15:54

**Terms & Conditions**

Services provided by Fairway Laboratories Inc. are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

**CHAIN OF CUSTODY** Fairway Laboratories Inc. ("Fairway," "us" or "we") will initiate a chain-of-custody/request for analysis upon sample receipt unless the client includes a completed form with the received sample(s). Upon request, Fairway will provide chain-of-custody forms for use.

**CONFIDENTIALITY** Fairway maintains confidentiality in all of our client interactions. The client's consent will be required before releasing information about the services provided.

**CONTRACTS** All contracts are subject to review and approval by Fairway's legal council. Each contract must be signed by a corporate officer.

**PAYMENT/BILLING** Unless otherwise set forth in a signed contract or purchase order, terms of payment are "NET 30 Days." The time allowed for payment shall begin based on the invoice date. A 1.5% per month service charge may be added to all unpaid balances beyond the initial 30 days. In its sole discretion, Fairway reserves the right to request payment before services and hold sample results for payment of due balances. We will not bill a third party without prior agreement among all parties acknowledging and accepting responsibility for payment.

**SAMPLE COLLECTION AND SUBMISSION** Clients not requesting collection services from Fairway are responsible for proper collection, preservation, packaging, and delivery of samples to the laboratory in accordance with current law and commercial practice. Fairway shall have no responsibility for sample integrity prior to the receipt of the sample(s) and/or for any inaccuracy in test or analyses results as a result of the failure of the client or any third party to maintain the integrity of samples prior to delivery to Fairway. All samples submitted must be accompanied by a completed chain of custody or similar document clearly noting the requested analyses, dates/time sampled, client contact information, and trail of custody.

**SUBCONTRACTING** Some analyses may require subcontracting to another laboratory. Unless the client indicates otherwise, this decision will be made by Fairway. Subcontracted work will be identified on the final report in accordance with NELAC requirements.

**RETURN OF RESULTS** Fairway routinely provides faxed or verbal results within 10 working days of receipt of sample(s) and a hard copy of the data results is routinely received via US Postal Service within 15 working days. At the request of the client, Fairway may offer expedited return of sample results. Surcharges may apply to rush requests. All rush requests must be pre-approved by Fairway. We reserve the right to charge an archive retrieval fee for results older than one (1) year from the date of the request. All records will be maintained by Fairway for 5 years, after which, they will be destroyed.

**SAMPLE DISPOSAL** Fairway will maintain samples for four (4) weeks after the sample receipt date. Fairway will dispose of samples which are not and/or do not contain hazardous wastes (as such term is defined by applicable federal or state law), unless prior arrangements have been made for long-term storage. Fairway reserves the right to charge a disposal fee for the proper disposal of samples found or suspected to contain hazardous waste. A return shipping charge will be invoiced for samples returned to the client at their request.

**HAZARD COMMUNICATION** The client has the responsibility to inform the laboratory of any hazardous characteristics known or suspected about the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

**WARRANTY AND LIMITATION OF LIABILITY** For services rendered, Fairway warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Fairway does not accept any legal responsibility for the purposes for which client uses the test results.

**LITIGATION** All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Fairway Laboratories, Inc. shall be invoiced by Fairway and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

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# CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Please print. See back of COC for instructions/terms and conditions.

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P.O. Box 1925  
Altoona, PA 16602  
Phone: (814) 946-4306  
Fax: (814) 946-8791



89 Kristi Rd  
Pennsdale, PA 17756  
Phone: (570) 494-6380

5609032 #1  
COC #

Page 1 of 2

Page 8 of 10

Client Name: <u>RETTEW as agent of XTO</u>		Received on ice? Y N		Reportable to PADEP? Yes <input type="checkbox"/>		Analyses Requested						LAB USE ONLY					
Address: <u>5143 Stoneham Rd North Canton, OH, 44720</u>		Sample Temp: _____		PWSID # _____		XTO Analyte List						FedEx USPS UPS Other					
Contact: <u>Joe Biglow</u>		Composite Start		GRAB -or- Composite End								Matrix		# of Containers		Tracking #	
Phone #: <u>(330) 818-9770</u>																Bottle Type/Comments	
Fax #: _____		Project Name: <u>XTO Baseline Sampling</u>		Quote/PO #: <u>091322071</u>		TAT: Normal <input type="checkbox"/> Rush <input checked="" type="checkbox"/>		Rush TAT subject to pre-approval and surcharge.		Date Required: <u>07/15/15</u>							
Sample Description/Location		GRAB	Composite	Start Date	Start Time	End Date	End Time	Solid	Water	Other	# of Containers						
1 SWS-Wassmann Unit		X		<del>7-8-15</del>		7-8-15	14:30	X			10	X					
2 Greenwood-Stream-01																	
Trip Blank		X				11-18-14	08:45	X			1	X					
Sampled by: <u>[Signature]</u>		Date	Time	Received by: <u>Valerie Bryan</u>		Date	Time	Remarks									
Relinquished by: <u>Valerie Bryan</u>		07/08/15	16:55	Received by: <u>[Signature]</u>		7/8/15	15:55	Header on lab report needs to include: Location: Wassmann Unit									
Relinquished by: <u>[Signature]</u>		7/8/15	2035	Received by: <u>[Signature]</u>		7/8/15	2035	Samuel T. & Sharissa L. Greenubal 55535 New Cut Rd. Shadyside, OH, 43947									
Relinquished by: _____		Date	Time	Received by: _____		Date	Time										

**Chain of Custody Receiving Document**

Receiver: DC

Page 2 of 2

Date/Time of this check: 7/9/15 709 Client: Retew Lab # SG09032

Received on ICE?  \* Sample Temperature when delivered to the Lab: 0.1 Acceptable?  \* or In cool down process?  \*

Custody Seals? 4 Intact? 4

COC/Labels on bottles agree?  \* Correct containers for all the analysis requested?  \* Matrix: WPC

COC #	Number and Type of BOTTLES										Comments
	Poly Non-Pres.	Poly H2SO4	Poly HNO3	Amber H2SO4	Amber Non-Pres.	Poly NaOH	VOCS (Head space?)	Other <input type="checkbox"/> *	Properly Preserved <input type="checkbox"/> *	Bacti	
<u>1</u>	<u>2</u>		<u>2</u>	<u>1</u>			<u>4-HI</u>	<u>250 MP</u>	<input checked="" type="checkbox"/>		
<u>2 TB</u>							<u>1-HI</u>		<input checked="" type="checkbox"/>	<u>A</u>	

**\* DEVIATION PRESENT:**  
 No Ice ( )  
 Not at Proper Temperature ( )  
 Wrong Container ( )  
 Missing Information: ( )

**CLIENT CALLED:**  
 YES ( )  
 By Whom: \_\_\_\_\_  
 Date: \_\_\_\_\_

**CLIENT RESPONSE:**  
 Proceed with analysis; qualify data ( )  
 Will Resample ( )  
 Provided Information ( )  
 No Response; Proceed and qualified ( )  
 Client Contact: \_\_\_\_\_ Date: \_\_\_\_\_

\* Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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**Nate Fela**

Project Manager

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Office: 330.818.9770

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5609032 #3

## XTO: Baseline Sampling

Alkalinity
Arsenic
Barium
Barium (Dissolved)
Benzene
Bromide
Calcium
Chloride
Chromium
Ethane
Ethylbenzene
Field pH
HEM
Iron
Iron (Dissolved)
Lead
Magnesium
Manganese
MBAS
Methane
Nitrate as N
Potassium
Propane
Selenium
Sodium
Specific Conductance
Strontium
Sulfate
Toluene
Total Dissolved Solids
Total Hardness
Total Suspended Solids
Turbidity
Xylenes, Total

1



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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: CLIENT 07/23/15 17:13  
 Number of Containers: 41

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
SWS-Wassmann Unit-M&E Legacy-Spring-01	5G17098-01	Water	Grab	07/16/15 12:00	07/17/15 16:45
SWS-Wassmann Unit-M&E Legacy-Spring-02	5G17098-02	Water	Grab	07/16/15 12:30	07/17/15 16:45
SWS-Wassmann Unit-M&E Legacy-Pond-01	5G17098-03	Water	Grab	07/16/15 13:15	07/17/15 16:45
SWS-Wassmann Unit-M&E Legacy-Stream-01	5G17098-04	Water	Grab	07/16/15 14:10	07/17/15 16:45
TRIP BLANK	5G17098-05	Water	Trip Blank	04/27/15 14:52	07/17/15 16:45

Location: Wassmann Unit  
 Robert J. Blazek  
 for M & E Legacy Group, LLC  
 54334 Key Bellaire Road  
 Bellaire, OH. 43906

Fairway Laboratories, Inc.

Reviewed and Submitted by:

Michael P. Tyler  
 Laboratory Director

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 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: CLIENT  
 Number of Containers: 41

**Reported:**  
 07/23/15 17:13

**Client Sample ID:** SWS-Wassmann Unit-M&E Legacy-Spring-01

**Date/Time Sampled:** 07/16/15 12:00

**Laboratory Sample ID:** 5G17098-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Calculated Analytes**

Hardness	295	0.255	2.07	mg/l	07/21/15 20:14	SM2340B	rab	
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**Metals by EPA 200 Series Methods**

Arsenic	<0.00800		0.00800	mg/l	07/21/15 20:16	EPA 200.7/4.4	rab	
Barium, Dissolved	0.0983		0.0100	mg/l	07/22/15 10:22	EPA 200.7/4.4	rab	
Barium	0.101		0.0100	mg/l	07/21/15 20:14	EPA 200.7/4.4	rab	
Calcium	91.8		0.500	mg/l	07/21/15 20:14	EPA 200.7/4.4	rab	
Chromium	<0.00500		0.00500	mg/l	07/21/15 20:16	EPA 200.7/4.4	rab	2d
Iron, Dissolved	<0.0400		0.0400	mg/l	07/22/15 10:22	EPA 200.7/4.4	rab	
Iron	0.140		0.0400	mg/l	07/21/15 20:14	EPA 200.7/4.4	rab	
Potassium	0.803		0.200	mg/l	07/21/15 20:14	EPA 200.7/4.4	rab	
Magnesium	15.9		0.200	mg/l	07/21/15 20:14	EPA 200.7/4.4	rab	
Manganese	0.0558		0.0100	mg/l	07/21/15 20:15	EPA 200.7/4.4	rab	
Sodium	4.46		1.00	mg/l	07/21/15 20:14	EPA 200.7/4.4	rab	
Lead	<0.00800		0.00800	mg/l	07/21/15 20:16	EPA 200.7/4.4	rab	
Selenium	<0.0200		0.0200	mg/l	07/21/15 20:16	EPA 200.7/4.4	rab	
Strontium	0.348		0.0200	mg/l	07/21/15 20:14	EPA 200.7/4.4	rab	

**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	07/20/15 22:46	EPA 8260B	mtc	
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 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: CLIENT  
 Number of Containers: 41

**Reported:**  
 07/23/15 17:13

**Client Sample ID:** SWS-Wassmann Unit-M&E Legacy-Spring-01

**Date/Time Sampled:** 07/16/15 12:00

**Laboratory Sample ID:** 5G17098-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Volatile Organic Compounds by EPA Method 8260B**

Ethylbenzene	<1.00		1.00	ug/l	07/20/15 22:46	EPA 8260B	mtc	
Toluene	<1.00		1.00	ug/l	07/20/15 22:46	EPA 8260B	mtc	
Xylenes (total)	<2.00		2.00	ug/l	07/20/15 22:46	EPA 8260B	mtc	
<i>Surrogate: 4-Bromofluorobenzene</i>		93.2 %			07/20/15 22:46	EPA 8260B	mtc	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.2 %			07/20/15 22:46	EPA 8260B	mtc	
<i>Surrogate: Fluorobenzene</i>		100 %			07/20/15 22:46	EPA 8260B	mtc	

**Conventional Chemistry Parameters by SM/EPA Methods**

<b>Total Alkalinity to pH 4.5</b>	196		20.0	mg CaCO3/L	07/21/15 14:30	SM20-2320B	jlf	
Bromide	<0.200		0.200	mg/l	07/17/15 22:38	EPA 300.0/2.1	wsr	
<b>Chloride</b>	1.58		1.00	mg/l	07/17/15 22:38	EPA 300.0/2.1	wsr	
<b>Specific Conductance (EC)</b>	517		2.00	umhos/cm	07/18/15 15:46	SM20-2510B	cmh	
Methylene Blue Active Substances	<0.0250		0.0250	mg/l	07/18/15 07:18	SM 5540 C-11	nal	
<b>Nitrate as N</b>	1.960		1.000	mg/l	07/17/15 22:38	EPA 300.0/2.1	wsr	
Oil & Grease	<6.25		6.25	mg/l	07/20/15 16:06	EPA 1664A	SR	
<b>pH @ 18.7°C</b>	8.15			pH Units	07/18/15 15:46	SM 4500-H+B-11	cmh	
<b>Total Dissolved Solids</b>	310		20.0	mg/l	07/20/15 15:21	SM 2540 C-97	arr	
Total Suspended Solids	<4.00		4.00	mg/l	07/20/15 09:30	SM 2540 D-97	arr	

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 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: CLIENT  
 Number of Containers: 41

**Reported:**  
 07/23/15 17:13

**Client Sample ID:** SWS-Wassmann Unit-M&E Legacy-Spring-01

**Date/Time Sampled:** 07/16/15 12:00

**Laboratory Sample ID:** 5G17098-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Conventional Chemistry Parameters by SM/EPA Methods**

Sulfate as SO4	63.6		5.00	mg/l	07/20/15 16:08	EPA 300.0/2.1	bdw	
Turbidity	3.80		1.00	NTU	07/18/15 09:07	SM 2130 B-11	nal	

**Dissolved Gases by RSK 175**

Ethane	<0.0100		0.0100	mg/l	07/21/15 14:37	RSK 175	bag	
Methane	<0.0250		0.0250	mg/l	07/21/15 14:37	RSK 175	bag	
Propane	<0.0150		0.0150	mg/l	07/21/15 14:37	RSK 175	bag	

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 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: CLIENT 07/23/15 17:13  
 Number of Containers: 41

**Client Sample ID:** SWS-Wassmann Unit-M&E Legacy-Spring-02

**Date/Time Sampled:** 07/16/15 12:30

**Laboratory Sample ID:** 5G17098-02 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Calculated Analytes**

Hardness	185	0.255	2.07	mg/l	07/21/15 20:20	SM2340B	rab	
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**Metals by EPA 200 Series Methods**

Arsenic	<0.00800		0.00800	mg/l	07/21/15 20:22	EPA 200.7/4.4	rab	
Barium, Dissolved	0.0527		0.0100	mg/l	07/22/15 10:28	EPA 200.7/4.4	rab	
Barium	0.0631		0.0100	mg/l	07/21/15 20:20	EPA 200.7/4.4	rab	
Calcium	59.8		0.500	mg/l	07/21/15 20:20	EPA 200.7/4.4	rab	
Chromium	<0.00500		0.00500	mg/l	07/21/15 20:22	EPA 200.7/4.4	rab	2d
Iron, Dissolved	<0.0400		0.0400	mg/l	07/22/15 10:28	EPA 200.7/4.4	rab	
Iron	0.114		0.0400	mg/l	07/21/15 20:20	EPA 200.7/4.4	rab	
Potassium	2.30		0.200	mg/l	07/21/15 20:20	EPA 200.7/4.4	rab	
Magnesium	8.58		0.200	mg/l	07/21/15 20:20	EPA 200.7/4.4	rab	
Manganese	0.152		0.0100	mg/l	07/21/15 20:21	EPA 200.7/4.4	rab	
Sodium	4.73		1.00	mg/l	07/21/15 20:20	EPA 200.7/4.4	rab	
Lead	<0.00800		0.00800	mg/l	07/21/15 20:22	EPA 200.7/4.4	rab	
Selenium	<0.0200		0.0200	mg/l	07/21/15 20:22	EPA 200.7/4.4	rab	
Strontium	0.173		0.0200	mg/l	07/21/15 20:20	EPA 200.7/4.4	rab	

