## Hadiaris, Amy (MPCA)

**From:** Oesterreich, Ryan <Ryan.Oesterreich@arcadis.com>
**Sent:** Wednesday, December 13, 2017 10:38 AM
**To:** Hadiaris, Amy (MPCA)
**Cc:** 'cpinter@ford.com'; Hinskey, Kristoffer
**Subject:** Q3 Area C Groundwater Sampling Summary
**Attachments:** Ford TCAP - September 2017 Groundwater Data Package.pdf

Hi Amy,

Attached are the summary documents for the groundwater sampling event completed around Area C in September 2017. The attached file includes:

- A potentiometric surface map
- An analytical post map
- A data table including all the results compared to the applicable reference standards
- The original analytical report

As we have discussed during project update calls, we are currently completing a Q4 round of sampling that includes Area C and all the Platteville and St. Peter wells on the main parcel.

Please let me know if you have any comments or questions,

Regards,

Ryan

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Professional Engineer / PE-MN, #47974
Professional Geologist / PG-MN, #47974

MISSISSIPPI RIVER BLVD

Tunnel 1A
Mined Sand Tunnel
Entrance Barrier Wall Location
(Feature 150)

OUTFALL-01
South of railroad access on south side of property,
along the inside curve of Mississippi River Boulevard
in Hidden Falls Park

AREA C
PARKING

SMOKE
STACK

WASTEWATER
TREATMENT AREA

STEAM
PLANT

AST

RETENTION
POND

WASTEWATER
COLLECTION ASTS

SW-01
Upgradient of lock and dam approximately 270 feet

SW-02

SW-03

SW-04
Downgradient of southern boundary with
Hidden Falls Park approximately 1600 feet

HA-01
HA-02
HA-03
HA-04
HA-05
HA-06
HA-07
HA-08
HA-09
HA-10
HA-11
HA-12
HA-13
HA-14
HA-15
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HA-21
HA-22
HA-23
HA-24
HA-25
HA-26
HA-27
HA-28
HA-29
HA-30
HA-31

AMW-07 (692.09)
AMW-21 (689.18)
AMW-22 (688.70)
AMW-22B (688.65)
AMW-23 (688.80)
AMW-23B (688.74)
AMW-24 (689.40)
AMW-25 (689.62)
AMW-26 (689.35)
AMW-19 (688.55)
AMW-20 (688.55)

689.75
689.50
689.25
689.00
688.75

0 140 280 Feet

1 inch = 140 feet

LEGEND:

- Existing Monitoring Well
- Surface Soil Sample
- Mississippi River Sampling Location
- Ford Property Boundary
- Fence
- Tunnel 1A
- Approximate Extent of Industrial Waste Fill (Dashed where Inferred)
- Elevation Contours (Feet Mean Sea Level)
- Buildings
- Asphalt
- Concrete
- Grass
- Mississippi River/ Retention Pond
- 689.00 Groundwater Elevation
- Groundwater Elevations (688.55) (Feet above Mean Sea Level)

NOTES:

Topographic survey for Area C completed January 2012, Sunde Land Surveying

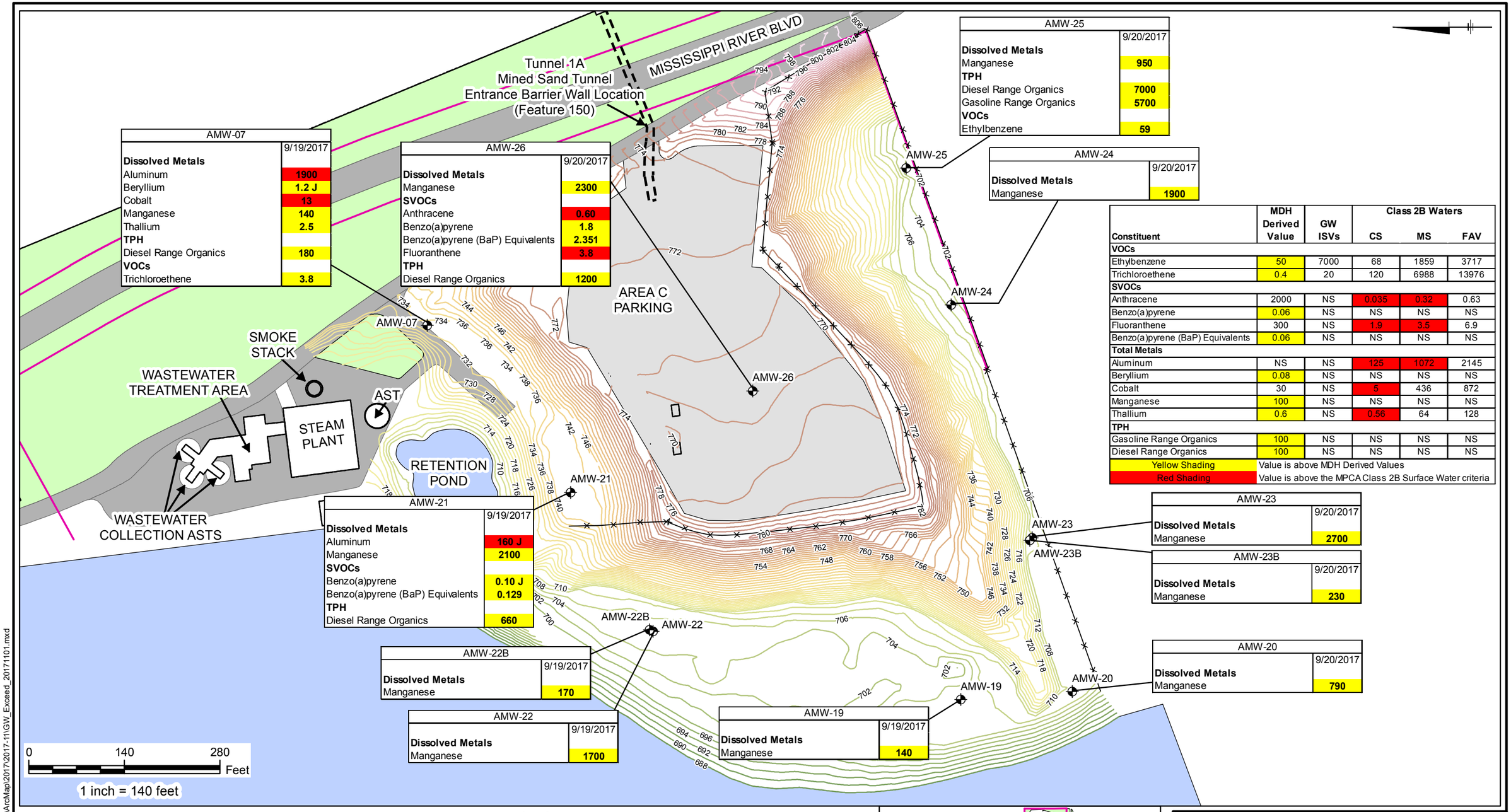
Twin Cities Assembly Plant
Ford Motor Company
St. Paul, Minnesota

# September 2017 Potentiometric Surface Map

ARCADIS

FIGURE 1

CITY: MPLS, MN DB: MG LD: RO
FORD ST. PAUL
Path: Z:\GISProjects_ENV\Ford\Ford Ranger\ArcMap\2017\2017-12\Area_C_Sept17_Pot_Map_20171207.mxd




| AMW-07 | 9/19/2017 |
|---|---|
| **Dissolved Metals** | |
| Aluminum | 1900 |
| Beryllium | 1.2 J |
| Cobalt | 13 |
| Manganese | 140 |
| Thallium | 2.5 |
| **TPH** | |
| Diesel Range Organics | 180 |
| **VOCs** | |
| Trichloroethene | 3.8 |

| AMW-26 | 9/20/2017 |
|---|---|
| **Dissolved Metals** | |
| Manganese | 2300 |
| **SVOCs** | |
| Anthracene | 0.60 |
| Benzo(a)pyrene | 1.8 |
| Benzo(a)pyrene (BaP) Equivalents | 2.351 |
| Fluoranthene | 3.8 |
| **TPH** | |
| Diesel Range Organics | 1200 |

| AMW-25 | 9/20/2017 |
|---|---|
| **Dissolved Metals** | |
| Manganese | 950 |
| **TPH** | |
| Diesel Range Organics | 7000 |
| Gasoline Range Organics | 5700 |
| **VOCs** | |
| Ethylbenzene | 59 |

| AMW-24 | 9/20/2017 |
|---|---|
| **Dissolved Metals** | |
| Manganese | 1900 |

| AMW-21 | 9/19/2017 |
|---|---|
| **Dissolved Metals** | |
| Aluminum | 160 J |
| Manganese | 2100 |
| **SVOCs** | |
| Benzo(a)pyrene | 0.10 J |
| Benzo(a)pyrene (BaP) Equivalents | 0.129 |
| **TPH** | |
| Diesel Range Organics | 660 |

| AMW-22B | 9/19/2017 |
|---|---|
| **Dissolved Metals** | |
| Manganese | 170 |

| AMW-22 | 9/19/2017 |
|---|---|
| **Dissolved Metals** | |
| Manganese | 1700 |

| AMW-19 | 9/19/2017 |
|---|---|
| **Dissolved Metals** | |
| Manganese | 140 |

| AMW-23 | 9/20/2017 |
|---|---|
| **Dissolved Metals** | |
| Manganese | 2700 |

| AMW-23B | 9/20/2017 |
|---|---|
| **Dissolved Metals** | |
| Manganese | 230 |

| AMW-20 | 9/20/2017 |
|---|---|
| **Dissolved Metals** | |
| Manganese | 790 |

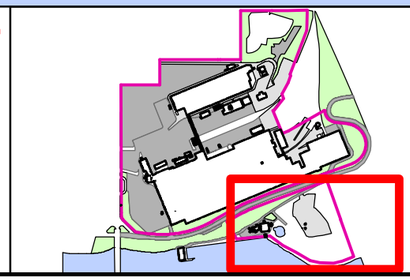
| Constituent | MDH Derived Value | GW ISVs | Class 2B Waters CS | MS | FAV |
|---|---|---|---|---|---|
| **VOCs** | | | | | |
| Ethylbenzene | 50 | 7000 | 68 | 1859 | 3717 |
| Trichloroethene | 0.4 | 20 | 120 | 6988 | 13976 |
| **SVOCs** | | | | | |
| Anthracene | 2000 | NS | 0.035 | 0.32 | 0.63 |
| Benzo(a)pyrene | 0.06 | NS | NS | NS | NS |
| Fluoranthene | 300 | NS | 1.9 | 3.5 | 6.9 |
| Benzo(a)pyrene (BaP) Equivalents | 0.06 | NS | NS | NS | NS |
| **Total Metals** | | | | | |
| Aluminum | NS | NS | 125 | 1072 | 2145 |
| Beryllium | 0.08 | NS | NS | NS | NS |
| Cobalt | 30 | NS | 5 | 436 | 872 |
| Manganese | 100 | NS | NS | NS | NS |
| Thallium | 0.6 | NS | 0.56 | 64 | 128 |
| **TPH** | | | | | |
| Gasoline Range Organics | 100 | NS | NS | NS | NS |
| Diesel Range Organics | 100 | NS | NS | NS | NS |
| Yellow Shading | Value is above MDH Derived Values | | | | |
| Red Shading | Value is above the MPCA Class 2B Surface Water criteria | | | | |