**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	07/20/15 23:23	EPA 8260B	mtc	
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 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: CLIENT  
 Number of Containers: 41

**Reported:**  
 07/23/15 17:13

**Client Sample ID:** SWS-Wassmann Unit-M&E Legacy-Spring-02

**Date/Time Sampled:** 07/16/15 12:30

**Laboratory Sample ID:** 5G17098-02 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Volatile Organic Compounds by EPA Method 8260B**

Ethylbenzene	<1.00		1.00	ug/l	07/20/15 23:23	EPA 8260B	mtc	
Toluene	<1.00		1.00	ug/l	07/20/15 23:23	EPA 8260B	mtc	
Xylenes (total)	<2.00		2.00	ug/l	07/20/15 23:23	EPA 8260B	mtc	
<i>Surrogate: 4-Bromofluorobenzene</i>		92.4 %			07/20/15 23:23	EPA 8260B	mtc	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		97.2 %			07/20/15 23:23	EPA 8260B	mtc	
<i>Surrogate: Fluorobenzene</i>		98.2 %			07/20/15 23:23	EPA 8260B	mtc	

**Conventional Chemistry Parameters by SM/EPA Methods**

<b>Total Alkalinity to pH 4.5</b>	136		20.0	mg CaCO3/L	07/21/15 14:30	SM20-2320B	jlf	
Bromide	<0.200		0.200	mg/l	07/17/15 22:55	EPA 300.0/2.1	wsr	
<b>Chloride</b>	3.75		1.00	mg/l	07/17/15 22:55	EPA 300.0/2.1	wsr	
<b>Specific Conductance (EC)</b>	342		2.00	umhos/cm	07/18/15 15:46	SM20-2510B	cmh	
Methylene Blue Active Substances	<0.0250		0.0250	mg/l	07/18/15 07:18	SM 5540 C-11	nal	
Nitrate as N	<1.000		1.000	mg/l	07/17/15 22:55	EPA 300.0/2.1	wsr	
Oil & Grease	<6.25		6.25	mg/l	07/20/15 16:06	EPA 1664A	SR	
<b>pH @ 18.5°C</b>	7.66			pH Units	07/18/15 15:46	SM 4500-H+B-11	cmh	
<b>Total Dissolved Solids</b>	226		20.0	mg/l	07/20/15 15:21	SM 2540 C-97	arr	
Total Suspended Solids	<4.00		4.00	mg/l	07/20/15 09:30	SM 2540 D-97	arr	

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 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: CLIENT  
 Number of Containers: 41

**Reported:**  
 07/23/15 17:13

**Client Sample ID:** SWS-Wassmann Unit-M&E Legacy-Spring-02

**Date/Time Sampled:** 07/16/15 12:30

**Laboratory Sample ID:** 5G17098-02 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Conventional Chemistry Parameters by SM/EPA Methods**

Sulfate as SO4	30.2		1.00	mg/l	07/17/15 22:55	EPA 300.0/2.1	wsr	
Turbidity	1.60		1.00	NTU	07/18/15 09:07	SM 2130 B-11	nal	

**Dissolved Gases by RSK 175**

Ethane	<0.0100		0.0100	mg/l	07/21/15 14:56	RSK 175	bag	
Methane	<0.0250		0.0250	mg/l	07/21/15 14:56	RSK 175	bag	
Propane	<0.0150		0.0150	mg/l	07/21/15 14:56	RSK 175	bag	

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 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: CLIENT  
 Number of Containers: 41

**Reported:**  
 07/23/15 17:13

**Client Sample ID:** SWS-Wassmann Unit-M&E Legacy-Pond-01

**Date/Time Sampled:** 07/16/15 13:15

**Laboratory Sample ID:** 5G17098-03 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Calculated Analytes**

Hardness	197	0.255	2.07	mg/l	07/21/15 20:27	SM2340B	rab	
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**Metals by EPA 200 Series Methods**

Arsenic	<0.00800		0.00800	mg/l	07/21/15 20:29	EPA 200.7/4.4	rab	
Barium, Dissolved	0.0403		0.0100	mg/l	07/22/15 10:36	EPA 200.7/4.4	rab	
Barium	0.0653		0.0100	mg/l	07/21/15 20:27	EPA 200.7/4.4	rab	
Calcium	59.2		0.500	mg/l	07/21/15 20:27	EPA 200.7/4.4	rab	
Chromium	<0.00500		0.00500	mg/l	07/21/15 20:29	EPA 200.7/4.4	rab	2d
Iron, Dissolved	<0.0400		0.0400	mg/l	07/22/15 10:36	EPA 200.7/4.4	rab	
Iron	0.506		0.0400	mg/l	07/21/15 20:27	EPA 200.7/4.4	rab	
Potassium	6.28		0.200	mg/l	07/21/15 20:27	EPA 200.7/4.4	rab	
Magnesium	11.9		0.200	mg/l	07/21/15 20:27	EPA 200.7/4.4	rab	
Manganese	1.05		0.0100	mg/l	07/21/15 20:28	EPA 200.7/4.4	rab	
Sodium	4.04		1.00	mg/l	07/21/15 20:27	EPA 200.7/4.4	rab	
Lead	<0.00800		0.00800	mg/l	07/21/15 20:29	EPA 200.7/4.4	rab	
Selenium	<0.0200		0.0200	mg/l	07/21/15 20:29	EPA 200.7/4.4	rab	
Strontium	0.241		0.0200	mg/l	07/21/15 20:27	EPA 200.7/4.4	rab	

**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	07/21/15 00:01	EPA 8260B	mtc	
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 Pennsdale, PA 17756  
 (570) 494-6380  
 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: CLIENT  
 Number of Containers: 41

**Reported:**  
 07/23/15 17:13

**Client Sample ID:** SWS-Wassmann Unit-M&E Legacy-Pond-01

**Date/Time Sampled:** 07/16/15 13:15

**Laboratory Sample ID:** 5G17098-03 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Volatile Organic Compounds by EPA Method 8260B**

Ethylbenzene	<1.00		1.00	ug/l	07/21/15 00:01	EPA 8260B	mtc	
Toluene	<1.00		1.00	ug/l	07/21/15 00:01	EPA 8260B	mtc	
Xylenes (total)	<2.00		2.00	ug/l	07/21/15 00:01	EPA 8260B	mtc	
<i>Surrogate: 4-Bromofluorobenzene</i>		90.9 %			07/21/15 00:01	EPA 8260B	mtc	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		89.5 %			07/21/15 00:01	EPA 8260B	mtc	
<i>Surrogate: Fluorobenzene</i>		91.2 %			07/21/15 00:01	EPA 8260B	mtc	

**Conventional Chemistry Parameters by SM/EPA Methods**

<b>Total Alkalinity to pH 4.5</b>	144		20.0	mg CaCO3/L	07/21/15 14:30	SM20-2320B	jlf	
Bromide	<0.200		0.200	mg/l	07/17/15 23:11	EPA 300.0/2.1	wsr	
<b>Chloride</b>	3.73		1.00	mg/l	07/17/15 23:11	EPA 300.0/2.1	wsr	
<b>Specific Conductance (EC)</b>	363		2.00	umhos/cm	07/18/15 15:46	SM20-2510B	cmh	
Methylene Blue Active Substances	<0.0250		0.0250	mg/l	07/18/15 07:18	SM 5540 C-11	nal	
Nitrate as N	<1.000		1.000	mg/l	07/17/15 23:11	EPA 300.0/2.1	wsr	
Oil & Grease	<6.25		6.25	mg/l	07/20/15 16:06	EPA 1664A	SR	
<b>pH @ 18.1°C</b>	7.79			pH Units	07/18/15 15:46	SM 4500-H+B-11	cmh	
<b>Total Dissolved Solids</b>	214		20.0	mg/l	07/20/15 15:21	SM 2540 C-97	arr	
<b>Total Suspended Solids</b>	16.0		4.00	mg/l	07/20/15 09:30	SM 2540 D-97	arr	

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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: CLIENT  
 Number of Containers: 41

**Reported:**  
 07/23/15 17:13

**Client Sample ID:** SWS-Wassmann Unit-M&E Legacy-Pond-01

**Date/Time Sampled:** 07/16/15 13:15

**Laboratory Sample ID:** 5G17098-03 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Conventional Chemistry Parameters by SM/EPA Methods**

Sulfate as SO4	24.4		1.00	mg/l	07/17/15 23:11	EPA 300.0/2.1	wsr	
Turbidity	18.2		1.00	NTU	07/18/15 09:07	SM 2130 B-11	nal	

**Dissolved Gases by RSK 175**

Ethane	<0.0100		0.0100	mg/l	07/21/15 15:16	RSK 175	bag	
Methane	0.0381		0.0250	mg/l	07/21/15 15:16	RSK 175	bag	
Propane	<0.0150		0.0150	mg/l	07/21/15 15:16	RSK 175	bag	

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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: CLIENT 07/23/15 17:13  
 Number of Containers: 41

**Client Sample ID:** SWS-Wassmann Unit-M&E Legacy-Stream-01

**Date/Time Sampled:** 07/16/15 14:10

**Laboratory Sample ID:** 5G17098-04 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Calculated Analytes**

Hardness	243	0.255	2.07	mg/l	07/21/15 20:34	SM2340B	rab	
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**Metals by EPA 200 Series Methods**

Arsenic	<0.00800		0.00800	mg/l	07/21/15 20:36	EPA 200.7/4.4	rab	
Barium, Dissolved	0.0697		0.0100	mg/l	07/22/15 10:43	EPA 200.7/4.4	rab	
Barium	0.0847		0.0100	mg/l	07/21/15 20:34	EPA 200.7/4.4	rab	
Calcium	78.5		0.500	mg/l	07/21/15 20:34	EPA 200.7/4.4	rab	
Chromium	<0.00500		0.00500	mg/l	07/21/15 20:36	EPA 200.7/4.4	rab	2d
Iron, Dissolved	<0.0400		0.0400	mg/l	07/22/15 10:43	EPA 200.7/4.4	rab	
Iron	0.969		0.0400	mg/l	07/21/15 20:34	EPA 200.7/4.4	rab	
Potassium	1.62		0.200	mg/l	07/21/15 20:34	EPA 200.7/4.4	rab	
Magnesium	11.5		0.200	mg/l	07/21/15 20:34	EPA 200.7/4.4	rab	
Manganese	0.191		0.0100	mg/l	07/21/15 20:35	EPA 200.7/4.4	rab	
Sodium	14.4		1.00	mg/l	07/21/15 20:34	EPA 200.7/4.4	rab	
Lead	<0.00800		0.00800	mg/l	07/21/15 20:36	EPA 200.7/4.4	rab	
Selenium	<0.0200		0.0200	mg/l	07/21/15 20:36	EPA 200.7/4.4	rab	
Strontium	0.309		0.0200	mg/l	07/21/15 20:34	EPA 200.7/4.4	rab	

**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	07/21/15 01:17	EPA 8260B	mtc	
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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: CLIENT  
 Number of Containers: 41

**Reported:**  
 07/23/15 17:13

**Client Sample ID:** SWS-Wassmann Unit-M&E Legacy-Stream-01

**Date/Time Sampled:** 07/16/15 14:10

**Laboratory Sample ID:** 5G17098-04 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Volatile Organic Compounds by EPA Method 8260B**

Ethylbenzene	<1.00		1.00	ug/l	07/21/15 01:17	EPA 8260B	mtc	
Toluene	<1.00		1.00	ug/l	07/21/15 01:17	EPA 8260B	mtc	
Xylenes (total)	<2.00		2.00	ug/l	07/21/15 01:17	EPA 8260B	mtc	
<i>Surrogate: 4-Bromofluorobenzene</i>		92.9 %			07/21/15 01:17	EPA 8260B	mtc	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		97.9 %			07/21/15 01:17	EPA 8260B	mtc	
<i>Surrogate: Fluorobenzene</i>		100 %			07/21/15 01:17	EPA 8260B	mtc	

**Conventional Chemistry Parameters by SM/EPA Methods**

<b>Total Alkalinity to pH 4.5</b>	176		20.0	mg CaCO3/L	07/21/15 14:30	SM20-2320B	jlf	
Bromide	<0.200		0.200	mg/l	07/17/15 23:28	EPA 300.0/2.1	wsr	
<b>Chloride</b>	26.4		5.00	mg/l	07/20/15 16:24	EPA 300.0/2.1	bdw	
<b>Specific Conductance (EC)</b>	489		2.00	umhos/cm	07/18/15 15:46	SM20-2510B	cmh	
Methylene Blue Active Substances	<0.0250		0.0250	mg/l	07/18/15 07:18	SM 5540 C-11	nal	
Nitrate as N	<1.000		1.000	mg/l	07/17/15 23:28	EPA 300.0/2.1	wsr	
Oil & Grease	<6.25		6.25	mg/l	07/20/15 16:06	EPA 1664A	SR	
<b>pH @ 18.2°C</b>	8.33			pH Units	07/18/15 15:46	SM 4500-H+B-11	cmh	
<b>Total Dissolved Solids</b>	272		20.0	mg/l	07/20/15 15:21	SM 2540 C-97	arr	
<b>Total Suspended Solids</b>	33.0		4.00	mg/l	07/20/15 09:30	SM 2540 D-97	arr	2a

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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: CLIENT  
 Number of Containers: 41

**Reported:**  
 07/23/15 17:13

**Client Sample ID:** SWS-Wassmann Unit-M&E Legacy-Stream-01

**Date/Time Sampled:** 07/16/15 14:10

**Laboratory Sample ID:** 5G17098-04 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Conventional Chemistry Parameters by SM/EPA Methods**

Sulfate as SO4	31.9		1.00	mg/l	07/17/15 23:28	EPA 300.0/2.1	wsr	
Turbidity	36.1		1.00	NTU	07/18/15 09:07	SM 2130 B-11	nal	

**Dissolved Gases by RSK 175**

Ethane	<0.0100		0.0100	mg/l	07/21/15 17:19	RSK 175	bag	
Methane	<0.0250		0.0250	mg/l	07/21/15 17:19	RSK 175	bag	
Propane	<0.0150		0.0150	mg/l	07/21/15 17:19	RSK 175	bag	

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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: CLIENT 07/23/15 17:13  
 Number of Containers: 41

**Client Sample ID: TRIP BLANK**

**Date/Time Sampled: 04/27/15 14:52**

**Laboratory Sample ID: 5G17098-05 (Water/Trip Blank)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	07/21/15 20:35	EPA 8260B	mtc	
Ethylbenzene	<1.00		1.00	ug/l	07/21/15 20:35	EPA 8260B	mtc	
Toluene	<1.00		1.00	ug/l	07/21/15 20:35	EPA 8260B	mtc	
Xylenes (total)	<2.00		2.00	ug/l	07/21/15 20:35	EPA 8260B	mtc	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>92.6 %</i>		<i>70-130</i>		<i>07/21/15 20:35</i>	<i>EPA 8260B</i>	<i>mtc</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>96.3 %</i>		<i>70-130</i>		<i>07/21/15 20:35</i>	<i>EPA 8260B</i>	<i>mtc</i>	
<i>Surrogate: Fluorobenzene</i>	<i>98.1 %</i>		<i>70-130</i>		<i>07/21/15 20:35</i>	<i>EPA 8260B</i>	<i>mtc</i>	

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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: CLIENT  
 Number of Containers: 41

**Reported:**  
 07/23/15 17:13

**Notes**

- 2a The RPD result exceeded the QC control limits for the duplicate, LCSD or MSD sample analyzed.
- 2d The LCS spike recovery was outside acceptance limits for the noted analyte. Data accepted based on additional batch QC.

**Definitions**

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory.

MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

\* P indicates analysis performed by Fairway Laboratories, Inc. at the Pennsdale location. This location is PaDEP Chapter 252 certified.

< Represents "less than" - indicates that the result was less than the reporting limit.

MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values.

RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.

[CALC] Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.

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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: CLIENT 07/23/15 17:13  
 Number of Containers: 41

**Terms & Conditions**

Services provided by Fairway Laboratories Inc. are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

**CHAIN OF CUSTODY** Fairway Laboratories Inc. ("Fairway," "us" or "we") will initiate a chain-of-custody/request for analysis upon sample receipt unless the client includes a completed form with the received sample(s). Upon request, Fairway will provide chain-of-custody forms for use.

**CONFIDENTIALITY** Fairway maintains confidentiality in all of our client interactions. The client's consent will be required before releasing information about the services provided.

**CONTRACTS** All contracts are subject to review and approval by Fairway's legal council. Each contract must be signed by a corporate officer.

**PAYMENT/BILLING** Unless otherwise set forth in a signed contract or purchase order, terms of payment are "NET 30 Days." The time allowed for payment shall begin based on the invoice date. A 1.5% per month service charge may be added to all unpaid balances beyond the initial 30 days. In its sole discretion, Fairway reserves the right to request payment before services and hold sample results for payment of due balances. We will not bill a third party without prior agreement among all parties acknowledging and accepting responsibility for payment.

**SAMPLE COLLECTION AND SUBMISSION** Clients not requesting collection services from Fairway are responsible for proper collection, preservation, packaging, and delivery of samples to the laboratory in accordance with current law and commercial practice. Fairway shall have no responsibility for sample integrity prior to the receipt of the sample(s) and/or for any inaccuracy in test or analyses results as a result of the failure of the client or any third party to maintain the integrity of samples prior to delivery to Fairway. All samples submitted must be accompanied by a completed chain of custody or similar document clearly noting the requested analyses, dates/time sampled, client contact information, and trail of custody.

**SUBCONTRACTING** Some analyses may require subcontracting to another laboratory. Unless the client indicates otherwise, this decision will be made by Fairway. Subcontracted work will be identified on the final report in accordance with NELAC requirements.

**RETURN OF RESULTS** Fairway routinely provides faxed or verbal results within 10 working days of receipt of sample(s) and a hard copy of the data results is routinely received via US Postal Service within 15 working days. At the request of the client, Fairway may offer expedited return of sample results. Surcharges may apply to rush requests. All rush requests must be pre-approved by Fairway. We reserve the right to charge an archive retrieval fee for results older than one (1) year from the date of the request. All records will be maintained by Fairway for 5 years, after which, they will be destroyed.

**SAMPLE DISPOSAL** Fairway will maintain samples for four (4) weeks after the sample receipt date. Fairway will dispose of samples which are not and/or do not contain hazardous wastes (as such term is defined by applicable federal or state law), unless prior arrangements have been made for long-term storage. Fairway reserves the right to charge a disposal fee for the proper disposal of samples found or suspected to contain hazardous waste. A return shipping charge will be invoiced for samples returned to the client at their request.

**HAZARD COMMUNICATION** The client has the responsibility to inform the laboratory of any hazardous characteristics known or suspected about the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

**WARRANTY AND LIMITATION OF LIABILITY** For services rendered, Fairway warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Fairway does not accept any legal responsibility for the purposes for which client uses the test results.

**LITIGATION** All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Fairway Laboratories, Inc. shall be invoiced by Fairway and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

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# CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Please print. See back of COC for instructions/terms and conditions.

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P.O. Box 1925  
Altoona, PA 16602  
Phone: (814) 946-4306  
Fax: (814) 946-8791

## FAIRWAY LABORATORIES

Environmental Laboratory

89 Kristi Rd  
Pennsdale, PA 17756  
Phone: (570) 494-6380

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COC #

Page 1 of 2

Client Name: <u>RETTEW as agent of XTO</u> Address: <u>5143 Stoneham Rd</u> <u>North Canton, OH, 44720</u> Contact: <u>Joe Biaglow</u> Phone #: <u>(330) 818-9770</u> Fax #: _____ Project Name: <u>XTO Baseline Sampling</u> Quote/PO #: <u>091322071</u>		Received on ice? Y N Sample Temp: _____ Reportable to PADEP? Yes <input type="checkbox"/> PWSID #: _____		Analyses Requested					LAB USE ONLY FedEx <input type="checkbox"/> USPS <input type="checkbox"/> UPS <input type="checkbox"/> Other <input type="checkbox"/> Tracking # _____				
TAT: Normal <input type="checkbox"/> Rush <input checked="" type="checkbox"/> Rush TAT subject to pre-approval and surcharge. Date Required: <u>7/23/15</u>		Composite Start GRAB -or- Composite End		Matrix Solid _____ Water _____ Other _____			# of Containers <u>XTO Analyte List</u>		Tracking # _____				
Sample Description/Location		GRAB	Composite	Start Date	Start Time	End Date	End Time	Solid	Water	Other	# of Containers	Bottle Type/Comments	
1 SWS-Wassmann Unit		X		<del>7-16-15</del>		7-16-15	12:00	X			10	X	
-M&E Legacy-Spring-01													
2 SWS-Wassmann Unit		X				7-16-15	12:30	X			10	X	
-M&E Legacy-Spring-02													
3 SWS-Wassmann Unit		X				7-16-15	13:15	X			10	X	
-M&E Legacy-Pond-01													
4 SWS-Wassmann Unit		X				7-16-15	14:10	X			10	X	
-M&E Legacy-Stream-01													
Trop Blank		X				4-27-15	14:52	X			1	X	
Sampled by: <u>[Signature]</u> Date: <u>7-16-15</u> Time: <u>1600</u>		Received by: <u>Valerie Bryan</u> Date: <u>7/16/15</u> Time: <u>17:25</u>		Remarks: Header on lab report needs to include: Location: Wassmann Unit									
Relinquished by: <u>Valerie Bryan</u> Date: <u>7/17/15</u> Time: <u>06:00</u>		Received by: <u>[Signature]</u> Date: <u>7/17/15</u> Time: <u>1330</u>		Robert J. Blazek For M&E Legacy Group, LLC 54334 Key Bellaire Road Bellaire, OH 43906									
Relinquished by: <u>[Signature]</u> Date: <u>7/17/15</u> Time: <u>1445</u>		Received by: <u>[Signature]</u> Date: <u>7-17</u> Time: <u>1445</u>											
Relinquished by: <u>[Signature]</u> Date: <u>7-17</u> Time: <u>16:45</u>		Received by: <u>[Signature]</u> Date: <u>7/17/15</u> Time: <u>16:45</u>											

**Chain of Custody Receiving Document**

Receiver: AR

Page 2 of 2

#2

Date/Time of this check: 7-17-15 16:00 Client: Reffew Lab # 5617098

Received on ICE?  \* Sample Temperature when delivered to the Lab: 0 Acceptable?  \* or In cool down process?  \*

Custody Seals? 4 Intact? 4

COC/Labels on bottles agree?  \* Correct containers for all the analysis requested?  \* Matrix: Water

COC #	Number and Type of BOTTLES										Comments
	Poly Non-Pres.	Poly H2SO4	Poly HNO3	Amber H2SO4	Amber Non-Pres.	Poly NaOH	VOCS (Head space?)	Other <input type="checkbox"/> *	Properly Preserved <input checked="" type="checkbox"/> *	Bacti	
1	2		2	1			4 HL	250ml	4		
2	↓		↓	↓			↓		↓		
3	↓		↓	↓			↓		↓		
4	↓		↓	↓			↓		↓		
T/S							FAK				

<p><b>* DEVIATION PRESENT:</b></p> <p><input checked="" type="checkbox"/> No Ice ( )</p> <p><input checked="" type="checkbox"/> Not at Proper Temperature ( )</p> <p><input checked="" type="checkbox"/> Wrong Container ( )</p> <p><input checked="" type="checkbox"/> Missing Information: ( )</p>	<p><b>CLIENT CALLED:</b></p> <p>YES ( )</p> <p>By Whom: _____</p> <p>Date: _____</p>	<p><b>CLIENT RESPONSE:</b></p> <p>Proceed with analysis; qualify data ( )</p> <p>Will Resample ( )</p> <p>Provided Information ( )</p> <p>No Response; Proceed and qualified ( )</p> <p>Client Contact: _____ Date: _____</p>
--	--	---

\* Comments: \_\_\_\_\_

# RETTEW

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An Engineering News-Record Top Design Firm

Nate Fela

Project Manager

5143 Stoneham Road

Suite 100

North Canton, Oh. 44720

Office: 330.818.9770

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567098 #13

## XTO Baseline Sampling

Alkalinity
Arsenic
Barium
Barium (Dissolved)
Benzene
Bromide
Calcium
Chloride
Chromium
Ethane
Ethylbenzene
Field pH
HEM
Iron
Iron (Dissolved)
Lead
Magnesium
Manganese
MBAS
Methane
Nitrate as N
Potassium
Propane
Selenium
Sodium
Specific Conductance
Strontium
Sulfate
Toluene
Total Dissolved Solids
Total Hardness
Total Suspended Solids
Turbidity
Xylenes, Total



2019 Ninth Avenue  
 PO Box 1925  
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 (814) 946-4306  
 NELAP: PA 07-062, VA 460212

89 Kristi Road  
 Pennsdale, PA 17756  
 (570) 494-6380  
 PaDEP: PA 41-04684



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State Certifications: MD 275, WV 364

Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: CLIENT  
 Number of Containers: 11  
**Reported:**  
 07/28/15 15:51

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
GWS_WassmannUnit-Riggs-Well-01	5F22010-01	Water	Grab	06/18/15 12:10	06/19/15 20:20
TRIP BLANK	5F22010-02	Water	Grab	04/27/15 14:50	06/19/15 20:20

5F22010-01 Location Header revised. This report replaces report issued on 06/26/15 15:58. 07/28/15smc

Location:  
 Wassmann Unit  
 Jerry L Riggs  
 55182 Key Bellaire Rd.  
 Bellaire, OH 43906

Fairway Laboratories, Inc.

Reviewed and Submitted by:

Michael P. Tyler  
 Laboratory Director

*Fairway Labs in Altoona, PA is a NELAP (National Environmental Laboratory Accreditation Program) accredited lab, and as such, certifies that all applicable test results meet the requirements of NELAP, unless otherwise stated on the analytical report.*

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: CLIENT 07/28/15 15:51  
 Number of Containers: 11

**Client Sample ID:** GWS\_WassmannUnit-Riggs-Well-01

**Date/Time Sampled:** 06/18/15 12:10

**Laboratory Sample ID:** 5F22010-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Calculated Analytes**

Hardness	83.8	0.255	2.07	mg/l	06/26/15 12:40	SM2340B	nal	
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**Metals by EPA 200 Series Methods**

Arsenic	0.0116		0.00800	mg/l	06/26/15 12:42	EPA 200.7/4.4	nal	
Barium, Dissolved	1.07		0.0100	mg/l	06/26/15 09:02	EPA 200.7/4.4	nal	
Barium	1.10		0.0100	mg/l	06/26/15 12:40	EPA 200.7/4.4	nal	
Calcium	17.7		0.500	mg/l	06/26/15 12:40	EPA 200.7/4.4	nal	
Chromium	<0.00500		0.00500	mg/l	06/26/15 12:42	EPA 200.7/4.4	nal	
Iron, Dissolved	<0.0400		0.0400	mg/l	06/26/15 09:02	EPA 200.7/4.4	nal	
Iron	0.0886		0.0400	mg/l	06/26/15 12:40	EPA 200.7/4.4	nal	
Potassium	1.57		0.200	mg/l	06/26/15 12:40	EPA 200.7/4.4	nal	
Magnesium	9.63		0.200	mg/l	06/26/15 12:40	EPA 200.7/4.4	nal	
Manganese	<0.0100		0.0100	mg/l	06/26/15 12:42	EPA 200.7/4.4	nal	
Sodium	192		1.00	mg/l	06/26/15 12:40	EPA 200.7/4.4	nal	
Lead	<0.00800		0.00800	mg/l	06/26/15 12:42	EPA 200.7/4.4	nal	
Selenium	<0.0200		0.0200	mg/l	06/26/15 12:42	EPA 200.7/4.4	nal	
Strontium	1.24		0.0200	mg/l	06/26/15 12:40	EPA 200.7/4.4	nal	

**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	06/23/15 22:37	EPA 8260B	wlm	
---------	-------	--	------	------	----------------	-----------	-----	--

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 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: CLIENT  
 Number of Containers: 11

**Reported:**  
 07/28/15 15:51

**Client Sample ID:** GWS\_WassmannUnit-Riggs-Well-01

**Date/Time Sampled:** 06/18/15 12:10

**Laboratory Sample ID:** 5F22010-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
---------	--------	-----	----	-------	----------------------	--------	-----------	------

**Volatile Organic Compounds by EPA Method 8260B**

Ethylbenzene	<1.00		1.00	ug/l	06/23/15 22:37	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	06/23/15 22:37	EPA 8260B	wlm	
Xylenes (total)	<2.00		2.00	ug/l	06/23/15 22:37	EPA 8260B	wlm	
<i>Surrogate: 4-Bromofluorobenzene</i>		99.3 %			06/23/15 22:37	EPA 8260B	wlm	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		104 %			06/23/15 22:37	EPA 8260B	wlm	
<i>Surrogate: Fluorobenzene</i>		89.7 %			06/23/15 22:37	EPA 8260B	wlm	

**Conventional Chemistry Parameters by SM/EPA Methods**

<b>Total Alkalinity to pH 4.5</b>	414		20.0	mg CaCO3/L	06/26/15 11:40	SM20-2320B	jlf	
<b>Bromide</b>	0.214		0.200	mg/l	06/20/15 10:07	EPA 300.0/2.1	bdw	
<b>Chloride</b>	36.9		5.00	mg/l	06/24/15 01:09	EPA 300.0/2.1	bdw	
<b>Specific Conductance (EC)</b>	914		2.00	umhos/cm	06/22/15 13:08	SM20-2510B	spt	
Methylene Blue Active Substances	<0.0250		0.0250	mg/l	06/20/15 11:02	SM 5540 C-11	elb	
Nitrate as N	<1.000		1.000	mg/l	06/20/15 10:07	EPA 300.0/2.1	bdw	
Oil & Grease	<6.25		6.25	mg/l	06/25/15 13:50	EPA 1664A	SR	
<b>pH @ 16.9°C</b>	8.01			pH Units	06/22/15 13:00	SM 4500-H+B-11	spt	
<b>Total Dissolved Solids</b>	492		20.0	mg/l	06/23/15 15:49	SM 2540 C-97	arr	
<b>Total Suspended Solids</b>	5.00		4.00	mg/l	06/22/15 13:07	SM 2540 D-97	arr	

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 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: CLIENT 07/28/15 15:51  
 Number of Containers: 11

**Client Sample ID:** GWS\_WassmannUnit-Riggs-Well-01

**Date/Time Sampled:** 06/18/15 12:10

**Laboratory Sample ID:** 5F22010-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
---------	--------	-----	----	-------	----------------------	--------	-----------	------

**Conventional Chemistry Parameters by SM/EPA Methods**

Sulfate as SO4	8.30		1.00	mg/l	06/20/15 10:07	EPA 300.0/2.1	bdw	
Turbidity	<1.00		1.00	NTU	06/20/15 09:32	SM 2130 B-11	cal	

**Dissolved Gases by RSK 175**

Ethane	0.361		0.0100	mg/l	06/24/15 17:57	RSK 175	bag	
Methane	7.62		0.625	mg/l	06/25/15 08:09	RSK 175	bag	
Propane	<0.0150		0.0150	mg/l	06/24/15 17:57	RSK 175	bag	

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 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: CLIENT 07/28/15 15:51  
 Number of Containers: 11

**Client Sample ID: TRIP BLANK**

**Date/Time Sampled: 04/27/15 14:50**

**Laboratory Sample ID: 5F22010-02 (Water/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	06/23/15 23:15	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	06/23/15 23:15	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	06/23/15 23:15	EPA 8260B	wlm	
Xylenes (total)	<2.00		2.00	ug/l	06/23/15 23:15	EPA 8260B	wlm	
<i>Surrogate: 4-Bromofluorobenzene</i>		100 %	70-130		06/23/15 23:15	EPA 8260B	wlm	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		106 %	70-130		06/23/15 23:15	EPA 8260B	wlm	
<i>Surrogate: Fluorobenzene</i>		89.4 %	70-130		06/23/15 23:15	EPA 8260B	wlm	

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 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: CLIENT  
 Number of Containers: 11

**Reported:**  
 07/28/15 15:51

**Definitions**

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory.

MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

- \* P indicates analysis performed by Fairway Laboratories, Inc. at the Pennsdale location. This location is PaDEP Chapter 252 certified.
- < Represents "less than" - indicates that the result was less than the reporting limit.
- MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values.
- RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.
- [CALC] Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.



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Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: CLIENT 07/28/15 15:51  
 Number of Containers: 11

**Terms & Conditions**

Services provided by Fairway Laboratories Inc. are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

**CHAIN OF CUSTODY** Fairway Laboratories Inc. ("Fairway," "us" or "we") will initiate a chain-of-custody/request for analysis upon sample receipt unless the client includes a completed form with the received sample(s). Upon request, Fairway will provide chain-of-custody forms for use.

**CONFIDENTIALITY** Fairway maintains confidentiality in all of our client interactions. The client's consent will be required before releasing information about the services provided.

**CONTRACTS** All contracts are subject to review and approval by Fairway's legal council. Each contract must be signed by a corporate officer.

**PAYMENT/BILLING** Unless otherwise set forth in a signed contract or purchase order, terms of payment are "NET 30 Days." The time allowed for payment shall begin based on the invoice date. A 1.5% per month service charge may be added to all unpaid balances beyond the initial 30 days. In its sole discretion, Fairway reserves the right to request payment before services and hold sample results for payment of due balances. We will not bill a third party without prior agreement among all parties acknowledging and accepting responsibility for payment.

**SAMPLE COLLECTION AND SUBMISSION** Clients not requesting collection services from Fairway are responsible for proper collection, preservation, packaging, and delivery of samples to the laboratory in accordance with current law and commercial practice. Fairway shall have no responsibility for sample integrity prior to the receipt of the sample(s) and/or for any inaccuracy in test or analyses results as a result of the failure of the client or any third party to maintain the integrity of samples prior to delivery to Fairway. All samples submitted must be accompanied by a completed chain of custody or similar document clearly noting the requested analyses, dates/time sampled, client contact information, and trail of custody.

**SUBCONTRACTING** Some analyses may require subcontracting to another laboratory. Unless the client indicates otherwise, this decision will be made by Fairway. Subcontracted work will be identified on the final report in accordance with NELAC requirements.

**RETURN OF RESULTS** Fairway routinely provides faxed or verbal results within 10 working days of receipt of sample(s) and a hard copy of the data results is routinely received via US Postal Service within 15 working days. At the request of the client, Fairway may offer expedited return of sample results. Surcharges may apply to rush requests. All rush requests must be pre-approved by Fairway. We reserve the right to charge an archive retrieval fee for results older than one (1) year from the date of the request. All records will be maintained by Fairway for 5 years, after which, they will be destroyed.

**SAMPLE DISPOSAL** Fairway will maintain samples for four (4) weeks after the sample receipt date. Fairway will dispose of samples which are not and/or do not contain hazardous wastes (as such term is defined by applicable federal or state law), unless prior arrangements have been made for long-term storage. Fairway reserves the right to charge a disposal fee for the proper disposal of samples found or suspected to contain hazardous waste. A return shipping charge will be invoiced for samples returned to the client at their request.

**HAZARD COMMUNICATION** The client has the responsibility to inform the laboratory of any hazardous characteristics known or suspected about the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

**WARRANTY AND LIMITATION OF LIABILITY** For services rendered, Fairway warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Fairway does not accept any legal responsibility for the purposes for which client uses the test results.

**LITIGATION** All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Fairway Laboratories, Inc. shall be invoiced by Fairway and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

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# CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Please print. See back of COC for instructions/terms and conditions.

2019 9th Ave.  
P.O. Box 1925  
Altoona, PA 16602  
Phone: (814) 946-4306  
Fax: (814) 946-8791



89 Kristi Rd  
Pennsdale, PA 17756  
Phone: (570) 494-6380

5F22010 #1  
COC #

Page 1 of 2

<b>Client Name:</b> <u>Rettow Associates</u> <b>Address:</b> <u>5143 Stoneham Rd</u> <u>North Canton OH 44720</u> <b>Contact:</b> <u>Joe Bingham</u> <b>Phone #:</b> <u>330 818 9770</u> <b>Fax #:</b> _____ <b>Project Name:</b> <u>XTO Baseline Sampling</u> <b>Quote/PO #:</b> <u>09122071</u>		Received on ice? Y N Sample Temp: _____ Reportable to PADEP? Yes <input type="checkbox"/> PWSID # _____		<b>Analyses Requested</b>					<b>LAB USE ONLY</b> FedEx    USPS UPS      Other Tracking # _____ _____ _____								
<b>TAT:</b> Normal <input type="checkbox"/> Rush <input checked="" type="checkbox"/> Rush TAT subject to pre-approval and surcharge. <b>Date Required:</b> <u>06/26/15</u>		GRAB Composite	<b>Composite Start</b>		<b>GRAB -or- Composite End</b>		<b>Matrix</b> Solid    Water    Other			# of Containers	<u>XTO Analyte List</u>					Bottle Type/Comments	
<b>Sample Description/Location</b>		GRAB Composite	Start Date	Start Time	End Date	End Time	Solid	Water	Other	# of Containers	<u>XTO Analyte List</u>					Bottle Type/Comments	
1 <u>GWS-Wassmann Unit - Riggs - well-01</u>		X	_____	_____	6-18-15	12:10	X	_____	_____	10	X					_____	
2 <u>Trip Blank</u>		X	_____	_____	4-27-15	14:50	X	_____	_____	1	X					<u>prepared by Valerie Bryan</u>	
<b>Sampled by:</b> <u>Joe Bingham</u>		Date	Time	<b>Received by:</b> <u>Valerie Bryan</u>		Date	Time	<b>Remarks</b>									
<b>Relinquished by:</b> <u>Valerie Bryan</u>		Date	Time	<b>Received by:</b> <u>David Adams</u>		Date	Time	<u>Header on lab report needs to include:</u>									
<b>Relinquished by:</b> <u>David Adams</u>		Date	Time	<b>Received by:</b> _____		Date	Time	<u>Location: Wassmann Unit</u>									
<b>Relinquished by:</b> <u>David Adams</u>		Date	Time	<b>Received by:</b> <u>Nicole Stewart</u>		Date	Time	<u>Jerry L Riggs</u>									
<b>Relinquished by:</b> <u>David Adams</u>		Date	Time	<b>Received by:</b> _____		Date	Time	<u>55182 Key Bollaire Rd</u>									
<b>Relinquished by:</b> <u>David Adams</u>		Date	Time	<b>Received by:</b> _____		Date	Time	<u>Bellaire, OH 43906</u>									

By relinquishing my sample to Fairway Laboratories, Inc., I hereby agree to the terms and conditions printed on the reverse.

White Original - FLI File    Canary - FLI Copy    Pink - Customer Receipt Copy

**Chain of Custody Receiving Document**

Receiver: YNS

Page 2 of 2

Date/Time of this check: 6/22/15 8:08 Client: Rittew Lab # SF22010

Received on ICE?  \* Sample Temperature when delivered to the Lab: 0.5 Acceptable?  \* or In cool down process?  \*

Custody Seals?  Intact?

COC/Labels on bottles agree?  \* Correct containers for all the analysis requested?  \* Matrix: water

COC #	Number and Type of BOTTLES										Comments
	Poly Non-Pres.	Poly H2SO4	Poly HNO3	Amber H2SO4	Amber Non-Pres.	Poly NaOH	VOCS (Head space?) <u>HCL</u>	Other <u>huggie</u> <input type="checkbox"/> *	Properly Preserved <input type="checkbox"/> *	Bacti	
<u>1</u>	<u>2</u>		<u>2</u>	<u>1</u>			<u>4</u>	<u>1</u>	<u>Y</u>		
<u>2</u>							<u>1</u>		<u>NA</u>		

<p><b>* DEVIATION PRESENT:</b></p> <p><input checked="" type="checkbox"/> No Ice ( )</p> <p><input checked="" type="checkbox"/> Not at Proper Temperature ( )</p> <p><input checked="" type="checkbox"/> Wrong Container ( )</p> <p><input checked="" type="checkbox"/> Missing Information: ( )</p>	<p><b>CLIENT CALLED:</b></p> <p>YES ( )</p> <p>By Whom: _____</p> <p>Date: _____</p>	<p><b>CLIENT RESPONSE:</b></p> <p>Proceed with analysis; qualify data ( )</p> <p>Will Resample ( )</p> <p>Provided Information ( )</p> <p>No Response; Proceed and qualified ( )</p> <p>Client Contact: _____ Date: _____</p>
--	--	---

\* Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5F 22010

#3

# RETTEW

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**Nate Fela**

Project Manager

5143 Stoneham Road

Suite 100

North Canton, Oh. 44720

Office: 330.818.9770

[www.rettew.com](http://www.rettew.com)

## XTO Baseline Sampling

Alkalinity
Arsenic
Barium
Barium (Dissolved)
Benzene
Bromide
Calcium
Chloride
Chromium
Ethane
Ethylbenzene
Field pH
HEM
Iron
Iron (Dissolved)
Lead
Magnesium
Manganese
MBAS
Methane
Nitrate as N
Potassium
Propane
Selenium
Sodium
Specific Conductance
Strontium
Sulfate
Toluene
Total Dissolved Solids
Total Hardness
Total Suspended Solids
Turbidity
Xylenes, Total

1



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 PaDEP: PA 41-04684



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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: Rettew 08/14/15 11:36  
 Number of Containers: 11

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
SWS-Wassmann Unit-Sadlowski-Pond-01	5H07095-01	Water	Grab	08/06/15 11:45	08/07/15 16:00
TRIP BLANK	5H07095-02	Water	Trip Blank	07/16/15 06:26	08/07/15 16:00

Location: Wassmann Unit  
 Frank Sadlowski  
 55279 New Cut Rd.  
 Shadyside, OH.

Fairway Laboratories, Inc.

Reviewed and Submitted by:

Michael P. Tyler  
 Laboratory Director

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 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: Rettew  
 Number of Containers: 11

**Reported:**  
 08/14/15 11:36

**Client Sample ID:** SWS-Wassmann Unit-Sadlowski-Pond-01

**Date/Time Sampled:** 08/06/15 11:45

**Laboratory Sample ID:** 5H07095-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Calculated Analytes**

Hardness	148	0.255	2.07	mg/l	08/13/15 21:55	SM2340B	rab	
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**Metals by EPA 200 Series Methods**

Arsenic	<0.00800		0.00800	mg/l	08/13/15 21:57	EPA 200.7/4.4	rab	
Barium, Dissolved	0.0829		0.0100	mg/l	08/11/15 00:51	EPA 200.7/4.4	rab	
Barium	0.219		0.0100	mg/l	08/13/15 21:55	EPA 200.7/4.4	rab	
Calcium	40.1		0.500	mg/l	08/13/15 21:55	EPA 200.7/4.4	rab	
Chromium	0.0103		0.00500	mg/l	08/13/15 21:57	EPA 200.7/4.4	rab	
Iron, Dissolved	1.18		0.0400	mg/l	08/11/15 00:51	EPA 200.7/4.4	rab	
Iron	16.9		0.0400	mg/l	08/13/15 21:55	EPA 200.7/4.4	rab	
Potassium	11.1		0.200	mg/l	08/13/15 21:55	EPA 200.7/4.4	rab	
Magnesium	11.7		0.200	mg/l	08/13/15 21:55	EPA 200.7/4.4	rab	
Manganese	1.06		0.0100	mg/l	08/13/15 21:56	EPA 200.7/4.4	rab	
Sodium	23.1		1.00	mg/l	08/13/15 21:55	EPA 200.7/4.4	rab	
Lead	0.00891		0.00800	mg/l	08/13/15 21:57	EPA 200.7/4.4	rab	
Selenium	<0.0200		0.0200	mg/l	08/13/15 21:57	EPA 200.7/4.4	rab	
Strontium	0.116		0.0200	mg/l	08/13/15 21:55	EPA 200.7/4.4	rab	

**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	08/11/15 09:09	EPA 8260B	mtc	
---------	-------	--	------	------	----------------	-----------	-----	--

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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: Rettew  
 Number of Containers: 11

**Reported:**  
 08/14/15 11:36

**Client Sample ID:** SWS-Wassmann Unit-Sadlowski-Pond-01

**Date/Time Sampled:** 08/06/15 11:45

**Laboratory Sample ID:** 5H07095-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Volatile Organic Compounds by EPA Method 8260B**

Ethylbenzene	<1.00		1.00	ug/l	08/11/15 09:09	EPA 8260B	mtc	
Toluene	<1.00		1.00	ug/l	08/11/15 09:09	EPA 8260B	mtc	
Xylenes (total)	<2.00		2.00	ug/l	08/11/15 09:09	EPA 8260B	mtc	
<i>Surrogate: 4-Bromofluorobenzene</i>		100 %	70-130		08/11/15 09:09	EPA 8260B	mtc	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		116 %	70-130		08/11/15 09:09	EPA 8260B	mtc	
<i>Surrogate: Fluorobenzene</i>		93.5 %	70-130		08/11/15 09:09	EPA 8260B	mtc	

**Conventional Chemistry Parameters by SM/EPA Methods**

<b>Total Alkalinity to pH 4.5</b>	94.0		20.0	mg CaCO3/L	08/11/15 10:50	SM20-2320B	jlf	
Bromide	<0.200		0.200	mg/l	08/07/15 20:59	EPA 300.0/2.1	cal	
<b>Chloride</b>	36.8		5.00	mg/l	08/10/15 12:07	EPA 300.0/2.1	bdw	
<b>Specific Conductance (EC)</b>	372		2.00	umhos/cm	08/11/15 11:03	SM20-2510B	spt	
Methylene Blue Active Substances	<0.100		0.100	mg/l	08/08/15 08:16	SM 5540 C-11	nal	
Nitrate as N	<1.000		1.000	mg/l	08/07/15 20:59	EPA 300.0/2.1	cal	
Oil & Grease	<6.25		6.25	mg/l	08/10/15 16:23	EPA 1664A	SR	
<b>pH @ 12.9°C</b>	7.00			pH Units	08/11/15 10:16	SM 4500-H+B-11	spt	
<b>Total Dissolved Solids</b>	120		40.0	mg/l	08/10/15 15:44	SM 2540 C-97	arr	
<b>Total Suspended Solids</b>	436		16.0	mg/l	08/10/15 08:42	SM 2540 D-97	arr	

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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: Rettew  
 Number of Containers: 11

**Reported:**  
 08/14/15 11:36

**Client Sample ID:** SWS-Wassmann Unit-Sadlowski-Pond-01

**Date/Time Sampled:** 08/06/15 11:45

**Laboratory Sample ID:** 5H07095-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
---------	--------	-----	----	-------	----------------------	--------	-----------	------

**Conventional Chemistry Parameters by SM/EPA Methods**

Sulfate as SO4	31.0		1.00	mg/l	08/07/15 20:59	EPA 300.0/2.1	cal	
Turbidity	215		1.00	NTU	08/08/15 09:20	SM 2130 B-11	nal	

**Dissolved Gases by RSK 175**

Ethane	<0.0100		0.0100	mg/l	08/11/15 12:44	RSK 175	bag	
Methane	0.531		0.0250	mg/l	08/11/15 12:44	RSK 175	bag	
Propane	<0.0150		0.0150	mg/l	08/11/15 12:44	RSK 175	bag	

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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: Rettew 08/14/15 11:36  
 Number of Containers: 11

**Client Sample ID: TRIP BLANK**

**Date/Time Sampled: 07/16/15 06:26**

**Laboratory Sample ID: 5H07095-02 (Water/Trip Blank)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
---------	--------	-----	----	-------	----------------------	--------	-----------	------

**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	08/11/15 09:47	EPA 8260B	mtc	
Ethylbenzene	<1.00		1.00	ug/l	08/11/15 09:47	EPA 8260B	mtc	
Toluene	<1.00		1.00	ug/l	08/11/15 09:47	EPA 8260B	mtc	
Xylenes (total)	<2.00		2.00	ug/l	08/11/15 09:47	EPA 8260B	mtc	
<i>Surrogate: 4-Bromofluorobenzene</i>		100 %	70-130		08/11/15 09:47	EPA 8260B	mtc	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		117 %	70-130		08/11/15 09:47	EPA 8260B	mtc	
<i>Surrogate: Fluorobenzene</i>		94.7 %	70-130		08/11/15 09:47	EPA 8260B	mtc	

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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: Rettew  
 Number of Containers: 11

**Reported:**  
 08/14/15 11:36

**Definitions**

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory.

MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

- \* P indicates analysis performed by Fairway Laboratories, Inc. at the Pennsdale location. This location is PaDEP Chapter 252 certified.
- < Represents "less than" - indicates that the result was less than the reporting limit.
- MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values.
- RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.
- [CALC] Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.



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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: Rettew 08/14/15 11:36  
 Number of Containers: 11

**Terms & Conditions**

Services provided by Fairway Laboratories Inc. are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

**CHAIN OF CUSTODY** Fairway Laboratories Inc. ("Fairway," "us" or "we") will initiate a chain-of-custody/request for analysis upon sample receipt unless the client includes a completed form with the received sample(s). Upon request, Fairway will provide chain-of-custody forms for use.

**CONFIDENTIALITY** Fairway maintains confidentiality in all of our client interactions. The client's consent will be required before releasing information about the services provided.

**CONTRACTS** All contracts are subject to review and approval by Fairway's legal council. Each contract must be signed by a corporate officer.

**PAYMENT/BILLING** Unless otherwise set forth in a signed contract or purchase order, terms of payment are "NET 30 Days." The time allowed for payment shall begin based on the invoice date. A 1.5% per month service charge may be added to all unpaid balances beyond the initial 30 days. In its sole discretion, Fairway reserves the right to request payment before services and hold sample results for payment of due balances. We will not bill a third party without prior agreement among all parties acknowledging and accepting responsibility for payment.

**SAMPLE COLLECTION AND SUBMISSION** Clients not requesting collection services from Fairway are responsible for proper collection, preservation, packaging, and delivery of samples to the laboratory in accordance with current law and commercial practice. Fairway shall have no responsibility for sample integrity prior to the receipt of the sample(s) and/or for any inaccuracy in test or analyses results as a result of the failure of the client or any third party to maintain the integrity of samples prior to delivery to Fairway. All samples submitted must be accompanied by a completed chain of custody or similar document clearly noting the requested analyses, dates/time sampled, client contact information, and trail of custody.

**SUBCONTRACTING** Some analyses may require subcontracting to another laboratory. Unless the client indicates otherwise, this decision will be made by Fairway. Subcontracted work will be identified on the final report in accordance with NELAC requirements.

**RETURN OF RESULTS** Fairway routinely provides faxed or verbal results within 10 working days of receipt of sample(s) and a hard copy of the data results is routinely received via US Postal Service within 15 working days. At the request of the client, Fairway may offer expedited return of sample results. Surcharges may apply to rush requests. All rush requests must be pre-approved by Fairway. We reserve the right to charge an archive retrieval fee for results older than one (1) year from the date of the request. All records will be maintained by Fairway for 5 years, after which, they will be destroyed.

**SAMPLE DISPOSAL** Fairway will maintain samples for four (4) weeks after the sample receipt date. Fairway will dispose of samples which are not and/or do not contain hazardous wastes (as such term is defined by applicable federal or state law), unless prior arrangements have been made for long-term storage. Fairway reserves the right to charge a disposal fee for the proper disposal of samples found or suspected to contain hazardous waste. A return shipping charge will be invoiced for samples returned to the client at their request.

**HAZARD COMMUNICATION** The client has the responsibility to inform the laboratory of any hazardous characteristics known or suspected about the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

**WARRANTY AND LIMITATION OF LIABILITY** For services rendered, Fairway warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Fairway does not accept any legal responsibility for the purposes for which client uses the test results.

**LITIGATION** All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Fairway Laboratories, Inc. shall be invoiced by Fairway and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

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# CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Please print. See back of COC for instructions/terms and conditions.

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Phone: (814) 946-4306  
Fax: (814) 946-8791

## FAIRWAY LABORATORIES

Environmental Laboratory

89 Kristi Rd  
Pennsdale, PA 17756  
Phone: (570) 494-6380

STH06 8-715  
COC #

STH07085 #1

Page 1 of 2

Client Name: <u>RETREW as agent of XTO</u>		Received on ice? Y N		Reportable to PADEP? Yes <input type="checkbox"/>		Analyses Requested					LAB USE ONLY	
Address: <u>5413 Stoneham Rd North Canton, OH 44720</u>		Sample Temp: _____		PWSID # _____							FedEx USPS UPS Other	
Contact: <u>Joe Biaglow</u>		Composite Start		GRAB -or- Composite End		Matrix			# of Containers	XTO Analyte List	Tracking #	
Phone #: <u>(330) 818-9770</u>						Solid	Water	Other				
Fax #: _____		Composite		End							Bottle Type/Comments	
Project Name: <u>XTO Baseline Sampling</u>		GRAB		End								
Quote/PO #: <u>091322071</u>		TAT: Normal <input type="checkbox"/> Rush <input checked="" type="checkbox"/>		Date Required: <u>8/13/15</u>								
Sample Description/Location			Start Date	Start Time	End Date	End Time	Solid	Water	Other	# of Containers	XTO Analyte List	
<u>SWS - Wassmann Unit - Sadlowski</u>		<input checked="" type="checkbox"/>			<u>8-6-15</u>	<u>11:45</u>		<input checked="" type="checkbox"/>		<u>10</u>	<input checked="" type="checkbox"/>	
<u>- Pond - 01</u>												
<u>Tr. p Blank (1)</u>		<input checked="" type="checkbox"/>			<u>7-16-15</u>	<u>6:26</u>		<input checked="" type="checkbox"/>		<u>1</u>	<input checked="" type="checkbox"/>	
Sampled by: <u>[Signature]</u>		Date	Time	Received by: <u>[Signature]</u>		Date	Time	Remarks				
Relinquished by: <u>[Signature]</u>		Date	Time	Received by: <u>[Signature]</u>		Date	Time	<u>Header on lab report needs to include: location: Wassmann Unit</u>  <u>Frank Sadlowski 55279 New Cut Rd Shady Side, OH</u>				
Relinquished by: <u>[Signature]</u>		Date	Time	Received by: <u>[Signature]</u>		Date	Time					
Relinquished by: _____		Date	Time	Received by: <u>[Signature]</u>		Date	Time					

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White Original - FLI File    Canary - FLI Copy    Pink - Customer Receipt Copy

### Chain of Custody Receiving Document

Receiver: CR

Page 2 of 2

#2

Date/Time of this check: 8-7-15 16:10 Client: Reflex Lab # 57107095

Received on ICE? Y  \* Sample Temperature when delivered to the Lab: 0.0 Acceptable? Y  \* or In cool down process?  \*

Custody Seals? Y Intact? Y

COC/Labels on bottles agree? Y  \* Correct containers for all the analysis requested? Y  \* Matrix: water

COC #	Number and Type of BOTTLES										Comments
	Poly Non-Pres.	Poly H2SO4	Poly HNO3	Amber H2SO4	Amber Non-Pres.	Poly NaOH	VOCS (Head space?)	Other <input type="checkbox"/> *	Properly Preserved <input checked="" type="checkbox"/> *	Bacti	
<u>1</u>	<u>2</u>		<u>2</u>	<u>1</u>			<u>✓</u>	<input type="checkbox"/> *	<input checked="" type="checkbox"/> *		
<u>DB</u>						<u>4 HCL</u>	<u>250ml</u>		<u>↓</u>		
						<u>1 HCL</u>					

<p><b>* DEVIATION PRESENT:</b></p> <p><input checked="" type="checkbox"/> No Ice ( )</p> <p><input checked="" type="checkbox"/> Not at Proper Temperature ( )</p> <p><input checked="" type="checkbox"/> Wrong Container ( )</p> <p><input checked="" type="checkbox"/> Missing Information: ( )</p>	<p><b>CLIENT CALLED:</b></p> <p>YES ( )</p> <p>By Whom: _____</p> <p>Date: _____</p>	<p><b>CLIENT RESPONSE:</b></p> <p>Proceed with analysis; qualify data ( )</p> <p>Will Resample ( )</p> <p>Provided Information ( )</p> <p>No Response; Proceed and qualified ( )</p> <p>Client Contact: _____ Date: _____</p>
--	--	---

\* Comments: \_\_\_\_\_

# RETTEW

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Nate Fela

Project Manager

5143 Stoneham Road

Suite 100

North Canton, Oh. 44720

Office: 330.818.9770

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SH07095 #3

## XTO Baseline Sampling

Alkalinity
Arsenic
Barium
Barium (Dissolved)
Benzene
Bromide
Calcium
Chloride
Chromium
Ethane
Ethylbenzene
Field pH
HEM
Iron
Iron (Dissolved)
Lead
Magnesium
Manganese
MBAS
Methane
Nitrate as N
Potassium
Propane
Selenium
Sodium
Specific Conductance
Strontium
Sulfate
Toluene
Total Dissolved Solids
Total Hardness
Total Suspended Solids
Turbidity
Xylenes, Total

1



2019 Ninth Avenue  
 PO Box 1925  
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89 Kristi Road  
 Pennsdale, PA 17756  
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 PaDEP: PA 41-04684



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State Certifications: MD 275, WV 364

Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11

**Reported:**  
 07/28/15 15:52

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
SWS-WASSMANN UNIT-TRAILERCLUB-STREAM-01	5G09025-01	Water	Grab	07/08/15 13:00	07/08/15 20:35
TRIP BLANK	5G09025-02	Water	Trip Blank	11/18/14 08:45	07/08/15 20:35

5G09025 -01 Sample ID revised. This report replaces report issued on 07/16/15 11:18. 07/28/15smc

Trailer Club of Brooks Run  
 The C/O Paul Amos  
 55203 Key Bellaire Rd.  
 Bellaire, OH 43906

Fairway Laboratories, Inc.

Reviewed and Submitted by:

Michael P. Tyler  
 Laboratory Director

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Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11

**Reported:**  
 07/28/15 15:52

**Client Sample ID:** SWS-WASSMANN  
 UNIT-TRAILERCLUB-STREAM-01

**Date/Time Sampled:** 07/08/15 13:00

**Laboratory Sample ID:** 5G09025-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Calculated Analytes**

Hardness	219	0.255	2.07	mg/l	07/15/15 14:49	SM2340B	rab	
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**Metals by EPA 200 Series Methods**

Arsenic	0.00960		0.00800	mg/l	07/15/15 14:51	EPA 200.7/4.4	rab	
Barium, Dissolved	0.0667		0.0100	mg/l	07/15/15 11:49	EPA 200.7/4.4	rab	
Barium	0.0925		0.0100	mg/l	07/15/15 14:50	EPA 200.7/4.4	rab	
Calcium	69.1		0.500	mg/l	07/15/15 14:49	EPA 200.7/4.4	rab	
Chromium	<0.00500		0.00500	mg/l	07/15/15 14:51	EPA 200.7/4.4	rab	
Iron, Dissolved	0.0459		0.0400	mg/l	07/15/15 11:49	EPA 200.7/4.4	rab	
Iron	3.20		0.0400	mg/l	07/15/15 14:50	EPA 200.7/4.4	rab	
Potassium	2.72		0.200	mg/l	07/15/15 14:49	EPA 200.7/4.4	rab	
Magnesium	11.4		0.200	mg/l	07/15/15 14:49	EPA 200.7/4.4	rab	
Manganese	0.0918		0.0100	mg/l	07/15/15 14:51	EPA 200.7/4.4	rab	
Sodium	28.9		1.00	mg/l	07/15/15 14:49	EPA 200.7/4.4	rab	
Lead	<0.00800		0.00800	mg/l	07/15/15 14:51	EPA 200.7/4.4	rab	
Selenium	<0.0200		0.0200	mg/l	07/15/15 14:51	EPA 200.7/4.4	rab	
Strontium	0.297		0.0200	mg/l	07/15/15 14:49	EPA 200.7/4.4	rab	

**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	07/11/15 10:12	EPA 8260B	mtc	
---------	-------	--	------	------	----------------	-----------	-----	--

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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11  
**Reported:**  
 07/28/15 15:52

**Client Sample ID:** SWS-WASSMANN  
 UNIT-TRAILERCLUB-STREAM-01

**Date/Time Sampled:** 07/08/15 13:00

**Laboratory Sample ID:** 5G09025-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
---------	--------	-----	----	-------	----------------------	--------	-----------	------

**Volatile Organic Compounds by EPA Method 8260B**

Ethylbenzene	<1.00		1.00	ug/l	07/11/15 10:12	EPA 8260B	mtc	
Toluene	<1.00		1.00	ug/l	07/11/15 10:12	EPA 8260B	mtc	
Xylenes (total)	<2.00		2.00	ug/l	07/11/15 10:12	EPA 8260B	mtc	
<i>Surrogate: 4-Bromofluorobenzene</i>		92.6 %			07/11/15 10:12	EPA 8260B	mtc	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		81.8 %			07/11/15 10:12	EPA 8260B	mtc	
<i>Surrogate: Fluorobenzene</i>		87.6 %			07/11/15 10:12	EPA 8260B	mtc	

**Conventional Chemistry Parameters by SM/EPA Methods**

<b>Total Alkalinity to pH 4.5</b>	126		20.0	mg CaCO3/L	07/14/15 13:55	SM20-2320B	adb	
Bromide	<0.200		0.200	mg/l	07/09/15 17:50	EPA 300.0/2.1	bdw	
<b>Chloride</b>	40.2		5.00	mg/l	07/10/15 23:35	EPA 300.0/2.1	bdw	
<b>Specific Conductance (EC)</b>	515		2.00	umhos/cm	07/09/15 10:25	SM20-2510B	spt	
Methylene Blue Active Substances	<0.0250		0.0250	mg/l	07/10/15 07:49	SM 5540 C-11	elb	
Nitrate as N	<1.000		1.000	mg/l	07/09/15 17:50	EPA 300.0/2.1	bdw	
Oil & Grease	<6.25		6.25	mg/l	07/13/15 15:29	EPA 1664A	SR	
<b>pH @ 14.8°C</b>	8.40			pH Units	07/09/15 10:19	SM 4500-H+B-11	spt	
<b>Total Dissolved Solids</b>	288		20.0	mg/l	07/10/15 15:23	SM 2540 C-97	arr	
<b>Total Suspended Solids</b>	77.0		4.00	mg/l	07/09/15 13:51	SM 2540 D-97	arr	