LEGEND:

- Monitoring Well
- Ford Property Boundary
- Fence
- Tunnel 1A
- Buildings
- Asphalt
- Concrete
- Grass
- Mississippi River/Retention Pond
- Elevation Contours (Feet Mean Sea Level)

NOTES:
Results reported in micrograms per liter (µg/L)
Results displayed for exceedances only
J = estimated result
NS = no standard
AMW = Arcadis monitoring well
AST = Aboveground storage tank
GW ISVs = Groundwater Intrusion Screening Values
SVOC = semivolatile organic compound
TPH = total petroleum hydrocarbon
VOC = volatile compound
MPCA = Minnesota Pollution Control Agency
MDH = Minnesota Department of Health
Topographic survey for Area C completed January 2012, Sunde Land Surveying

**DRAFT**



Twin Cities Assembly Plant
Ford Motor Company
St. Paul, Minnesota

**GROUNDWATER EXCEEDANCES**

ARCADIS

FIGURE 2

CITY: MPLS, MN DB: MG LD: RO
FORD ST. PAUL
Path: Z:\GISProjects_ENV\Ford\Ford Ranger\ArcMap\2017\2017-11\GW_Exceed_20171101.mxd

**Table 1**
**September 2017 Groundwater Analytical Results**
**Ford Motor Company - Twin Cities Assembly Plant**
**966 South Mississippi River Boulevard**
**St. Paul, Minnesota**

| Location Identification: | | | | | | | AMW-07 | AMW-19 | AMW-20 | AMW-21 | AMW-22 | AMW-22B | AMW-23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Identification: | | | | | | | AMW-07-(20170919) | AMW-19-(20170919) | AMW-20-(20170920) | AMW-21-(20170919) | AMW-22-(20170919) | AMW-22B-(20170919) | AMW-23-(20170920) |
| Sample Date: | | | GW | Class 2B Waters | | | 9/19/2017 | 9/19/2017 | 9/20/2017 | 9/19/2017 | 9/19/2017 | 9/19/2017 | 9/20/2017 |
| Screened Geology: | Units | MDH Derived Value | ISVs | CS | MS | FAV | NS | NS | NS | NS | NS | NS | NS |
| **VOCs** | | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ug/L | 70 | NS | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 1,1,1-Trichloroethane | ug/L | 9000 | 3000 | 329 | 2957 | 5913 | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 1,1,2,2-Tetrachloroethane | ug/L | 2 | 40 | 13 | 1127 | 2253 | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 1,1,2-Trichloroethane | ug/L | 3 | 40 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 1,1-Dichloroethane | ug/L | 100 | 4000 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 1,2,3-Trichlorobenzene | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 1,2,3-Trichloropropane | ug/L | 0.003 | NS | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 1,2,4-Trichlorobenzene | ug/L | 4 | 200 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 1,2,4-Trimethylbenzene | ug/L | 100 | 70 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dibromo-3-chloropropane | ug/L | NS | NS | NS | NS | NS | < 2.0 | < 2.0 | < 2.0 | < 2.0 J | < 2.0 | < 2.0 | < 2.0 |
| 1,2-Dibromoethane | ug/L | 0.004 | 2 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dichlorobenzene | ug/L | 600 | 7000 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dichloroethane | ug/L | 1 | 20 | 190 | 45050 | 90100 | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 1,2-Dichloropropane | ug/L | 5 | 70 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 1,3,5-Trimethylbenzene | ug/L | 100 | 70 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 1,3-Dichlorobenzene | ug/L | NS | 2000 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 1,3-Dichloropropane | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 1,4-Dichlorobenzene | ug/L | 10 | 2000 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 2,2-Dichloropropane | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 2-Butanone (MEK) | ug/L | 4000 | 4000000 | NS | NS | NS | < 10 | < 10 | < 10 | < 10 J | < 10 | < 10 | < 10 |
| 2-Chlorotoluene | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 2-Hexanone | ug/L | NS | NS | NS | NS | NS | < 10 | < 10 | < 10 | < 10 J | < 10 | < 10 | < 10 |
| 4-Chlorotoluene | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| 4-Methyl-2-Pentanone | ug/L | 300 | 1000000 | NS | NS | NS | < 10 | < 10 | < 10 | < 10 J | < 10 | < 10 | < 10 |
| Acetone | ug/L | 4000 | 500000 | NS | NS | NS | < 10 | < 10 | **2.7 J** | < 10 J | < 10 | < 10 | **1.9 J** |
| Allyl chloride | ug/L | 30 | NS | NS | NS | NS | < 2.0 | < 2.0 | < 2.0 | < 2.0 J | < 2.0 | < 2.0 | < 2.0 |
| Benzene | ug/L | 2 | 40 | 114 | 4487 | 8974 | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Bromobenzene | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Bromochloromethane | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Bromodichloromethane | ug/L | 6 | 20 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Bromoform | ug/L | 40 | 1000 | 466 | 2900 | 5800 | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Bromomethane | ug/L | 10 | 30 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Carbon Disulfide | ug/L | 700 | 1000 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | **3.8 J** | < 1.0 | < 1.0 | < 1.0 |
| Carbon Tetrachloride | ug/L | 1 | 1 | 5.9 | 1750 | 3500 | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| CFC-11 | ug/L | 2000 | 300 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| CFC-12 | ug/L | 700 | 70 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Chlorobenzene | ug/L | 100 | 800 | 20 | 423 | 846 | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Chlorodibromomethane | ug/L | 10 | 20 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Chloroethane | ug/L | NS | 40000 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Chloroform | ug/L | 30 | 1000 | 155 | 1392 | 2784 | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Chloromethane | ug/L | NS | 20 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| cis-1,2-Dichloroethene | ug/L | 6 | 500 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | **1.5** | **0.80 J** | < 1.0 |
| cis-1,3-Dichloropropene | ug/L | NS | 60 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Cyclohexane | ug/L | NS | 2000 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Cymene (p-Isopropyltoluene) | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |

See Notes on Last Page.

**Table 1**
**September 2017 Groundwater Analytical Results**
**Ford Motor Company - Twin Cities Assembly Plant**
**966 South Mississippi River Boulevard**
**St. Paul, Minnesota**

| Location Identification: | | | | | Class 2B Waters | | AMW-07 | AMW-19 | AMW-20 | AMW-21 | AMW-22 | AMW-22B | AMW-23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Identification: | | | | | | | AMW-07-(20170919) | AMW-19-(20170919) | AMW-20-(20170920) | AMW-21-(20170919) | AMW-22-(20170919) | AMW-22B-(20170919) | AMW-23-(20170920) |
| Sample Date: | | | GW | | | | 9/19/2017 | 9/19/2017 | 9/20/2017 | 9/19/2017 | 9/19/2017 | 9/19/2017 | 9/20/2017 |
| Screened Geology: | Units | MDH Derived Value | ISVs | CS | MS | FAV | NS | NS | NS | NS | NS | NS | NS |
| Dibromomethane | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Dichloromethane | ug/L | 5 | 400 | 1940 | 13875 | 27749 | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Dichloromonofluoromethane | ug/L | 30 | NS | NS | NS | NS | < 2.0 | < 2.0 | < 2.0 | < 2.0 J | < 2.0 | < 2.0 | < 2.0 |
| Diethyl ether | ug/L | 200 | NS | NS | NS | NS | < 2.0 | < 2.0 | < 2.0 | < 2.0 J | < 2.0 | < 2.0 | < 2.0 |
| Ethylbenzene | ug/L | 50 | 7000 | 68 | 1859 | 3717 | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Hexachloro-1,3-butadiene | ug/L | 1 | 5 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Isopropylbenzene | ug/L | 300 | NS | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| m&p-Xylenes | ug/L | 300 | 800 | NS | NS | NS | < 2.0 | < 2.0 | < 2.0 | < 2.0 J | < 2.0 | < 2.0 | < 2.0 |
| Methyl Acetate | ug/L | NS | NS | NS | NS | NS | < 10 | < 10 | < 10 | < 10 J | < 10 | < 10 | < 10 |
| Methylcyclohexane | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Methyl-tert-butylether | ug/L | 60 | 200000 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Naphthalene | ug/L | 70 | 1000 | 81 | 409 | 818 | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| n-Butylbenzene | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| n-Propylbenzene | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| o-Xylene | ug/L | 300 | 1000 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| sec-Butylbenzene | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Styrene (Monomer) | ug/L | NS | 20000 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| tert-Butylbenzene | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Tetrachloroethene | ug/L | 4 | 60 | 8.9 | 428 | 857 | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Tetrahydrofuran | ug/L | NS | NS | NS | NS | NS | < 5.0 | < 5.0 | < 5.0 | < 5.0 J | < 5.0 | < 5.0 | < 5.0 |
| Toluene | ug/L | 200 | 40000 | 253 | 1352 | 2703 | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| trans-1,2-Dichloroethene | ug/L | 40 | 300 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| trans-1,3-Dichloropropene | ug/L | NS | 200 | NS | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Trichloroethene | ug/L | 0.4 | 20 | 120 | 6988 | 13976 | **3.8** | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| Vinyl chloride | ug/L | 0.2 | 1 | 9.2 | NS | NS | < 1.0 | < 1.0 | < 1.0 | < 1.0 J | < 1.0 | < 1.0 | < 1.0 |
| **SVOCs** | | | | | | | | | | | | | |
| 1,1-Biphenyl | ug/L | 300 | NS | NS | NS | NS | < 0.98 | < 0.95 | < 0.95 | < 0.98 | < 0.95 | < 0.95 | < 0.95 |
| 2,2-Oxybis(1-Chloropropane) | ug/L | NS | NS | NS | NS | NS | < 0.98 | < 0.95 | < 0.95 | < 0.98 | < 0.95 | < 0.95 | < 0.95 |
| 2,4,5-Trichlorophenol | ug/L | NS | NS | NS | NS | NS | < 4.9 | < 4.8 | < 4.8 | < 4.9 | < 4.8 | < 4.8 | < 4.8 |
| 2,4,6-Trichlorophenol | ug/L | 30 | NS | 2 | 102 | 203 | < 4.9 | < 4.8 | < 4.8 | < 4.9 | < 4.8 | < 4.8 | < 4.8 |
| 2,4-Dichlorophenol | ug/L | 20 | NS | NS | NS | NS | < 2.0 | < 1.9 | < 1.9 | < 2.0 | < 1.9 | < 1.9 | < 1.9 |
| 2,4-Dimethylphenol | ug/L | 100 | NS | NS | NS | NS | < 2.0 | < 1.9 | < 1.9 | < 2.0 | < 1.9 | < 1.9 | < 1.9 |
| 2,4-Dinitrophenol | ug/L | 10 | NS | NS | NS | NS | < 4.9 | < 4.8 | < 4.8 | < 4.9 | < 4.8 | < 4.8 | < 4.8 |
| 2,4-Dinitrotoluene | ug/L | NS | NS | NS | NS | NS | < 4.9 | < 4.8 | < 4.8 | < 4.9 | < 4.8 | < 4.8 | < 4.8 |
| 2,6-Dinitrotoluene | ug/L | NS | NS | NS | NS | NS | < 4.9 | < 4.8 | < 4.8 | < 4.9 | < 4.8 | < 4.8 | < 4.8 |
| 2-Chloronaphthalene | ug/L | NS | NS | NS | NS | NS | < 0.98 | < 0.95 | < 0.95 | < 0.98 | < 0.95 | < 0.95 | < 0.95 |
| 2-Chlorophenol | ug/L | 30 | NS | NS | NS | NS | < 0.98 | < 0.95 | < 0.95 | < 0.98 | < 0.95 | < 0.95 | < 0.95 |
| 2-Methyl-4,6-dinitrophenol | ug/L | NS | NS | NS | NS | NS | < 4.9 | < 4.8 | < 4.8 | < 4.9 | < 4.8 | < 4.8 | < 4.8 |
| 2-Methylnaphthalene | ug/L | 8 | 10000 | NS | NS | NS | < 0.20 | < 0.19 | < 0.19 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| 2-Methylphenol | ug/L | 30 | NS | NS | NS | NS | < 0.98 | < 0.95 | < 0.95 | < 0.98 | < 0.95 | < 0.95 | < 0.95 |
| 2-Nitroaniline | ug/L | NS | NS | NS | NS | NS | < 2.0 | < 1.9 | < 1.9 | < 2.0 | < 1.9 | < 1.9 | < 1.9 |
| 2-Nitrophenol | ug/L | NS | NS | NS | NS | NS | < 2.0 | < 1.9 | < 1.9 | < 2.0 | < 1.9 | < 1.9 | < 1.9 |
| 3,3-Dichlorobenzidine | ug/L | 0.8 | NS | NS | NS | NS | < 4.9 | < 4.8 | < 4.8 | < 4.9 | < 4.8 | < 4.8 | < 4.8 |
| 3-Methylphenol, 4-Methylphenol | ug/L | NS | NS | NS | NS | NS | < 2.0 | < 1.9 | < 1.9 | < 2.0 | < 1.9 | < 1.9 | < 1.9 |
| 3-Nitroaniline | ug/L | NS | NS | NS | NS | NS | < 2.0 | < 1.9 | < 1.9 | < 2.0 | < 1.9 | < 1.9 | < 1.9 |
| 4-Bromophenyl phenyl ether | ug/L | NS | NS | NS | NS | NS | < 2.0 | < 1.9 | < 1.9 | < 2.0 | < 1.9 | < 1.9 | < 1.9 |

See Notes on Last Page.

**Table 1**
**September 2017 Groundwater Analytical Results**
**Ford Motor Company - Twin Cities Assembly Plant**
**966 South Mississippi River Boulevard**
**St. Paul, Minnesota**

| Location Identification: | | | | | | | AMW-07 | AMW-19 | AMW-20 | AMW-21 | AMW-22 | AMW-22B | AMW-23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Identification: | | | | | | | AMW-07-(20170919) | AMW-19-(20170919) | AMW-20-(20170920) | AMW-21-(20170919) | AMW-22-(20170919) | AMW-22B-(20170919) | AMW-23-(20170920) |
| Sample Date: | | | GW | Class 2B Waters | | | 9/19/2017 | 9/19/2017 | 9/20/2017 | 9/19/2017 | 9/19/2017 | 9/19/2017 | 9/20/2017 |
| Screened Geology: | Units | MDH Derived Value | ISVs | CS | MS | FAV | NS | NS | NS | NS | NS | NS | NS |
| 4-Chloro-3-Methylphenol | ug/L | NS | NS | NS | NS | NS | < 2.0 | < 1.9 | < 1.9 | < 2.0 | < 1.9 | < 1.9 | < 1.9 |
| 4-Chlorophenyl phenyl ether | ug/L | NS | NS | NS | NS | NS | < 2.0 | < 1.9 | < 1.9 | < 2.0 | < 1.9 | < 1.9 | < 1.9 |
| 4-Nitroaniline | ug/L | NS | NS | NS | NS | NS | < 2.0 | < 1.9 | < 1.9 | < 2.0 | < 1.9 | < 1.9 | < 1.9 |
| 4-Nitrophenol | ug/L | NS | NS | NS | NS | NS | < 4.9 | < 4.8 | < 4.8 | < 4.9 | < 4.8 | < 4.8 | < 4.8 |
| Acenaphthene | ug/L | 400 | NS | 20 | 56 | 112 | < 0.20 | < 0.19 | < 0.19 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| Acenaphthylene | ug/L | NS | NS | NS | NS | NS | < 0.20 | < 0.19 | < 0.19 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| Acetophenone | ug/L | NS | NS | NS | NS | NS | < 0.98 | < 0.95 | < 0.95 | < 0.98 | < 0.95 | < 0.95 | < 0.95 |
| Anthracene | ug/L | 2000 | NS | 0.035 | 0.32 | 0.63 | < 0.20 | < 0.19 | < 0.19 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| Atrazine | ug/L | 3 | NS | 10 | 323 | 645 | < 2.0 | < 1.9 | < 1.9 | < 2.0 | < 1.9 | < 1.9 | < 1.9 |
| Benzaldehyde | ug/L | NS | NS | NS | NS | NS | < 2.0 | < 1.9 | < 1.9 | < 2.0 | < 1.9 | < 1.9 | < 1.9 |
| Benzo(a)anthracene | ug/L | NS | NS | NS | NS | NS | **0.18 J** | < 0.19 | < 0.19 | **0.16 J** | < 0.19 | < 0.19 | < 0.19 |
| Benzo(a)pyrene | ug/L | 0.06 | NS | NS | NS | NS | < 0.20 | < 0.19 | < 0.19 | **0.10 J** | < 0.19 | < 0.19 | < 0.19 |
| Benzo(b)fluoranthene | ug/L | NS | NS | NS | NS | NS | < 0.20 | < 0.19 | < 0.19 | **0.11 J** | < 0.19 | < 0.19 | < 0.19 |
| Benzo(g,h,i)perylene | ug/L | NS | NS | NS | NS | NS | < 0.20 | < 0.19 | < 0.19 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| Benzo(k)fluoranthene | ug/L | NS | NS | NS | NS | NS | < 0.20 | < 0.19 | < 0.19 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| bis(2-Chloroethoxy)methane | ug/L | NS | NS | NS | NS | NS | < 0.98 | < 0.95 | < 0.95 | < 0.98 | < 0.95 | < 0.95 | < 0.95 |
| bis(2-Chloroethyl)ether | ug/L | 0.3 | NS | NS | NS | NS | < 0.98 | < 0.95 | < 0.95 | < 0.98 | < 0.95 | < 0.95 | < 0.95 |
| bis(2-Ethylhexyl)phthalate | ug/L | 6 | NS | 2.1 | NS | NS | < 4.9 | < 4.8 | < 4.8 | **1.8 J** | < 4.8 | < 4.8 | < 4.8 |
| Butyl benzyl phthalate | ug/L | 100 | NS | NS | NS | NS | < 2.0 | < 1.9 | < 1.9 | < 2.0 | < 1.9 | < 1.9 | < 1.9 |
| Caprolactam | ug/L | NS | NS | NS | NS | NS | **0.77 J** | < 4.8 | < 4.8 | **0.36 J** | < 4.8 | < 4.8 | < 4.8 |
| Carbazole | ug/L | NS | NS | NS | NS | NS | < 0.98 | < 0.95 | < 0.95 | < 0.98 | < 0.95 | < 0.95 | < 0.95 |
| Chrysene | ug/L | NS | NS | NS | NS | NS | **0.19 J** | < 0.19 | < 0.19 | **0.16 J** | < 0.19 | < 0.19 | < 0.19 |
| Dibenzo(a,h)anthracene | ug/L | NS | NS | NS | NS | NS | < 0.20 | < 0.19 | < 0.19 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| Dibenzofuran | ug/L | NS | NS | NS | NS | NS | < 0.98 | < 0.95 | < 0.95 | < 0.98 | < 0.95 | < 0.95 | < 0.95 |
| Diethyl phthalate | ug/L | 6000 | NS | NS | NS | NS | **1.2 J** | < 1.9 | < 1.9 UB | < 2.0 | < 1.9 | < 1.9 | < 1.9 UB |
| Dimethyl phthalate | ug/L | 70000 | NS | NS | NS | NS | < 2.0 | < 1.9 | < 1.9 | < 2.0 | < 1.9 | < 1.9 | < 1.9 |
| Di-n-butyl phthalate | ug/L | 20 | NS | NS | NS | NS | < 4.9 | < 4.8 | < 4.8 | < 4.9 | < 4.8 | < 4.8 | < 4.8 |
| Di-n-octyl phthalate | ug/L | NS | NS | 30 | 825 | 1650 | < 2.0 | < 1.9 | < 1.9 | < 2.0 | < 1.9 | < 1.9 | < 1.9 |
| Fluoranthene | ug/L | 300 | NS | 1.9 | 3.5 | 6.9 | **0.24** | < 0.19 | < 0.19 | **0.21** | < 0.19 | < 0.19 | < 0.19 |
| Fluorene | ug/L | 300 | NS | NS | NS | NS | < 0.20 | < 0.19 | < 0.19 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| Hexachloro-1,3-butadiene | ug/L | 1 | 5 | NS | NS | NS | < 0.98 | < 0.95 | < 0.95 | < 0.98 | < 0.95 | < 0.95 | < 0.95 |
| Hexachlorobenzene | ug/L | 0.2 | NS | 0.00024 | NS | NS | < 0.20 | < 0.19 | < 0.19 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| Hexachlorocyclopentadiene | ug/L | NS | NS | NS | NS | NS | < 9.8 | < 9.5 | < 9.5 | < 9.8 | < 9.5 | < 9.5 | < 9.5 |
| Hexachloroethane | ug/L | NS | NS | NS | NS | NS | < 0.98 | < 0.95 | < 0.95 | < 0.98 | < 0.95 | < 0.95 | < 0.95 |
| Indeno(1,2,3-cd)pyrene | ug/L | NS | NS | NS | NS | NS | < 0.20 | < 0.19 | < 0.19 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| Isophorone | ug/L | 100 | NS | NS | NS | NS | < 0.98 | < 0.95 | < 0.95 | < 0.98 | < 0.95 | < 0.95 | < 0.95 |
| Naphthalene | ug/L | 70 | 1000 | 81 | 409 | 818 | < 0.20 | < 0.19 | < 0.19 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| Nitrobenzene | ug/L | NS | NS | NS | NS | NS | < 0.98 | < 0.95 | < 0.95 | < 0.98 | < 0.95 | < 0.95 | < 0.95 |
| N-Nitrosodi-n-propylamine | ug/L | NS | NS | NS | NS | NS | < 0.98 | < 0.95 | < 0.95 | < 0.98 | < 0.95 | < 0.95 | < 0.95 |
| N-Nitrosodiphenylamine | ug/L | 70 | NS | NS | NS | NS | < 0.98 | < 0.95 | < 0.95 | < 0.98 | < 0.95 | < 0.95 | < 0.95 |
| p-Chloroaniline | ug/L | NS | NS | NS | NS | NS | < 2.0 | < 1.9 | < 1.9 | < 2.0 | < 1.9 | < 1.9 | < 1.9 |
| Pentachlorophenol | ug/L | 0.3 | NS | NS | NS | NS | < 4.9 | < 4.8 | < 4.8 | < 4.9 | < 4.8 | < 4.8 | < 4.8 |
| Phenanthrene | ug/L | NS | NS | 3.6 | 32 | 64 | **0.12 J** | < 0.19 | < 0.19 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| Phenol | ug/L | 4000 | NS | 123 | 2214 | 4428 | < 0.98 | < 0.95 | < 0.95 | < 0.98 | < 0.95 | < 0.95 | < 0.95 |
| Pyrene | ug/L | 200 | NS | NS | NS | NS | **0.33** | < 0.19 | < 0.19 | **0.24** | < 0.19 | < 0.19 | < 0.19 |
| Benzo(a)pyrene (BaP) Equivalents | ug/L | 0.06 | NS | NS | NS | NS | **0.02** | ND | ND | **0.129** | ND | ND | ND |