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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11  
**Reported:**  
 07/28/15 15:52

**Client Sample ID:** SWS-WASSMANN  
 UNIT-TRAILERCLUB-STREAM-01

**Date/Time Sampled:** 07/08/15 13:00

**Laboratory Sample ID:** 5G09025-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
---------	--------	-----	----	-------	----------------------	--------	-----------	------

**Conventional Chemistry Parameters by SM/EPA Methods**

Sulfate as SO4	32.9		1.00	mg/l	07/09/15 17:50	EPA 300.0/2.1	bdw	
Turbidity	66.6		1.00	NTU	07/10/15 08:20	SM 2130 B-11	nal	

**Dissolved Gases by RSK 175**

Ethane	<0.0100		0.0100	mg/l	07/09/15 15:32	RSK 175	bag	
Methane	<0.0250		0.0250	mg/l	07/09/15 15:32	RSK 175	bag	
Propane	<0.0150		0.0150	mg/l	07/09/15 15:32	RSK 175	bag	

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 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11  
**Reported:**  
 07/28/15 15:52

**Client Sample ID: TRIP BLANK**

**Date/Time Sampled:** 11/18/14 08:45

**Laboratory Sample ID: 5G09025-02 (Water/Trip Blank)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	07/11/15 10:50	EPA 8260B	mtc	
Ethylbenzene	<1.00		1.00	ug/l	07/11/15 10:50	EPA 8260B	mtc	
Toluene	<1.00		1.00	ug/l	07/11/15 10:50	EPA 8260B	mtc	
Xylenes (total)	<2.00		2.00	ug/l	07/11/15 10:50	EPA 8260B	mtc	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>92.9 %</i>		<i>70-130</i>		<i>07/11/15 10:50</i>	<i>EPA 8260B</i>	<i>mtc</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>81.5 %</i>		<i>70-130</i>		<i>07/11/15 10:50</i>	<i>EPA 8260B</i>	<i>mtc</i>	
<i>Surrogate: Fluorobenzene</i>	<i>87.3 %</i>		<i>70-130</i>		<i>07/11/15 10:50</i>	<i>EPA 8260B</i>	<i>mtc</i>	

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 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11

**Reported:**  
 07/28/15 15:52

**Definitions**

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory.

MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

- \* P indicates analysis performed by Fairway Laboratories, Inc. at the Pennsdale location. This location is PaDEP Chapter 252 certified.
- < Represents "less than" - indicates that the result was less than the reporting limit.
- MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values.
- RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.
- [CALC] Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.



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 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11  
**Reported:**  
 07/28/15 15:52

**Terms & Conditions**

Services provided by Fairway Laboratories Inc. are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

**CHAIN OF CUSTODY** Fairway Laboratories Inc. ("Fairway," "us" or "we") will initiate a chain-of-custody/request for analysis upon sample receipt unless the client includes a completed form with the received sample(s). Upon request, Fairway will provide chain-of-custody forms for use.

**CONFIDENTIALITY** Fairway maintains confidentiality in all of our client interactions. The client's consent will be required before releasing information about the services provided.

**CONTRACTS** All contracts are subject to review and approval by Fairway's legal council. Each contract must be signed by a corporate officer.

**PAYMENT/BILLING** Unless otherwise set forth in a signed contract or purchase order, terms of payment are "NET 30 Days." The time allowed for payment shall begin based on the invoice date. A 1.5% per month service charge may be added to all unpaid balances beyond the initial 30 days. In its sole discretion, Fairway reserves the right to request payment before services and hold sample results for payment of due balances. We will not bill a third party without prior agreement among all parties acknowledging and accepting responsibility for payment.

**SAMPLE COLLECTION AND SUBMISSION** Clients not requesting collection services from Fairway are responsible for proper collection, preservation, packaging, and delivery of samples to the laboratory in accordance with current law and commercial practice. Fairway shall have no responsibility for sample integrity prior to the receipt of the sample(s) and/or for any inaccuracy in test or analyses results as a result of the failure of the client or any third party to maintain the integrity of samples prior to delivery to Fairway. All samples submitted must be accompanied by a completed chain of custody or similar document clearly noting the requested analyses, dates/time sampled, client contact information, and trail of custody.

**SUBCONTRACTING** Some analyses may require subcontracting to another laboratory. Unless the client indicates otherwise, this decision will be made by Fairway. Subcontracted work will be identified on the final report in accordance with NELAC requirements.

**RETURN OF RESULTS** Fairway routinely provides faxed or verbal results within 10 working days of receipt of sample(s) and a hard copy of the data results is routinely received via US Postal Service within 15 working days. At the request of the client, Fairway may offer expedited return of sample results. Surcharges may apply to rush requests. All rush requests must be pre-approved by Fairway. We reserve the right to charge an archive retrieval fee for results older than one (1) year from the date of the request. All records will be maintained by Fairway for 5 years, after which, they will be destroyed.

**SAMPLE DISPOSAL** Fairway will maintain samples for four (4) weeks after the sample receipt date. Fairway will dispose of samples which are not and/or do not contain hazardous wastes (as such term is defined by applicable federal or state law), unless prior arrangements have been made for long-term storage. Fairway reserves the right to charge a disposal fee for the proper disposal of samples found or suspected to contain hazardous waste. A return shipping charge will be invoiced for samples returned to the client at their request.

**HAZARD COMMUNICATION** The client has the responsibility to inform the laboratory of any hazardous characteristics known or suspected about the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

**WARRANTY AND LIMITATION OF LIABILITY** For services rendered, Fairway warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Fairway does not accept any legal responsibility for the purposes for which client uses the test results.

**LITIGATION** All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Fairway Laboratories, Inc. shall be invoiced by Fairway and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

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# CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

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P.O. Box 1925  
Altoona, PA 16602  
Phone: (814) 946-4306  
Fax: (814) 946-8791



89 Kristi Rd  
Pennsdale, PA 17756  
Phone: (570) 494-6380

5609025 #1  
COC #

Page 1 of 2

Please print. See back of COC for instructions/terms and conditions.

Client Name: <u>Rutton as agent of XTO</u>		Received on ice? Y N		Reportable to PADEP? Yes <input type="checkbox"/>		Analyses Requested					LAB USE ONLY		
Address: <u>5143 Stoneham Rd</u> <u>North Canton, OH, 44720</u>		Sample Temp: _____		PWSID # _____							FedEx USPS UPS Other		
Contact: <u>Joe Biaglow</u>		Composite Start		GRAB -or- Composite End		Matrix			XTO Analyte List			Tracking #	
Phone #: <u>(330) 818-9770</u>						Solid	Water	Other					
Fax #: _____													
Project Name: <u>XTO Baseline Sampling</u>													
Quote/PO #: <u>091322071</u>													
TAT: Normal <input type="checkbox"/> Rush <input checked="" type="checkbox"/>		GRAB	Composite										
Rush TAT subject to pre-approval and surcharge.													
Date Required: <u>07/15/15</u>													
Sample Description/Location		Start Date	Start Time	End Date	End Time	Solid	Water	Other	# of Containers	Bottle Type/Comments			
<u>SWS-Wassmann Unit-Trailer</u>				<u>7-8-15</u>	<u>13:00</u>		<u>X</u>		<u>10</u>	<u>X</u>			
<u>Club-Stream-01</u>													
<u>Trip Blank</u>				<u>11-18-14</u>	<u>08:45</u>		<u>X</u>		<u>1</u>	<u>X</u>			
Sampled by: <u>[Signature]</u>		Date	Time	Received by: <u>Valerie Bryan</u>		Date	Time	Remarks <u>Header on lab report needs to include:</u> <u>Trailer Club of Brooks Rm The C/O Paul Amos</u> <u>55203 Key-Bellaire Rd</u> <u>Bellaire, OH 43906</u>					
Relinquished by: <u>Valerie Bryan</u>		Date	Time	Received by: <u>[Signature]</u>		Date	Time						
Relinquished by: <u>[Signature]</u>		Date	Time	Received by: <u>[Signature]</u>		Date	Time						
Relinquished by: _____		Date	Time	Received by: _____		Date	Time						

#2

### Chain of Custody Receiving Document

Receiver: DC

Page 2 of 2

Date/Time of this check: 7/9/15 709 Client: Retew Lab # 5609025

Received on ICE?  \* Sample Temperature when delivered to the Lab: 0.1 Acceptable?  \* or In cool down process?  \*

Custody Seals? 4 Intact? 4

COC/Labels on bottles agree?  \* Correct containers for all the analysis requested?  \* Matrix: WAF

COC #	Number and Type of BOTTLES										Comments
	Poly Non-Pres.	Poly H2SO4	Poly HNO3	Amber H2SO4	Amber Non-Pres.	Poly NaOH	VOCS (Head space?)	Other <input type="checkbox"/> *	Properly Preserved <input type="checkbox"/> *	Bacti	
<u>1</u>	<u>2</u>		<u>2</u>	<u>1</u>			<u>4H1</u>	<u>250MP</u>	<input checked="" type="checkbox"/>		
<u>2 TB</u>							<u>1-H9</u>		<input checked="" type="checkbox"/>	<u>A</u>	

<b>* DEVIATION PRESENT:</b> <input checked="" type="checkbox"/> No Ice ( ) <input checked="" type="checkbox"/> Not at Proper Temperature ( ) <input checked="" type="checkbox"/> Wrong Container ( ) <input checked="" type="checkbox"/> Missing Information: ( )	<b>CLIENT CALLED:</b> YES ( ) By Whom: _____ Date: _____	<b>CLIENT RESPONSE:</b> Proceed with analysis; qualify data ( ) Will Resample ( ) Provided Information ( ) No Response; Proceed and qualified ( ) Client Contact: _____ Date: _____
---	---	--

\* Comments: \_\_\_\_\_

5609025 #3

# RETTEW

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An Engineering News-Record Top Design Firm

**Nate Fela**  
Project Manager  
5143 Stoneham Road  
Suite 100  
North Canton, Oh. 44720  
Office: 330.818.9770  
[www.rettew.com](http://www.rettew.com)

## XTO Baseline Sampling

Alkalinity
Arsenic
Barium
Barium (Dissolved)
Benzene
Bromide
Calcium
Chloride
Chromium
Ethane
Ethylbenzene
Field pH
HEM
Iron
Iron (Dissolved)
Lead
Magnesium
Manganese
MBAS
Methane
Nitrate as N
Potassium
Propane
Selenium
Sodium
Specific Conductance
Strontium
Sulfate
Toluene
Total Dissolved Solids
Total Hardness
Total Suspended Solids
Turbidity
Xylenes, Total

1



2019 Ninth Avenue  
 PO Box 1925  
 Altoona, PA 16603  
 (814) 946-4306  
 NELAP: PA 07-062, VA 460212

89 Kristi Road  
 Pennsdale, PA 17756  
 (570) 494-6380  
 PaDEP: PA 41-04684



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State Certifications: MD 275, WV 364

Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: CLIENT 08/06/15 15:12  
 Number of Containers: 11

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
SWS-Wassmann Unit-Van Derheyden-Stream-01	5G31121-01	Water	Grab	07/30/15 11:45	07/31/15 19:30
TRIP BLANK	5G31121-02	Water	Trip Blank	04/27/15 14:47	07/31/15 19:30

Location:Wassmann Unit  
 Stephanie Van Derheyden  
 55270 New Cut Rd.  
 Bellaire, OH. 43906

Fairway Laboratories, Inc.

Reviewed and Submitted by:

Michael P. Tyler  
 Laboratory Director

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 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: CLIENT 08/06/15 15:12  
 Number of Containers: 11

**Client Sample ID:** SWS-Wassmann Unit-Van  
 Derheyden-Stream-01

**Date/Time Sampled:** 07/30/15 11:45

**Laboratory Sample ID:** 5G31121-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Calculated Analytes**

<b>Hardness</b>	291	0.255	2.07	mg/l	08/04/15 11:57	SM2340B	rab	
-----------------	-----	-------	------	------	----------------	---------	-----	--

**Metals by EPA 200 Series Methods**

Arsenic	<0.00800		0.00800	mg/l	08/04/15 11:59	EPA 200.7/4.4	rab	
<b>Barium, Dissolved</b>	0.0749		0.0100	mg/l	08/05/15 12:51	EPA 200.7/4.4	rab	
<b>Barium</b>	0.0910		0.0100	mg/l	08/04/15 11:57	EPA 200.7/4.4	rab	2a
<b>Calcium</b>	91.6		0.500	mg/l	08/04/15 11:57	EPA 200.7/4.4	rab	2b
Chromium	<0.00500		0.00500	mg/l	08/04/15 11:59	EPA 200.7/4.4	rab	
Iron, Dissolved	<0.0400		0.0400	mg/l	08/05/15 12:51	EPA 200.7/4.4	rab	
<b>Iron</b>	0.965		0.0400	mg/l	08/04/15 11:57	EPA 200.7/4.4	rab	
<b>Potassium</b>	1.93		0.200	mg/l	08/04/15 11:57	EPA 200.7/4.4	rab	2a
<b>Magnesium</b>	15.1		0.200	mg/l	08/04/15 11:57	EPA 200.7/4.4	rab	
<b>Manganese</b>	0.0634		0.0100	mg/l	08/04/15 11:59	EPA 200.7/4.4	rab	2a
<b>Sodium</b>	12.8		1.00	mg/l	08/04/15 11:57	EPA 200.7/4.4	rab	2a
Lead	<0.00800		0.00800	mg/l	08/04/15 11:59	EPA 200.7/4.4	rab	
Selenium	<0.0200		0.0200	mg/l	08/04/15 11:59	EPA 200.7/4.4	rab	
<b>Strontium</b>	0.360		0.0200	mg/l	08/04/15 11:57	EPA 200.7/4.4	rab	

**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	08/06/15 00:40	EPA 8260B	wlm	
---------	-------	--	------	------	----------------	-----------	-----	--

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 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: CLIENT 08/06/15 15:12  
 Number of Containers: 11

**Client Sample ID: SWS-Wassmann Unit-Van  
 Derheyden-Stream-01**

**Date/Time Sampled: 07/30/15 11:45**

**Laboratory Sample ID: 5G31121-01 (Water/Grab)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
---------	--------	-----	----	-------	----------------------	--------	-----------	------

**Volatile Organic Compounds by EPA Method 8260B**

Ethylbenzene	<1.00		1.00	ug/l	08/06/15 00:40	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	08/06/15 00:40	EPA 8260B	wlm	
Xylenes (total)	<2.00		2.00	ug/l	08/06/15 00:40	EPA 8260B	wlm	
<i>Surrogate: 4-Bromofluorobenzene</i>		95.9 %			08/06/15 00:40	EPA 8260B	wlm	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		111 %			08/06/15 00:40	EPA 8260B	wlm	
<i>Surrogate: Fluorobenzene</i>		102 %			08/06/15 00:40	EPA 8260B	wlm	

**Conventional Chemistry Parameters by SM/EPA Methods**

<b>Total Alkalinity to pH 4.5</b>	188		20.0	mg CaCO3/L	08/04/15 13:00	SM20-2320B	jlf	
Bromide	<0.200		0.200	mg/l	08/01/15 05:44	EPA 300.0/2.1	wsr	
<b>Chloride</b>	18.9		1.00	mg/l	08/01/15 05:44	EPA 300.0/2.1	wsr	
<b>Specific Conductance (EC)</b>	478		2.00	umhos/cm	08/03/15 12:05	SM20-2510B	spt	
Methylene Blue Active Substances	<0.0250		0.0250	mg/l	08/01/15 07:30	SM 5540 C-11	nal	
Nitrate as N	<1.000		1.000	mg/l	08/01/15 05:44	EPA 300.0/2.1	wsr	
Oil & Grease	<6.25		6.25	mg/l	08/03/15 15:50	EPA 1664A	SR	
<b>pH @ 15.4°C</b>	8.32			pH Units	08/03/15 11:58	SM 4500-H+B-11	spt	
<b>Total Dissolved Solids</b>	262		20.0	mg/l	08/03/15 14:27	SM 2540 C-97	arr	
<b>Total Suspended Solids</b>	37.0		4.00	mg/l	08/03/15 08:50	SM 2540 D-97	arr	