See Notes on Last Page.

**Table 1**
**September 2017 Groundwater Analytical Results**
**Ford Motor Company - Twin Cities Assembly Plant**
**966 South Mississippi River Boulevard**
**St. Paul, Minnesota**

| Location Identification: | | | | | | | AMW-07 | AMW-19 | AMW-20 | AMW-21 | AMW-22 | AMW-22B | AMW-23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Identification: | | | | | | | AMW-07-(20170919) | AMW-19-(20170919) | AMW-20-(20170920) | AMW-21-(20170919) | AMW-22-(20170919) | AMW-22B-(20170919) | AMW-23-(20170920) |
| Sample Date: | | | GW | Class 2B Waters | | | 9/19/2017 | 9/19/2017 | 9/20/2017 | 9/19/2017 | 9/19/2017 | 9/19/2017 | 9/20/2017 |
| Screened Geology: | Units | MDH Derived Value | ISVs | CS | MS | FAV | NS | NS | NS | NS | NS | NS | NS |
| **Total Metals** | | | | | | | | | | | | | |
| Aluminum | ug/L | NS | NS | 125 | 1072 | 2145 | **1900** | < 200 | < 200 | **160 J** | < 200 | < 200 | < 200 |
| Antimony | ug/L | 6 | NS | 31 | 90 | 180 | < 10 | < 10 | < 10 | < 10 | < 10 | < 10 | < 10 |
| Arsenic | ug/L | 10 | NS | 53 | 360 | 720 | < 10 | < 10 | < 10 | < 10 | **7.4 J** | < 10 | < 10 |
| Barium | ug/L | 2000 | NS | NS | NS | NS | **11 J** | **130 J** | **160 J** | **94 J** | **150 J** | **180 J** | **190 J** |
| Beryllium | ug/L | 0.08 | NS | NS | NS | NS | **1.2 J** | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 |
| Cadmium | ug/L | 0.5 | NS | 2 | 65 | 130 | **0.40 J** | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 |
| Calcium | ug/L | NS | NS | NS | NS | NS | **76000** | **140000** | **170000** | **150000** | **120000** | **79000** | **160000** |
| Chromium | ug/L | 100 | NS | 11 | 16 | 32 | **2.2 J** | **5.0 J** | **0.78 J** | **1.4 J** | **0.58 J** | **1.1 J** | **1.6 J** |
| Cobalt | ug/L | 30 | NS | 5 | 436 | 872 | **13** | < 7.0 | **1.4 J** | **0.89 J** | **0.85 J** | < 7.0 | **3.1 J** |
| Copper | ug/L | 1000 | NS | 14 | 31 | 62 | < 25 | < 25 | < 25 | < 25 | < 25 | < 25 | < 25 |
| Iron | ug/L | NS | NS | NS | NS | NS | < 100 | **28 J** | **240** | **1900** | **6700** | **3100** | **720** |
| Lead | ug/L | 15 | NS | 7 | 173 | 346 | < 3.0 | < 3.0 | < 3.0 | < 3.0 | < 3.0 | < 3.0 | < 3.0 |
| Magnesium | ug/L | NS | NS | NS | NS | NS | **32000** | **41000** | **49000** | **44000** | **34000** | **30000** | **44000** |
| Manganese | ug/L | 100 | NS | NS | NS | NS | **140** | **140** | **790** | **2100** | **1700** | **170** | **2700** |
| Mercury | ug/L | NS | 2 | 0.0069 | 2.4 | 4.9 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 | < 0.20 |
| Nickel | ug/L | 100 | NS | 259 | 2332 | 4664 | **51** | **2.7 J** | **3.4 J** | **4.7 J** | < 40 | < 40 | **2.7 J** |
| Potassium | ug/L | NS | NS | NS | NS | NS | **5000** | **3200 J** | **3000 J** | **5600** | **3900 J** | **2200 J** | **3900 J** |
| Selenium | ug/L | 30 | NS | 5 | 20 | 40 | **2.2 J** | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 | < 5.0 |
| Silver | ug/L | 30 | NS | 1 | 6 | 11 | < 10 | < 10 | < 10 | < 10 | < 10 | < 10 | < 10 |
| Sodium | ug/L | NS | NS | NS | NS | NS | **18000** | **36000** | **54000** | **33000** | **24000** | **5900** | **54000** |
| Thallium | ug/L | 0.6 | NS | 0.56 | 64 | 128 | **2.5** | < 1.0 | < 1.0 | < 1.0 | < 1.0 | **0.21 J** | < 1.0 |
| Vanadium | ug/L | 50 | NS | NS | NS | NS | < 10 | < 10 | < 10 | < 10 | < 10 | < 10 | < 10 |
| Zinc | ug/L | 2000 | NS | 174 | 193 | 385 | **91** | < 50 | < 50 | < 50 | < 50 | < 50 | < 50 |
| **TPH** | | | | | | | | | | | | | |
| Gasoline Range Organics | ug/L | 100 | NS | NS | NS | NS | < 100 | < 100 | < 100 | < 100 | < 100 | < 100 | < 100 |
| Diesel Range Organics | ug/L | 100 | NS | NS | NS | NS | **180** | < 96 UB | < 96 UB | **660** | < 96 UB | < 96 UB | < 95 UB |
| **PCBs** | | | | | | | | | | | | | |
| Aroclor 1016 | ug/L | 0.04 | NS | 0.000029 | 1 | 2 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 |
| Aroclor 1221 | ug/L | 0.04 | NS | 0.000029 | 1 | 2 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 |
| Aroclor 1232 | ug/L | 0.04 | NS | 0.000029 | 1 | 2 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 |
| Aroclor 1242 | ug/L | 0.04 | NS | 0.000029 | 1 | 2 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 |
| Aroclor 1248 | ug/L | 0.04 | NS | 0.000029 | 1 | 2 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 |
| Aroclor 1254 | ug/L | 0.04 | NS | 0.000029 | 1 | 2 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 |
| Aroclor 1260 | ug/L | 0.04 | NS | 0.000029 | 1 | 2 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 | < 0.19 |
| **Other** | | | | | | | | | | | | | |
| Cyanide | ug/L | 100 | NS | 5.2 | 22 | 45 | < 10 | < 10 | < 10 | < 10 | < 10 | < 10 | < 10 |

See Notes on Last Page.