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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: CLIENT 08/06/15 15:12  
 Number of Containers: 11

**Client Sample ID:** SWS-Wassmann Unit-Van  
 Derheyden-Stream-01

**Date/Time Sampled:** 07/30/15 11:45

**Laboratory Sample ID:** 5G31121-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
---------	--------	-----	----	-------	----------------------	--------	-----------	------

**Conventional Chemistry Parameters by SM/EPA Methods**

Sulfate as SO4	47.1		5.00	mg/l	08/03/15 23:38	EPA 300.0/2.1	bdw	
Turbidity	27.0		1.00	NTU	08/01/15 10:37	SM 2130 B-11	nal	

**Dissolved Gases by RSK 175**

Ethane	<0.0100		0.0100	mg/l	08/03/15 18:19	RSK 175	bag	
Methane	<0.0250		0.0250	mg/l	08/03/15 18:19	RSK 175	bag	
Propane	<0.0150		0.0150	mg/l	08/03/15 18:19	RSK 175	bag	

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 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: CLIENT 08/06/15 15:12  
 Number of Containers: 11

**Client Sample ID: TRIP BLANK**

**Date/Time Sampled: 04/27/15 14:47**

**Laboratory Sample ID: 5G31121-02 (Water/Trip Blank)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
---------	--------	-----	----	-------	----------------------	--------	-----------	------

**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	08/05/15 23:16	EPA 8260B	wlm	
Ethylbenzene	<1.00		1.00	ug/l	08/05/15 23:16	EPA 8260B	wlm	
Toluene	<1.00		1.00	ug/l	08/05/15 23:16	EPA 8260B	wlm	
Xylenes (total)	<2.00		2.00	ug/l	08/05/15 23:16	EPA 8260B	wlm	
<i>Surrogate: 4-Bromofluorobenzene</i>		93.5 %			08/05/15 23:16	EPA 8260B	wlm	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		109 %			08/05/15 23:16	EPA 8260B	wlm	
<i>Surrogate: Fluorobenzene</i>		103 %			08/05/15 23:16	EPA 8260B	wlm	

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 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none]  
 Collector: CLIENT  
 Number of Containers: 11

**Reported:**  
 08/06/15 15:12

**Notes**

- 2a The RPD result exceeded the QC control limits for the duplicate, LCSD or MSD sample analyzed.
- 2b The spike recovery was outside acceptance limits for the MS and/or MSD for the noted analyte. Data accepted based on acceptable LCS recovery.

**Definitions**

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory.

MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

- \* P indicates analysis performed by Fairway Laboratories, Inc. at the Pennsdale location. This location is PaDEP Chapter 252 certified.
- < Represents "less than" - indicates that the result was less than the reporting limit.
- MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values.
- RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.
- [CALC] Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.

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 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: [none] **Reported:**  
 Collector: CLIENT 08/06/15 15:12  
 Number of Containers: 11

**Terms & Conditions**

Services provided by Fairway Laboratories Inc. are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

**CHAIN OF CUSTODY** Fairway Laboratories Inc. ("Fairway," "us" or "we") will initiate a chain-of-custody/request for analysis upon sample receipt unless the client includes a completed form with the received sample(s). Upon request, Fairway will provide chain-of-custody forms for use.

**CONFIDENTIALITY** Fairway maintains confidentiality in all of our client interactions. The client's consent will be required before releasing information about the services provided.

**CONTRACTS** All contracts are subject to review and approval by Fairway's legal council. Each contract must be signed by a corporate officer.

**PAYMENT/BILLING** Unless otherwise set forth in a signed contract or purchase order, terms of payment are "NET 30 Days." The time allowed for payment shall begin based on the invoice date. A 1.5% per month service charge may be added to all unpaid balances beyond the initial 30 days. In its sole discretion, Fairway reserves the right to request payment before services and hold sample results for payment of due balances. We will not bill a third party without prior agreement among all parties acknowledging and accepting responsibility for payment.

**SAMPLE COLLECTION AND SUBMISSION** Clients not requesting collection services from Fairway are responsible for proper collection, preservation, packaging, and delivery of samples to the laboratory in accordance with current law and commercial practice. Fairway shall have no responsibility for sample integrity prior to the receipt of the sample(s) and/or for any inaccuracy in test or analyses results as a result of the failure of the client or any third party to maintain the integrity of samples prior to delivery to Fairway. All samples submitted must be accompanied by a completed chain of custody or similar document clearly noting the requested analyses, dates/time sampled, client contact information, and trail of custody.

**SUBCONTRACTING** Some analyses may require subcontracting to another laboratory. Unless the client indicates otherwise, this decision will be made by Fairway. Subcontracted work will be identified on the final report in accordance with NELAC requirements.

**RETURN OF RESULTS** Fairway routinely provides faxed or verbal results within 10 working days of receipt of sample(s) and a hard copy of the data results is routinely received via US Postal Service within 15 working days. At the request of the client, Fairway may offer expedited return of sample results. Surcharges may apply to rush requests. All rush requests must be pre-approved by Fairway. We reserve the right to charge an archive retrieval fee for results older than one (1) year from the date of the request. All records will be maintained by Fairway for 5 years, after which, they will be destroyed.

**SAMPLE DISPOSAL** Fairway will maintain samples for four (4) weeks after the sample receipt date. Fairway will dispose of samples which are not and/or do not contain hazardous wastes (as such term is defined by applicable federal or state law), unless prior arrangements have been made for long-term storage. Fairway reserves the right to charge a disposal fee for the proper disposal of samples found or suspected to contain hazardous waste. A return shipping charge will be invoiced for samples returned to the client at their request.

**HAZARD COMMUNICATION** The client has the responsibility to inform the laboratory of any hazardous characteristics known or suspected about the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

**WARRANTY AND LIMITATION OF LIABILITY** For services rendered, Fairway warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Fairway does not accept any legal responsibility for the purposes for which client uses the test results.

**LITIGATION** All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Fairway Laboratories, Inc. shall be invoiced by Fairway and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

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# CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Please print. See back of COC for instructions/terms and conditions.

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Phone: (814) 946-4306  
Fax: (814) 946-8791



89 Kristi Rd  
Pennsdale, PA 17756  
Phone: (570) 494-6380

5231121  
COC #

Page 1 of 2

Client Name: <u>RETTEW</u>		Received on ice? Y N		Reportable to PADEP? Yes <input type="checkbox"/>		Analyses Requested						LAB USE ONLY					
Address: <u>5143 Stoneham Rd North Canton, OH, 44720</u>		Sample Temp: _____		PWSID # _____		XTO Analyte List						FedEx USPS UPS Other					
Contact: <u>Joe Biaglow</u>		Composite Start		GRAB -or- Composite End								Matrix		# of Containers		Tracking #	
Phone #: <u>(330) 818-9770</u>																Bottle Type/Comments	
Fax #: _____		Project Name: <u>XTO Baseline Sampling</u>		Quote/PO #: <u>091322074 091322071</u>		Solid		Water		Other							
TAT: Normal <input type="checkbox"/> Rush <input checked="" type="checkbox"/>		Rush TAT subject to pre-approval and surcharge.		Date Required: <u>8/6/15</u>		Start Date		Start Time		End Date		End Time					
Sample Description/Location		GRAB		Composite		Solid		Water		Other		# of Containers					
<u>SWS - Wassmann Unit</u>		X				7-30-15		11:45		X		10					
<u>- Van Derheyden - Stream - CI</u>																	
<u>Trip Blank</u>		X				4-27-15		14:47		X		1					
Sampled by: <u>ZH H</u>		Date: <u>7-30-15</u>		Time: <u>14:10</u>		Received by: <u>Galere Bryan</u>		Date: <u>7/30/15</u>		Time: <u>14:10</u>		Remarks					
Relinquished by: <u>Galere Bryan</u>		Date: <u>7/31/15</u>		Time: <u>15:00</u>		Received by: <u>[Signature]</u>		Date: <u>7/31/15</u>		Time: <u>15:00</u>		Header on lab report needs to include: <u>Location: Wassmann Unit</u>					
Relinquished by: <u>[Signature]</u>		Date: <u>7/31</u>		Time: <u>19:30</u>		Received by: _____		Date: _____		Time: _____		Stephanie Van Derheyden 55270 New Cut Rd. Bellaire, OH, 43906					
Relinquished by: _____		Date: _____		Time: _____		Received by: <u>Allen B</u>		Date: <u>7/31/15</u>		Time: <u>19:30</u>							

**Chain of Custody Receiving Document**

Receiver:   *OL*  

Page   2   of   2  

#2

Date/Time of this check:   7-31-15 20:40   Client:   *Restew*   Lab #   5631121  

Received on ICE?  \* Sample Temperature when delivered to the Lab:   0.4   Acceptable?  \* or In cool down process?  \*

Custody Seals?   *y*   Intact?   *y*  

COC/Labels on bottles agree?  \* Correct containers for all the analysis requested?  \* Matrix:   *WAV*  

COC #	Number and Type of BOTTLES										Comments
	Poly Non-Pres.	Poly H2SO4	Poly HNO3	Amber H2SO4	Amber Non-Pres.	Poly NaOH	VOCS (Head space?)	Other <input type="checkbox"/> *	Properly Preserved <input checked="" type="checkbox"/> *	Bacti	
<u>  1  </u>	<u>  2  </u>		<u>  2  </u>	<u>  1  </u>			<u>  5  </u>	<u>  <i>250 mL by</i>  </u>	<u>  <i>y</i>  </u>		
<u>  <i>T.3</i>  </u>							<u>  <i>1.5</i>  </u>				

<p><b>* DEVIATION PRESENT:</b></p> <p><input checked="" type="checkbox"/> No Ice ( )</p> <p><input checked="" type="checkbox"/> Not at Proper Temperature ( )</p> <p><input checked="" type="checkbox"/> Wrong Container ( )</p> <p><input checked="" type="checkbox"/> Missing Information: ( )</p>	<p><b>CLIENT CALLED:</b></p> <p>YES ( )</p> <p>By Whom: _____</p> <p>Date: _____</p>	<p><b>CLIENT RESPONSE:</b></p> <p>Proceed with analysis; qualify data ( )</p> <p>Will Resample ( )</p> <p>Provided Information ( )</p> <p>No Response; Proceed and qualified ( )</p> <p>Client Contact: _____ Date: _____</p>
--	--	---

\* Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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# RETTEW

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**Nate Fela**

**Project Manager**

5143 Stoneham Road

Suite 100

North Canton, Oh. 44720

Office: 330.818.9770

[www.rettew.com](http://www.rettew.com)

5031121 #3

## XTO: Baseline Sampling

Alkalinity
Arsenic
Barium
Barium (Dissolved)
Benzene
Bromide
Calcium
Chloride
Chromium
Ethane
Ethylbenzene
Field pH
HEM
Iron
Iron (Dissolved)
Lead
Magnesium
Manganese
MBAS
Methane
Nitrate as N
Potassium
Propane
Selenium
Sodium
Specific Conductance
Strontium
Sulfate
Toluene
Total Dissolved Solids
Total Hardness
Total Suspended Solids
Turbidity
Xylenes, Total

1



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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11  
**Reported:**  
 07/28/15 15:53

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Sample Type	Date Sampled	Date Received
SWS-WASSMANN UNIT-WASSMANN-STREAM-01	5G09028-01	Water	Grab	07/08/15 11:45	07/08/15 20:35
TRIP BLANK	5G09028-02	Water	Trip Blank	11/18/14 08:45	07/08/15 20:35

5G09028-01 Sample ID and Location Header revised. This report replaces report issued on 07/16/15 11:18. 07/28/15smc

Location: Wassmann Unit  
 Martha Wassmann-Winn  
 55014 Winding Hill Rd.  
 Bellaire, OH 43906

Fairway Laboratories, Inc.

Reviewed and Submitted by:

Michael P. Tyler  
 Laboratory Director

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*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



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 PO Box 1925  
 Altoona, PA 16603  
 (814) 946-4306  
 NELAP: PA 07-062, VA 460212

89 Kristi Road  
 Pennsdale, PA 17756  
 (570) 494-6380  
 PaDEP: PA 41-04684



State Certifications: MD 275, WV 364

www.fairwaylaboratories.com

Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11  
 Reported: 07/28/15 15:53

Client Sample ID: SWS-WASSMANN  
 UNIT-WASSMANN-STREAM-01

Date/Time Sampled: 07/08/15 11:45

Laboratory Sample ID: 5G09028-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Calculated Analytes**

Hardness	99.7	0.255	2.07	mg/l	07/15/15 15:02	SM2340B	rab	
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**Metals by EPA 200 Series Methods**

Arsenic	<0.00800		0.00800	mg/l	07/15/15 15:04	EPA 200.7/4.4	rab	
Barium, Dissolved	0.0475		0.0100	mg/l	07/15/15 11:56	EPA 200.7/4.4	rab	
Barium	0.0593		0.0100	mg/l	07/15/15 15:03	EPA 200.7/4.4	rab	
Calcium	30.0		0.500	mg/l	07/15/15 15:02	EPA 200.7/4.4	rab	
Chromium	<0.00500		0.00500	mg/l	07/15/15 15:04	EPA 200.7/4.4	rab	
Iron, Dissolved	0.0595		0.0400	mg/l	07/15/15 11:56	EPA 200.7/4.4	rab	
Iron	1.43		0.0400	mg/l	07/15/15 15:03	EPA 200.7/4.4	rab	
Potassium	1.52		0.200	mg/l	07/15/15 15:02	EPA 200.7/4.4	rab	
Magnesium	5.99		0.200	mg/l	07/15/15 15:02	EPA 200.7/4.4	rab	
Manganese	0.0646		0.0100	mg/l	07/15/15 15:04	EPA 200.7/4.4	rab	
Sodium	5.79		1.00	mg/l	07/15/15 15:02	EPA 200.7/4.4	rab	
Lead	<0.00800		0.00800	mg/l	07/15/15 15:04	EPA 200.7/4.4	rab	
Selenium	<0.0200		0.0200	mg/l	07/15/15 15:04	EPA 200.7/4.4	rab	
Strontium	0.154		0.0200	mg/l	07/15/15 15:02	EPA 200.7/4.4	rab	

**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	07/11/15 11:28	EPA 8260B	mtc	
---------	-------	--	------	------	----------------	-----------	-----	--

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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11

**Reported:**  
 07/28/15 15:53

**Client Sample ID:** SWS-WASSMANN  
 UNIT-WASSMANN-STREAM-01

**Date/Time Sampled:** 07/08/15 11:45

**Laboratory Sample ID:** 5G09028-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Volatile Organic Compounds by EPA Method 8260B**

Ethylbenzene	<1.00		1.00	ug/l	07/11/15 11:28	EPA 8260B	mtc	
Toluene	<1.00		1.00	ug/l	07/11/15 11:28	EPA 8260B	mtc	
Xylenes (total)	<2.00		2.00	ug/l	07/11/15 11:28	EPA 8260B	mtc	
<i>Surrogate: 4-Bromofluorobenzene</i>		92.4 %			07/11/15 11:28	EPA 8260B	mtc	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		80.9 %			07/11/15 11:28	EPA 8260B	mtc	
<i>Surrogate: Fluorobenzene</i>		87.6 %			07/11/15 11:28	EPA 8260B	mtc	

**Conventional Chemistry Parameters by SM/EPA Methods**

<b>Total Alkalinity to pH 4.5</b>	62.0		20.0	mg CaCO3/L	07/14/15 13:55	SM20-2320B	adb	
Bromide	<0.200		0.200	mg/l	07/09/15 18:23	EPA 300.0/2.1	bdw	
<b>Chloride</b>	12.4		1.00	mg/l	07/09/15 18:23	EPA 300.0/2.1	bdw	
<b>Specific Conductance (EC)</b>	241		2.00	umhos/cm	07/09/15 10:25	SM20-2510B	spt	
Methylene Blue Active Substances	<0.0250		0.0250	mg/l	07/10/15 07:49	SM 5540 C-11	elb	
Nitrate as N	<1.000		1.000	mg/l	07/09/15 18:23	EPA 300.0/2.1	bdw	
Oil & Grease	<6.25		6.25	mg/l	07/13/15 15:29	EPA 1664A	SR	
<b>pH @ 15.7°C</b>	7.63			pH Units	07/09/15 10:19	SM 4500-H+B-11	spt	
<b>Total Dissolved Solids</b>	148		20.0	mg/l	07/10/15 15:23	SM 2540 C-97	arr	
<b>Total Suspended Solids</b>	65.0		4.00	mg/l	07/09/15 13:51	SM 2540 D-97	arr	

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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11  
**Reported:**  
 07/28/15 15:53

**Client Sample ID:** SWS-WASSMANN  
 UNIT-WASSMANN-STREAM-01

**Date/Time Sampled:** 07/08/15 11:45

**Laboratory Sample ID:** 5G09028-01 (Water/Grab)

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Conventional Chemistry Parameters by SM/EPA Methods**

Sulfate as SO4	23.2		1.00	mg/l	07/09/15 18:23	EPA 300.0/2.1	bdw	
Turbidity	50.5		1.00	NTU	07/10/15 08:20	SM 2130 B-11	nal	

**Dissolved Gases by RSK 175**

Ethane	<0.0100		0.0100	mg/l	07/09/15 16:11	RSK 175	bag	
Methane	<0.0250		0.0250	mg/l	07/09/15 16:11	RSK 175	bag	
Propane	<0.0150		0.0150	mg/l	07/09/15 16:11	RSK 175	bag	

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Rettew as agent for XTO  
 5143 Stoneham Rd. Ste 100  
 North Canton OH, 44720  
 Project Manager: Joe Biaglow

Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11  
**Reported:**  
 07/28/15 15:53

**Client Sample ID: TRIP BLANK**

**Date/Time Sampled:** 11/18/14 08:45

**Laboratory Sample ID: 5G09028-02 (Water/Trip Blank)**

Analyte	Result	MDL	RL	Units	Date / Time Analyzed	Method	* Analyst	Note
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**Volatile Organic Compounds by EPA Method 8260B**

Benzene	<1.00		1.00	ug/l	07/11/15 10:50	EPA 8260B	mtc	
Ethylbenzene	<1.00		1.00	ug/l	07/11/15 10:50	EPA 8260B	mtc	
Toluene	<1.00		1.00	ug/l	07/11/15 10:50	EPA 8260B	mtc	
Xylenes (total)	<2.00		2.00	ug/l	07/11/15 10:50	EPA 8260B	mtc	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>92.9 %</i>		<i>70-130</i>		<i>07/11/15 10:50</i>	<i>EPA 8260B</i>	<i>mtc</i>	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>81.5 %</i>		<i>70-130</i>		<i>07/11/15 10:50</i>	<i>EPA 8260B</i>	<i>mtc</i>	
<i>Surrogate: Fluorobenzene</i>	<i>87.3 %</i>		<i>70-130</i>		<i>07/11/15 10:50</i>	<i>EPA 8260B</i>	<i>mtc</i>	

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Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11

**Reported:**  
 07/28/15 15:53

**Definitions**

If surrogate values are not within the indicated range, then the results are considered to be estimated.

Reporting limits are adjusted accordingly when samples are analyzed at a dilution due to the matrix.

The following analyses are to be performed immediately upon sampling: pH, sulfite, chlorine residual, dissolved oxygen, filtration for ortho phosphorus, and ferrous iron. The date and time reported reflect the time the samples were analyzed at the laboratory.

MBAS, calculated as LAS, mol wt 348

If the solid sample weight for VOC analysis does not fall within the 3.5-6.5 gram range, the results are considered estimated values.

Unless otherwise noted, all results for solids are reported on a dry weight basis.

Samples collected by Fairway Laboratories' personnel are done so in accordance with Standard Operating Procedures established by Fairway Laboratories.

- \* P indicates analysis performed by Fairway Laboratories, Inc. at the Pennsdale location. This location is PaDEP Chapter 252 certified.
- < Represents "less than" - indicates that the result was less than the reporting limit.
- MDL Method Detection Limit - is the lowest or minimum level that provides 99% confidence level that the analyte is detected. Any reported result values that are less than the RL are considered estimated values.
- RL Reporting Limit - is the lowest or minimum level at which the analyte can be quantified.
- [CALC] Indicates a calculated result. Calculations use results from other analyses performed under accredited methods.



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Project: WASSMANN UNIT  
 Project Number: 091322071  
 Collector: Rettew  
 Number of Containers: 11  
**Reported:**  
 07/28/15 15:53

**Terms & Conditions**

Services provided by Fairway Laboratories Inc. are limited to the terms and conditions stated herein, unless otherwise agreed to in a formal contract.

**CHAIN OF CUSTODY** Fairway Laboratories Inc. ("Fairway," "us" or "we") will initiate a chain-of-custody/request for analysis upon sample receipt unless the client includes a completed form with the received sample(s). Upon request, Fairway will provide chain-of-custody forms for use.

**CONFIDENTIALITY** Fairway maintains confidentiality in all of our client interactions. The client's consent will be required before releasing information about the services provided.

**CONTRACTS** All contracts are subject to review and approval by Fairway's legal council. Each contract must be signed by a corporate officer.

**PAYMENT/BILLING** Unless otherwise set forth in a signed contract or purchase order, terms of payment are "NET 30 Days." The time allowed for payment shall begin based on the invoice date. A 1.5% per month service charge may be added to all unpaid balances beyond the initial 30 days. In its sole discretion, Fairway reserves the right to request payment before services and hold sample results for payment of due balances. We will not bill a third party without prior agreement among all parties acknowledging and accepting responsibility for payment.

**SAMPLE COLLECTION AND SUBMISSION** Clients not requesting collection services from Fairway are responsible for proper collection, preservation, packaging, and delivery of samples to the laboratory in accordance with current law and commercial practice. Fairway shall have no responsibility for sample integrity prior to the receipt of the sample(s) and/or for any inaccuracy in test or analyses results as a result of the failure of the client or any third party to maintain the integrity of samples prior to delivery to Fairway. All samples submitted must be accompanied by a completed chain of custody or similar document clearly noting the requested analyses, dates/time sampled, client contact information, and trail of custody.

**SUBCONTRACTING** Some analyses may require subcontracting to another laboratory. Unless the client indicates otherwise, this decision will be made by Fairway. Subcontracted work will be identified on the final report in accordance with NELAC requirements.

**RETURN OF RESULTS** Fairway routinely provides faxed or verbal results within 10 working days of receipt of sample(s) and a hard copy of the data results is routinely received via US Postal Service within 15 working days. At the request of the client, Fairway may offer expedited return of sample results. Surcharges may apply to rush requests. All rush requests must be pre-approved by Fairway. We reserve the right to charge an archive retrieval fee for results older than one (1) year from the date of the request. All records will be maintained by Fairway for 5 years, after which, they will be destroyed.

**SAMPLE DISPOSAL** Fairway will maintain samples for four (4) weeks after the sample receipt date. Fairway will dispose of samples which are not and/or do not contain hazardous wastes (as such term is defined by applicable federal or state law), unless prior arrangements have been made for long-term storage. Fairway reserves the right to charge a disposal fee for the proper disposal of samples found or suspected to contain hazardous waste. A return shipping charge will be invoiced for samples returned to the client at their request.

**HAZARD COMMUNICATION** The client has the responsibility to inform the laboratory of any hazardous characteristics known or suspected about the sample, and to provide information on hazard prevention and personal protection as necessary or otherwise required by applicable law.

**WARRANTY AND LIMITATION OF LIABILITY** For services rendered, Fairway warrants that it will apply its best scientific knowledge and judgment and to employ its best level of effort consistent with professional standards within the environmental testing industry in performing the analytical services requested by its clients. We disclaim any other warranties, expressed or implied by law. Fairway does not accept any legal responsibility for the purposes for which client uses the test results.

**LITIGATION** All costs associated with compliance to any subpoena for documents, for testimony in a court of law, or for any other purpose relating to work performed by Fairway Laboratories, Inc. shall be invoiced by Fairway and paid by client. These costs shall include, but are not limited to, hourly charges for the persons involved, travel, mileage, and accommodations and for any and all other expenses associated with said litigation.

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# CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Please print. See back of COC for instructions/terms and conditions.

2019 9th Ave.  
P.O. Box 1925  
Altoona, PA 16602  
Phone: (814) 946-4306  
Fax: (814) 946-8791



89 Kristi Rd  
Pennsdale, PA 17756  
Phone: (570) 494-6380

#1  
5609028  
COC #  
Page 1 of 2

Client Name: <u>KETTED as agent of XTO</u>		Received on ice? Y N		Reportable to PADEP? Yes <input type="checkbox"/>		Analyses Requested						LAB USE ONLY					
Address: <u>5143 Shoreham Rd</u> <u>North Canton, OH, 44720</u>		Sample Temp: _____		PWSID # _____		XTO Analyte List						FedEx USPS UPS Other					
Contact: <u>Joe Bingham</u>		Composite Start		GRAB -or- Composite End								Matrix		# of Containers		Tracking #	
Phone #: <u>(330) 818-9770</u>												Solid	Water				
Fax #: _____		Composite		End		Other		Bottle Type/Comments									
Project Name: <u>XTO Baseline Sampling</u>		TAT: Normal <input type="checkbox"/> Rush <input checked="" type="checkbox"/>		Date Required: <u>07/15/15</u>		Rush TAT subject to pre-approval and surcharge.		Date Required: <u>07/15/15</u>		Date Required: <u>07/15/15</u>		Date Required: <u>07/15/15</u>					
Quote/PO #: <u>091322071</u>		GRAB		Composite		Start Date		Start Time		End Date		End Time					
Sample Description/Location		GRAB		Composite		Start Date		Start Time		End Date		End Time					
<u>SWS-Wassmann Unit</u>		X				<u>7-8-15</u>		<u>11:45</u>		<u>X</u>		<u>10</u>					
<u>-Wassmann-Stream-01</u>																	
<u>Trip Blank</u>		X				<u>11-18-11</u>		<u>08:45</u>		<u>X</u>		<u>1</u>					
Sampled by: <u>[Signature]</u>		Date: <u>7/8/15</u>		Time: <u>15:55</u>		Received by: <u>Galere Bryan</u>		Date: <u>07/08/15</u>		Time: <u>15:55</u>		Header on					
Relinquished by: <u>Galere Bryan</u>		Date: <u>07/08/15</u>		Time: <u>16:55</u>		Received by: <u>[Signature]</u>		Date: <u>7/8/15</u>		Time: <u>1700</u>		Remarks: <u>Lab report needs to include:</u>					
Relinquished by: <u>[Signature]</u>		Date: <u>7/8/15</u>		Time: <u>2035</u>		Received by: <u>[Signature]</u>		Date: <u>7/8/15</u>		Time: <u>2035</u>		<u>Location: Wassmann Unit</u>					
Relinquished by: _____		Date: _____		Time: _____		Received by: _____		Date: _____		Time: _____		<u>Martha Wassmann-Winn</u> <u>55014 Winding Hill Rd</u> <u>Belkire, OH, 43906</u>					

By relinquishing my sample to Fairway Laboratories, Inc., I hereby agree to the terms and conditions printed on the reverse. White Original - FLI File Canary - FLI Copy Pink - Customer Receipt Copy

**Chain of Custody Receiving Document**

Receiver: DC

Page 2 of 2 #2

Date/Time of this check: 7/9/15 709 Client: Review Lab # SG 09028

Received on ICE?  \* Sample Temperature when delivered to the Lab: 0.1 Acceptable?  \* or In cool down process?  \*

Custody Seals? 4 Intact? 4

COC/Labels on bottles agree?  \* Correct containers for all the analysis requested?  \* Matrix: WAF

COC #	Number and Type of BOTTLES										Comments
	Poly Non-Pres.	Poly H2SO4	Poly HNO3	Amber H2SO4	Amber Non-Pres.	Poly NaOH	VOCS (Head space?)	Other <input type="checkbox"/> *	Properly Preserved <input type="checkbox"/> *	Bacti	
<u>1</u>	<u>2</u>		<u>2</u>	<u>1</u>			<u>4 HCl</u>	<u>250 MP</u>	<input checked="" type="checkbox"/>		
<u>2 TB</u>							<u>1-HA</u>		<input checked="" type="checkbox"/>	<u>A</u>	

<p><b>* DEVIATION PRESENT:</b></p> <p><input checked="" type="checkbox"/> No Ice ( )</p> <p><input checked="" type="checkbox"/> Not at Proper Temperature ( )</p> <p><input checked="" type="checkbox"/> Wrong Container ( )</p> <p><input checked="" type="checkbox"/> Missing Information: ( )</p>	<p><b>CLIENT CALLED:</b></p> <p>YES ( )</p> <p>By Whom: _____</p> <p>Date: _____</p>	<p><b>CLIENT RESPONSE:</b></p> <p>Proceed with analysis; qualify data ( )</p> <p>Will Resample ( )</p> <p>Provided Information ( )</p> <p>No Response; Proceed and qualified ( )</p> <p>Client Contact: _____ Date: _____</p>
--	--	---

\* Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# RETTEW

We answer to you.

An Engineering News-Record Top Design Firm

Nate Fela

Project Manager

5143 Stoneham Road

Suite 100

North Canton, Oh. 44720

Office: 330.818.9770

[www.rettew.com](http://www.rettew.com)

5G 091028 #3

## XII. Baseline Sampling

Alkalinity
Arsenic
Barium
Barium (Dissolved)
Benzene
Bromide
Calcium
Chloride
Chromium
Ethane
Ethylbenzene
Field pH
HEM
Iron
Iron (Dissolved)
Lead
Magnesium
Manganese
MBAS
Methane
Nitrate as N
Potassium
Propane
Selenium
Sodium
Specific Conductance
Strontium
Sulfate
Toluene
Total Dissolved Solids
Total Hardness
Total Suspended Solids
Turbidity
Xylenes, Total

1

**ATTACHMENT 4**



April 21, 2015

Ohio Department of Transportation  
2201 Reiser Ave S. E.  
New Philadelphia, Ohio. 44663

RE; Sample Wassman Unit. 2H 4H 6H  
Operator – XTO Energy Inc.;  
Pultney Township, Ohio.  
Landowner: Ohio Department of Transportation  
Parcel #26-60169.000 *BEL-147-33,22 PARCEL 6WD*  
Pre Drill Water Sampling

Regulatory Division at XTO Energy, Inc.

The purpose of signing this document is to **verify that there is not a water source for Domestic Livestock or Human Consumption** located on Parcel #26-60169.000

*Stephen M Lucas, REAL ESTATE ADM.*  
\_\_\_\_\_  
Ohio Department of Transportation, Landowner Date: 4/21/15

*Dan Kitchen*  
\_\_\_\_\_  
Dan Kitchen, Witness-JWCI Representative Date: 4/21/15