**Table 1**
**September 2017 Groundwater Analytical Results**
**Ford Motor Company - Twin Cities Assembly Plant**
**966 South Mississippi River Boulevard**
**St. Paul, Minnesota**

| Location Identification: | | | | | | | AMW-23B | AMW-24 | AMW-25 | AMW-26 |
|---|---|---|---|---|---|---|---|---|---|---|
| Sample Identification: | | | | | | | AMW-23B-(20170920) | AMW-24-(20170920) | AMW-25-(20170920) | AMW-26-(20170920) |
| Sample Date: | | | GW | Class 2B Waters | | | 9/20/2017 | 9/20/2017 | 9/20/2017 | 9/20/2017 |
| Screened Geology: | Units | MDH Derived Value | ISVs | CS | MS | FAV | NS | NS | NS | NS |
| **VOCs** | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | ug/L | 70 | NS | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 1,1,1-Trichloroethane | ug/L | 9000 | 3000 | 329 | 2957 | 5913 | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 1,1,2,2-Tetrachloroethane | ug/L | 2 | 40 | 13 | 1127 | 2253 | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 1,1,2-Trichloroethane | ug/L | 3 | 40 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 1,1-Dichloroethane | ug/L | 100 | 4000 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 1,2,3-Trichlorobenzene | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 1,2,3-Trichloropropane | ug/L | 0.003 | NS | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 1,2,4-Trichlorobenzene | ug/L | 4 | 200 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 1,2,4-Trimethylbenzene | ug/L | 100 | 70 | NS | NS | NS | < 1.0 | < 1.0 | **68** | < 1.0 |
| 1,2-Dibromo-3-chloropropane | ug/L | NS | NS | NS | NS | NS | < 2.0 | < 2.0 | < 40 | < 2.0 |
| 1,2-Dibromoethane | ug/L | 0.004 | 2 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 1,2-Dichlorobenzene | ug/L | 600 | 7000 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 1,2-Dichloroethane | ug/L | 1 | 20 | 190 | 45050 | 90100 | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 1,2-Dichloropropane | ug/L | 5 | 70 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 1,3,5-Trimethylbenzene | ug/L | 100 | 70 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 1,3-Dichlorobenzene | ug/L | NS | 2000 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 1,3-Dichloropropane | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 1,4-Dichlorobenzene | ug/L | 10 | 2000 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 2,2-Dichloropropane | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 2-Butanone (MEK) | ug/L | 4000 | 4000000 | NS | NS | NS | < 10 | < 10 | < 200 | < 10 |
| 2-Chlorotoluene | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 2-Hexanone | ug/L | NS | NS | NS | NS | NS | < 10 | < 10 | < 200 | < 10 |
| 4-Chlorotoluene | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| 4-Methyl-2-Pentanone | ug/L | 300 | 1000000 | NS | NS | NS | < 10 | < 10 | < 200 | < 10 |
| Acetone | ug/L | 4000 | 500000 | NS | NS | NS | < 10 | < 10 | < 200 | < 10 |
| Allyl chloride | ug/L | 30 | NS | NS | NS | NS | < 2.0 | < 2.0 | < 40 | < 2.0 |
| Benzene | ug/L | 2 | 40 | 114 | 4487 | 8974 | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Bromobenzene | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Bromochloromethane | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Bromodichloromethane | ug/L | 6 | 20 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Bromoform | ug/L | 40 | 1000 | 466 | 2900 | 5800 | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Bromomethane | ug/L | 10 | 30 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Carbon Disulfide | ug/L | 700 | 1000 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Carbon Tetrachloride | ug/L | 1 | 1 | 5.9 | 1750 | 3500 | < 1.0 | < 1.0 | < 20 | < 1.0 |
| CFC-11 | ug/L | 2000 | 300 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| CFC-12 | ug/L | 700 | 70 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Chlorobenzene | ug/L | 100 | 800 | 20 | 423 | 846 | < 1.0 | < 1.0 | < 20 | **3.6** |
| Chlorodibromomethane | ug/L | 10 | 20 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Chloroethane | ug/L | NS | 40000 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Chloroform | ug/L | 30 | 1000 | 155 | 1392 | 2784 | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Chloromethane | ug/L | NS | 20 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| cis-1,2-Dichloroethene | ug/L | 6 | 500 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | **1.2** |
| cis-1,3-Dichloropropene | ug/L | NS | 60 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Cyclohexane | ug/L | NS | 2000 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Cymene (p-Isopropyltoluene) | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |

See Notes on Last Page.

**Table 1**
**September 2017 Groundwater Analytical Results**
**Ford Motor Company - Twin Cities Assembly Plant**
**966 South Mississippi River Boulevard**
**St. Paul, Minnesota**

| Location Identification: | | | | | | | AMW-23B | AMW-24 | AMW-25 | AMW-26 |
|---|---|---|---|---|---|---|---|---|---|---|
| Sample Identification: | | | | | | | AMW-23B-(20170920) | AMW-24-(20170920) | AMW-25-(20170920) | AMW-26-(20170920) |
| Sample Date: | | | GW | Class 2B Waters | | | 9/20/2017 | 9/20/2017 | 9/20/2017 | 9/20/2017 |
| Screened Geology: | Units | MDH Derived Value | ISVs | CS | MS | FAV | NS | NS | NS | NS |
| Dibromomethane | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Dichloromethane | ug/L | 5 | 400 | 1940 | 13875 | 27749 | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Dichloromonofluoromethane | ug/L | 30 | NS | NS | NS | NS | < 2.0 | < 2.0 | < 40 | < 2.0 |
| Diethyl ether | ug/L | 200 | NS | NS | NS | NS | < 2.0 | < 2.0 | < 40 | < 2.0 |
| Ethylbenzene | ug/L | 50 | 7000 | 68 | 1859 | 3717 | < 1.0 | < 1.0 | **59** | < 1.0 |
| Hexachloro-1,3-butadiene | ug/L | 1 | 5 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Isopropylbenzene | ug/L | 300 | NS | NS | NS | NS | < 1.0 | < 1.0 | **7.1 J** | < 1.0 |
| m&p-Xylenes | ug/L | 300 | 800 | NS | NS | NS | < 2.0 | < 2.0 | **43** | < 2.0 |
| Methyl Acetate | ug/L | NS | NS | NS | NS | NS | < 10 | < 10 | < 200 | < 10 |
| Methylcyclohexane | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Methyl-tert-butylether | ug/L | 60 | 200000 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Naphthalene | ug/L | 70 | 1000 | 81 | 409 | 818 | < 1.0 | < 1.0 | < 20 | < 1.0 |
| n-Butylbenzene | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | **150** | < 1.0 |
| n-Propylbenzene | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | **25** | < 1.0 |
| o-Xylene | ug/L | 300 | 1000 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| sec-Butylbenzene | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | **12 J** | < 1.0 |
| Styrene (Monomer) | ug/L | NS | 20000 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| tert-Butylbenzene | ug/L | NS | NS | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Tetrachloroethene | ug/L | 4 | 60 | 8.9 | 428 | 857 | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Tetrahydrofuran | ug/L | NS | NS | NS | NS | NS | < 5.0 | < 5.0 | < 100 | < 5.0 |
| Toluene | ug/L | 200 | 40000 | 253 | 1352 | 2703 | < 1.0 | < 1.0 | < 20 | < 1.0 |
| trans-1,2-Dichloroethene | ug/L | 40 | 300 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| trans-1,3-Dichloropropene | ug/L | NS | 200 | NS | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Trichloroethene | ug/L | 0.4 | 20 | 120 | 6988 | 13976 | < 1.0 | < 1.0 | < 20 | < 1.0 |
| Vinyl chloride | ug/L | 0.2 | 1 | 9.2 | NS | NS | < 1.0 | < 1.0 | < 20 | < 1.0 |
| **SVOCs** | | | | | | | | | | |
| 1,1-Biphenyl | ug/L | 300 | NS | NS | NS | NS | < 0.95 | < 0.95 | < 0.95 | < 0.95 |
| 2,2-Oxybis(1-Chloropropane) | ug/L | NS | NS | NS | NS | NS | < 0.95 | < 0.95 | < 0.95 | < 0.95 |
| 2,4,5-Trichlorophenol | ug/L | NS | NS | NS | NS | NS | < 4.8 | < 4.8 | < 4.8 | < 4.8 |
| 2,4,6-Trichlorophenol | ug/L | 30 | NS | 2 | 102 | 203 | < 4.8 | < 4.8 | < 4.8 | < 4.8 |
| 2,4-Dichlorophenol | ug/L | 20 | NS | NS | NS | NS | < 1.9 | < 1.9 | < 1.9 | < 1.9 |
| 2,4-Dimethylphenol | ug/L | 100 | NS | NS | NS | NS | < 1.9 | < 1.9 | < 1.9 | < 1.9 |
| 2,4-Dinitrophenol | ug/L | 10 | NS | NS | NS | NS | < 4.8 | < 4.8 | < 4.8 | < 4.8 |
| 2,4-Dinitrotoluene | ug/L | NS | NS | NS | NS | NS | < 4.8 | < 4.8 | < 4.8 | < 4.8 |
| 2,6-Dinitrotoluene | ug/L | NS | NS | NS | NS | NS | < 4.8 | < 4.8 | < 4.8 | < 4.8 |
| 2-Chloronaphthalene | ug/L | NS | NS | NS | NS | NS | < 0.95 | < 0.95 | < 0.95 | < 0.95 |
| 2-Chlorophenol | ug/L | 30 | NS | NS | NS | NS | < 0.95 | < 0.95 | < 0.95 | < 0.95 |
| 2-Methyl-4,6-dinitrophenol | ug/L | NS | NS | NS | NS | NS | < 4.8 | < 4.8 | < 4.8 | < 4.8 |
| 2-Methylnaphthalene | ug/L | 8 | 10000 | NS | NS | NS | < 0.19 | < 0.19 | < 0.19 | **0.24** |
| 2-Methylphenol | ug/L | 30 | NS | NS | NS | NS | < 0.95 | < 0.95 | < 0.95 | < 0.95 |
| 2-Nitroaniline | ug/L | NS | NS | NS | NS | NS | < 1.9 | < 1.9 | < 1.9 | < 1.9 |
| 2-Nitrophenol | ug/L | NS | NS | NS | NS | NS | < 1.9 | < 1.9 | < 1.9 | < 1.9 |
| 3,3-Dichlorobenzidine | ug/L | 0.8 | NS | NS | NS | NS | < 4.8 | < 4.8 | < 4.8 | < 4.8 |
| 3-Methylphenol, 4-Methylphenol | ug/L | NS | NS | NS | NS | NS | < 1.9 | < 1.9 | < 1.9 | < 1.9 |
| 3-Nitroaniline | ug/L | NS | NS | NS | NS | NS | < 1.9 | < 1.9 | < 1.9 | < 1.9 |
| 4-Bromophenyl phenyl ether | ug/L | NS | NS | NS | NS | NS | < 1.9 | < 1.9 | < 1.9 | < 1.9 |

See Notes on Last Page.

**Table 1**
**September 2017 Groundwater Analytical Results**
**Ford Motor Company - Twin Cities Assembly Plant**
**966 South Mississippi River Boulevard**
**St. Paul, Minnesota**

| Location Identification: | | | | | | | AMW-23B | AMW-24 | AMW-25 | AMW-26 |
|---|---|---|---|---|---|---|---|---|---|---|
| Sample Identification: | | | | | | | AMW-23B-(20170920) | AMW-24-(20170920) | AMW-25-(20170920) | AMW-26-(20170920) |
| Sample Date: | | | GW | Class 2B Waters | | | 9/20/2017 | 9/20/2017 | 9/20/2017 | 9/20/2017 |
| Screened Geology: | Units | MDH Derived Value | ISVs | CS | MS | FAV | NS | NS | NS | NS |
| 4-Chloro-3-Methylphenol | ug/L | NS | NS | NS | NS | NS | < 1.9 | < 1.9 | < 1.9 | < 1.9 |
| 4-Chlorophenyl phenyl ether | ug/L | NS | NS | NS | NS | NS | < 1.9 | < 1.9 | < 1.9 | < 1.9 |
| 4-Nitroaniline | ug/L | NS | NS | NS | NS | NS | < 1.9 | < 1.9 | < 1.9 | < 1.9 |
| 4-Nitrophenol | ug/L | NS | NS | NS | NS | NS | < 4.8 | < 4.8 | < 4.8 | < 4.8 |
| Acenaphthene | ug/L | 400 | NS | 20 | 56 | 112 | < 0.19 | < 0.19 | < 0.19 | **0.72** |
| Acenaphthylene | ug/L | NS | NS | NS | NS | NS | < 0.19 | < 0.19 | < 0.19 | **0.19** |
| Acetophenone | ug/L | NS | NS | NS | NS | NS | < 0.95 | < 0.95 | < 0.95 | < 0.95 |
| Anthracene | ug/L | 2000 | NS | 0.035 | 0.32 | 0.63 | < 0.19 | < 0.19 | < 0.19 | **0.60** |
| Atrazine | ug/L | 3 | NS | 10 | 323 | 645 | < 1.9 | < 1.9 | < 1.9 | < 1.9 |
| Benzaldehyde | ug/L | NS | NS | NS | NS | NS | < 1.9 | < 1.9 | < 1.9 | < 1.9 |
| Benzo(a)anthracene | ug/L | NS | NS | NS | NS | NS | < 0.19 | < 0.19 | < 0.19 | **1.8** |
| Benzo(a)pyrene | ug/L | 0.06 | NS | NS | NS | NS | < 0.19 | < 0.19 | < 0.19 | **1.8** |
| Benzo(b)fluoranthene | ug/L | NS | NS | NS | NS | NS | < 0.19 | < 0.19 | < 0.19 | **1.8** |
| Benzo(g,h,i)perylene | ug/L | NS | NS | NS | NS | NS | < 0.19 | < 0.19 | < 0.19 | **0.98** |
| Benzo(k)fluoranthene | ug/L | NS | NS | NS | NS | NS | < 0.19 | < 0.19 | < 0.19 | **0.93** |
| bis(2-Chloroethoxy)methane | ug/L | NS | NS | NS | NS | NS | < 0.95 | < 0.95 | < 0.95 | < 0.95 |
| bis(2-Chloroethyl)ether | ug/L | 0.3 | NS | NS | NS | NS | < 0.95 | < 0.95 | < 0.95 | < 0.95 |
| bis(2-Ethylhexyl)phthalate | ug/L | 6 | NS | 2.1 | NS | NS | < 4.8 | < 4.8 | < 4.8 | **1.8 J** |
| Butyl benzyl phthalate | ug/L | 100 | NS | NS | NS | NS | < 1.9 | < 1.9 | < 1.9 | < 1.9 |
| Caprolactam | ug/L | NS | NS | NS | NS | NS | < 4.8 | < 4.8 | < 4.8 | **11** |
| Carbazole | ug/L | NS | NS | NS | NS | NS | < 0.95 | < 0.95 | < 0.95 | **0.33 J** |
| Chrysene | ug/L | NS | NS | NS | NS | NS | < 0.19 | < 0.19 | < 0.19 | **1.9** |
| Dibenzo(a,h)anthracene | ug/L | NS | NS | NS | NS | NS | < 0.19 | < 0.19 | < 0.19 | < 0.19 |
| Dibenzofuran | ug/L | NS | NS | NS | NS | NS | < 0.95 | < 0.95 | < 0.95 | **0.55 J** |
| Diethyl phthalate | ug/L | 6000 | NS | NS | NS | NS | **1.9** | < 1.9 UB | < 1.9 UB | **1.9** |
| Dimethyl phthalate | ug/L | 70000 | NS | NS | NS | NS | < 1.9 | < 1.9 | < 1.9 | < 1.9 |
| Di-n-butyl phthalate | ug/L | 20 | NS | NS | NS | NS | < 4.8 | < 4.8 | < 4.8 | < 4.8 |
| Di-n-octyl phthalate | ug/L | NS | NS | 30 | 825 | 1650 | < 1.9 | < 1.9 | < 1.9 | < 1.9 |
| Fluoranthene | ug/L | 300 | NS | 1.9 | 3.5 | 6.9 | < 0.19 | < 0.19 | < 0.19 | **3.8** |
| Fluorene | ug/L | 300 | NS | NS | NS | NS | < 0.19 | < 0.19 | < 0.19 | **1.3** |
| Hexachloro-1,3-butadiene | ug/L | 1 | 5 | NS | NS | NS | < 0.95 | < 0.95 | < 0.95 | < 0.95 |
| Hexachlorobenzene | ug/L | 0.2 | NS | 0.00024 | NS | NS | < 0.19 | < 0.19 | < 0.19 | < 0.19 |
| Hexachlorocyclopentadiene | ug/L | NS | NS | NS | NS | NS | < 9.5 | < 9.5 | < 9.5 | < 9.5 |
| Hexachloroethane | ug/L | NS | NS | NS | NS | NS | < 0.95 | < 0.95 | < 0.95 | < 0.95 |
| Indeno(1,2,3-cd)pyrene | ug/L | NS | NS | NS | NS | NS | < 0.19 | < 0.19 | < 0.19 | **0.79** |
| Isophorone | ug/L | 100 | NS | NS | NS | NS | < 0.95 | < 0.95 | < 0.95 | < 0.95 |
| Naphthalene | ug/L | 70 | 1000 | 81 | 409 | 818 | < 0.19 | < 0.19 | < 0.19 | **0.19** |
| Nitrobenzene | ug/L | NS | NS | NS | NS | NS | < 0.95 | < 0.95 | < 0.95 | < 0.95 |
| N-Nitrosodi-n-propylamine | ug/L | NS | NS | NS | NS | NS | < 0.95 | < 0.95 | < 0.95 | < 0.95 |
| N-Nitrosodiphenylamine | ug/L | 70 | NS | NS | NS | NS | < 0.95 | < 0.95 | < 0.95 | < 0.95 |
| p-Chloroaniline | ug/L | NS | NS | NS | NS | NS | < 1.9 | < 1.9 | < 1.9 | < 1.9 |
| Pentachlorophenol | ug/L | 0.3 | NS | NS | NS | NS | < 4.8 | < 4.8 | < 4.8 | < 4.8 |
| Phenanthrene | ug/L | NS | NS | 3.6 | 32 | 64 | < 0.19 | < 0.19 | < 0.19 | **1.8** |
| Phenol | ug/L | 4000 | NS | 123 | 2214 | 4428 | < 0.95 | < 0.95 | < 0.95 | < 0.95 |
| Pyrene | ug/L | 200 | NS | NS | NS | NS | < 0.19 | < 0.19 | < 0.19 | **3.7** |
| Benzo(a)pyrene (BaP) Equivalents | ug/L | 0.06 | NS | NS | NS | NS | ND | ND | ND | **2.351** |

See Notes on Last Page.

**Table 1**
**September 2017 Groundwater Analytical Results**
**Ford Motor Company - Twin Cities Assembly Plant**
**966 South Mississippi River Boulevard**
**St. Paul, Minnesota**

| Location Identification: | | | | | | | AMW-23B | AMW-24 | AMW-25 | AMW-26 |
|---|---|---|---|---|---|---|---|---|---|---|
| Sample Identification: | | | | | | | AMW-23B-(20170920) | AMW-24-(20170920) | AMW-25-(20170920) | AMW-26-(20170920) |
| Sample Date: | | | GW | Class 2B Waters | | | 9/20/2017 | 9/20/2017 | 9/20/2017 | 9/20/2017 |
| Screened Geology: | Units | MDH Derived Value | ISVs | CS | MS | FAV | NS | NS | NS | NS |
| **Total Metals** | | | | | | | | | | |
| Aluminum | ug/L | NS | NS | 125 | 1072 | 2145 | < 200 | < 200 | < 200 | **62 J** |
| Antimony | ug/L | 6 | NS | 31 | 90 | 180 | < 10 | < 10 | < 10 | < 10 |
| Arsenic | ug/L | 10 | NS | 53 | 360 | 720 | **3.4 J** | < 10 | < 10 | **9.0 J** |
| Barium | ug/L | 2000 | NS | NS | NS | NS | **190 J** | **88 J** | **130 J** | **220** |
| Beryllium | ug/L | 0.08 | NS | NS | NS | NS | < 5.0 | < 5.0 | < 5.0 | < 5.0 |
| Cadmium | ug/L | 0.5 | NS | 2 | 65 | 130 | < 5.0 | **0.32 J** | < 5.0 | < 5.0 |
| Calcium | ug/L | NS | NS | NS | NS | NS | **77000** | **170000** | **170000** | **150000** |
| Chromium | ug/L | 100 | NS | 11 | 16 | 32 | **1.3 J** | **0.70 J** | **1.4 J** | **1.4 J** |
| Cobalt | ug/L | 30 | NS | 5 | 436 | 872 | **1.1 J** | **2.2 J** | < 7.0 | **0.90 J** |
| Copper | ug/L | 1000 | NS | 14 | 31 | 62 | < 25 | < 25 | < 25 | < 25 |
| Iron | ug/L | NS | NS | NS | NS | NS | **3200** | **1900** | **1700** | **12000** |
| Lead | ug/L | 15 | NS | 7 | 173 | 346 | < 3.0 | < 3.0 | < 3.0 | < 3.0 |
| Magnesium | ug/L | NS | NS | NS | NS | NS | **27000** | **43000** | **54000** | **46000** |
| Manganese | ug/L | 100 | NS | NS | NS | NS | **230** | **1900** | **950** | **2300** |
| Mercury | ug/L | NS | 2 | 0.0069 | 2.4 | 4.9 | < 0.20 | < 0.20 | < 0.20 | < 0.20 |
| Nickel | ug/L | 100 | NS | 259 | 2332 | 4664 | < 40 | **3.5 J** | < 40 | **3.0 J** |
| Potassium | ug/L | NS | NS | NS | NS | NS | **1800 J** | **7500** | **3300 J** | **5700** |
| Selenium | ug/L | 30 | NS | 5 | 20 | 40 | < 5.0 | < 5.0 | < 5.0 | < 5.0 |
| Silver | ug/L | 30 | NS | 1 | 6 | 11 | < 10 | < 10 | < 10 | < 10 |
| Sodium | ug/L | NS | NS | NS | NS | NS | **9500** | **80000** | **48000** | **56000** |
| Thallium | ug/L | 0.6 | NS | 0.56 | 64 | 128 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Vanadium | ug/L | 50 | NS | NS | NS | NS | < 10 | < 10 | < 10 | < 10 |
| Zinc | ug/L | 2000 | NS | 174 | 193 | 385 | < 50 | < 50 | < 50 | < 50 |
| **TPH** | | | | | | | | | | |
| Gasoline Range Organics | ug/L | 100 | NS | NS | NS | NS | < 100 | < 100 | **5700** | < 100 |
| Diesel Range Organics | ug/L | 100 | NS | NS | NS | NS | < 97 UB | < 96 UB | **7000** | **1200** |
| **PCBs** | | | | | | | | | | |
| Aroclor 1016 | ug/L | 0.04 | NS | 0.000029 | 1 | 2 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| Aroclor 1221 | ug/L | 0.04 | NS | 0.000029 | 1 | 2 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| Aroclor 1232 | ug/L | 0.04 | NS | 0.000029 | 1 | 2 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| Aroclor 1242 | ug/L | 0.04 | NS | 0.000029 | 1 | 2 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| Aroclor 1248 | ug/L | 0.04 | NS | 0.000029 | 1 | 2 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| Aroclor 1254 | ug/L | 0.04 | NS | 0.000029 | 1 | 2 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| Aroclor 1260 | ug/L | 0.04 | NS | 0.000029 | 1 | 2 | < 0.20 | < 0.19 | < 0.19 | < 0.19 |
| **Other** | | | | | | | | | | |
| Cyanide | ug/L | 100 | NS | 5.2 | 22 | 45 | < 10 | < 10 | < 10 | < 10 |

See Notes on Last Page.

**Table 1**
**September 2017 Groundwater Analytical Results**
**Ford Motor Company - Twin Cities Assembly Plant**
**966 South Mississippi River Boulevard**
**St. Paul, Minnesota**

**Notes:**

Results are reported in micrograms per liter (µg/L).

| | |
|---|---|
| Yellow Shading | Above MDH Derived Values |
| Red Shading | Above Class 2B Waters Criteria |
| **Bolded** | Detected concentrations |
| < | Not deteced above reporting detection limit |
| AMW | Arcadis Monitoring Well |
| GW ISVs | Groundwater Intrusion Screening Values |
| J | Estimated result |
| MDH | Minnesota Department of Health |
| MPCA | Minnesota Pollution Control Agency |
| NA | Not analyzed |
| ND | Not detected |
| NS | No Standard / Not Screened |
| PCBs | polychlorinated biphenyl |
| SVOC | semi-volatile organic compounds |
| TPH | Total petroleum hydrocarbons |
| UB | Determined non-detect at the reporting limit by Cadena validation. |
| VOC | Volatile organic compounds |

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-85395-1
Client Project/Site: Ford TCAP - E200572

For:
ARCADIS U.S., Inc.
28550 Cabot Drive
Suite 500
Novi, Michigan 48377

Attn: Kristoffer Hinskey

Denise Pohl

*Authorized for release by:*
*10/5/2017 4:17:26 PM*

Denise Pohl, Project Manager II
(330)966-9789
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# Table of Contents

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| X | Surrogate is outside control limits |
| F1 | MS and/or MSD Recovery is outside acceptance limits. |
| F2 | MS/MSD RPD exceeds control limits |
| * | LCS or LCSD is outside acceptance limits. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| E | Result exceeded calibration range. |

### GC/MS Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| * | LCS or LCSD is outside acceptance limits. |
| B | Compound was found in the blank and sample. |

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| B | Compound was found in the blank and sample. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### Metals

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

## Job ID: 240-85395-1

### Laboratory: TestAmerica Canton

**Narrative**

## CASE NARRATIVE

## Client: ARCADIS U.S., Inc.

## Project: Ford TCAP - E200572

## Report Number: 240-85395-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

The 9012B analysis was performed at TestAmerica Nashville Laboratory.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

**RECEIPT**

The samples were received on 9/22/2017 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 14 coolers at receipt time were 0.8º C, 1.0º C, 1.2º C, 1.2º C, 1.4º C, 1.4º C, 1.6º C, 1.8º C, 2.0º C, 2.4º C, 2.4º C, 2.6º C, 3.6º C and 3.8º C.

Per the client change the sample ID of DUP-01 to AMW-19 for sample 240-85395-5. Due to missing coolers, the requested MS/MSD was not done.

**VOLATILE ORGANIC COMPOUNDS (GCMS)**

Samples AMW-07-(20170919) (240-85395-1), TRIP BLANK1 (240-85395-2), AMW-19-(20170919) (240-85395-5), TRIP BLANK3 (240-85395-6), AMW-20-(20170920) (240-85395-7), TRIP BLANK4 (240-85395-8), DUP-02-(20170920) (240-85395-9), TRIP BLANK5 (240-85395-10), AMW-21-(20170919) (240-85395-11), TRIP BLANK6 (240-85395-12), AMW-22-(20170919) (240-85395-13), TRIP BLANK7 (240-85395-14), AMW-22B-(20170919) (240-85395-15), TRIP BLANK8 (240-85395-16), AMW-23-(20170920) (240-85395-17), TRIP BLANK9 (240-85395-18), AMW-23B-(20170920) (240-85395-19), TRIP BLANK10 (240-85395-20), AMW-24-(20170920) (240-85395-21), TRIP BLANK11 (240-85395-22), AMW-25-(20170920) (240-85395-23), TRIP BLANK12 (240-85395-24), AMW-26-(20170920) (240-85395-25) and TRIP BLANK13 (240-85395-26) were analyzed for volatile organic compounds (GCMS) in accordance

## Job ID: 240-85395-1 (Continued)

### Laboratory: TestAmerica Canton (Continued)

with EPA SW-846 Method 8260B. The samples were analyzed on 10/01/2017, 10/02/2017 and 10/03/2017.

Methylene Chloride was detected in method blank MB 240-297056/7 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Dibromofluoromethane (Surr) failed the surrogate recovery criteria high for AMW-23-(20170920) (240-85395-17). Dibromofluoromethane (Surr) failed the surrogate recovery criteria high for TRIP BLANK9 (240-85395-18). Dibromofluoromethane (Surr) failed the surrogate recovery criteria high for AMW-23B-(20170920) (240-85395-19). Dibromofluoromethane (Surr) failed the surrogate recovery criteria high for TRIP BLANK11 (240-85395-22). Dibromofluoromethane (Surr) failed the surrogate recovery criteria high for AMW-25-(20170920) (240-85395-23). Dibromofluoromethane (Surr) failed the surrogate recovery criteria high for TRIP BLANK12 (240-85395-24). Dibromofluoromethane (Surr) failed the surrogate recovery criteria high for AMW-26-(20170920) (240-85395-25). Dibromofluoromethane (Surr) failed the surrogate recovery criteria high for TRIP BLANK13 (240-85395-26). 4-Bromofluorobenzene (Surr) failed the surrogate recovery criteria high for TRIP BLANK4 (240-85395-8). Dibromofluoromethane (Surr) failed the surrogate recovery criteria high for MB 240-297179/6. 4-Bromofluorobenzene (Surr) failed the surrogate recovery criteria high for 240-85327-B-1 MS. Dibromofluoromethane (Surr) failed the surrogate recovery criteria high for 240-85327-B-1 MSD. Refer to the QC report for details.

1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Dichlorodifluoromethane and Toluene failed the recovery criteria high for LCS 240-297056/5. Ethyl ether failed the recovery criteria high for LCS 240-297061/4. Refer to the QC report for details.

Tetrachloroethene failed the recovery criteria low for the MS of sample 240-85327-1 in batch 240-297061. For the MSD of sample 240-85327-1 in batch 240-297061, Tetrachloroethene failed the recovery criteria low. cis-1,2-Dichloroethene and trans-1,2-Dichloroethene failed the recovery criteria high. Also, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene and Vinyl chloride exceeded the RPD limit. Chloromethane failed the recovery criteria low for the MS of sample AMW-22B-(20170919)MS (240-85395-15) in batch 240-297056. 1,1,2,2-Tetrachloroethane and Dichlorodifluoromethane failed the recovery criteria high. 1,1,2,2-Tetrachloroethane, Carbon disulfide and Dichlorodifluoromethane failed the recovery criteria high for the MSD of sample AMW-22B-(20170919)MSD (240-85395-15) in batch 240-297056. Several analytes exceeded the RPD limit. 1,1-Dichloroethane and Chloroform failed the recovery criteria high for the MSD of sample 240-85397-25 in batch 240-297179. Several analytes exceeded the RPD limit. Refer to the QC report for details.

Sample AMW-25-(20170920) (240-85395-23)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 240-297056 recovered outside control limits for multiple analytes: These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.
TRIP BLANK6 (240-85395-12), AMW-22-(20170919) (240-85395-13), TRIP BLANK7 (240-85395-14), AMW-22B-(20170919) (240-85395-15) and (LCS 240-297056/5)

Method(s) 8260B: The pH of the sample(s) was greater than 2. The sample was analyzed within the normal 14 day holding time; however, experimental evidence suggests that some aromatic compounds in wastewater samples, notably, Benzene, Toluene, and Ethylbenzene are susceptible to biological degradation if sample is not preserved to a pH of 2.
AMW-21-(20170919) (240-85395-11)

Method(s) 8260B: Surrogate recovery for the following sample was outside the upper control limit: TRIP BLANK4 (240-85395-8). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: The laboratory control sample (LCS) for analytical batch 240-297061 recovered outside control limits for the following analyte: Ethyl ether. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

AMW-07-(20170919) (240-85395-1), TRIP BLANK1 (240-85395-2), AMW-19-(20170919) (240-85395-5), TRIP BLANK3 (240-85395-6), AMW-20-(20170920) (240-85395-7), TRIP BLANK4 (240-85395-8), DUP-02-(20170920) (240-85395-9), TRIP BLANK5 (240-85395-10), AMW-21-(20170919) (240-85395-11), TRIP BLANK8 (240-85395-16) and (LCS 240-297061/4)

Method(s) 8260B: The Trip Blank for preparation batch 297061 contained Acetone above the reporting limit (RL). There was insufficient

## Job ID: 240-85395-1 (Continued)

### Laboratory: TestAmerica Canton (Continued)

sample to perform a re-extraction and/or re-analysis; therefore, the data have been reported.
TRIP BLANK8 (240-85395-16)

Method(s) 8260B: Surrogate recovery for the following samples was outside the upper control limit: AMW-23-(20170920) (240-85395-17), TRIP BLANK9 (240-85395-18), AMW-23B-(20170920) (240-85395-19), TRIP BLANK11 (240-85395-22), AMW-25-(20170920) (240-85395-23), TRIP BLANK12 (240-85395-24), AMW-26-(20170920) (240-85395-25) and TRIP BLANK13 (240-85395-26). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: The method blank surrogate recovery was outside the upper control limit: (Dibromofluoromethane). The samples did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

AMW-23-(20170920) (240-85395-17), TRIP BLANK9 (240-85395-18), AMW-23B-(20170920) (240-85395-19), TRIP BLANK10 (240-85395-20), AMW-24-(20170920) (240-85395-21), TRIP BLANK11 (240-85395-22), AMW-25-(20170920) (240-85395-23), TRIP BLANK12 (240-85395-24), AMW-26-(20170920) (240-85395-25), TRIP BLANK13 (240-85395-26) and (MB 240-297179/6)

Method(s) 8260B: The following sample was diluted due to the abundance of non-target analytes: AMW-25-(20170920) (240-85395-23). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: The MS/MSD for batch 297346 was not analyzed due to an instrument malfunction.
AMW-25-(20170920) (240-85395-23) and AMW-26-(20170920) (240-85395-25)

Method(s) 8260B: The following sample was diluted due to the abundance of non-target analytes: AMW-25-(20170920) (240-85395-23). Elevated reporting limits (RLs) are provided.

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

**SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)**

Samples AMW-07-(20170919) (240-85395-1), AMW-19-(20170919) (240-85395-5), AMW-20-(20170920) (240-85395-7), DUP-02-(20170920) (240-85395-9), AMW-21-(20170919) (240-85395-11), AMW-22-(20170919) (240-85395-13), AMW-22B-(20170919) (240-85395-15), AMW-23-(20170920) (240-85395-17), AMW-23B-(20170920) (240-85395-19), AMW-24-(20170920) (240-85395-21), AMW-25-(20170920) (240-85395-23) and AMW-26-(20170920) (240-85395-25) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 09/26/2017 and 09/27/2017 and analyzed on 09/28/2017 and 09/29/2017.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Diethyl phthalate was detected in method blank MB 240-296485/18-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

2-Nitroaniline failed the recovery criteria high for LCSD 240-296485/20-A. Refer to the QC report for details.

Method(s) 8270C: The laboratory control sample duplicate (LCSD) for preparation batch 240-296485 and analytical batch 240-296829 recovered outside control limits for the following analyte: 2-Nitroaniline. This analyte was biased high in the LCSD and were not detected in the associated samples: AMW-20-(20170920) (240-85395-7), DUP-02-(20170920) (240-85395-9), AMW-23-(20170920) (240-85395-17), AMW-23B-(20170920) (240-85395-19), AMW-24-(20170920) (240-85395-21), AMW-25-(20170920) (240-85395-23) and AMW-26-(20170920) (240-85395-25); therefore, the data have been reported.

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-296281.

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-296388.

## Job ID: 240-85395-1 (Continued)

### Laboratory: TestAmerica Canton (Continued)

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-296485.

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

**WISCONSIN DRO**

Samples AMW-07-(20170919) (240-85395-1), AMW-19-(20170919) (240-85395-5), AMW-20-(20170920) (240-85395-7), DUP-02-(20170920) (240-85395-9), AMW-21-(20170919) (240-85395-11), AMW-22-(20170919) (240-85395-13), AMW-22B-(20170919) (240-85395-15), AMW-23-(20170920) (240-85395-17), AMW-23B-(20170920) (240-85395-19), AMW-24-(20170920) (240-85395-21), AMW-25-(20170920) (240-85395-23) and AMW-26-(20170920) (240-85395-25) were analyzed for Wisconsin DRO in accordance with Wisconsin DNR Modified DRO. The samples were prepared on 09/26/2017 and 09/27/2017 and analyzed on 09/27/2017, 09/28/2017 and 09/29/2017.

WI Diesel Range Organics (C10-C28) was detected in method blank MB 240-296388/8-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. WI Diesel Range Organics (C10-C28) was detected in method blank MB 240-296579/6-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Sample AMW-25-(20170920) (240-85395-23)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method(s) WI-DRO: Significant peaks, readily distinguished from background, were detected in the following samples within five minutes after the end of the analytical window defined by the last component eluting in the WI Diesel Range Organics (C10-C28) mix : AMW-07-(20170919) (240-85395-1) and AMW-21-(20170919) (240-85395-11).

Method(s) 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-296387.

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

**WISCONSIN GRO**

Samples AMW-07-(20170919) (240-85395-1), AMW-19-(20170919) (240-85395-5), AMW-20-(20170920) (240-85395-7), DUP-02-(20170920) (240-85395-9), AMW-21-(20170919) (240-85395-11), AMW-22-(20170919) (240-85395-13), AMW-22B-(20170919) (240-85395-15), AMW-23-(20170920) (240-85395-17), AMW-23B-(20170920) (240-85395-19), AMW-24-(20170920) (240-85395-21), AMW-25-(20170920) (240-85395-23) and AMW-26-(20170920) (240-85395-25) were analyzed for Wisconsin GRO in accordance with Wisconsin DNR Modified GRO. The samples were analyzed on 10/02/2017 and 10/03/2017.

Sample AMW-25-(20170920) (240-85395-23)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

**POLYCHLORINATED BIPHENYLS (PCBS)**

Samples AMW-07-(20170919) (240-85395-1), AMW-19-(20170919) (240-85395-5), AMW-20-(20170920) (240-85395-7), DUP-02-(20170920) (240-85395-9), AMW-21-(20170919) (240-85395-11), AMW-22-(20170919) (240-85395-13), AMW-22B-(20170919) (240-85395-15), AMW-23-(20170920) (240-85395-17), AMW-23B-(20170920) (240-85395-19), AMW-24-(20170920) (240-85395-21), AMW-25-(20170920) (240-85395-23) and AMW-26-(20170920) (240-85395-25) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082. The samples were prepared on 09/26/2017 and 09/27/2017 and analyzed on 09/28/2017, 09/29/2017 and 09/30/2017.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required. All of the samples in this data set analyzed for PCBs were subjected to the sulfuric acid cleanup procedure before instrumental analysis, per EPA Method 3665A.

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by

## Job ID: 240-85395-1 (Continued)

### Laboratory: TestAmerica Canton (Continued)

sulfur: AMW-07-(20170919) (240-85395-1), AMW-22-(20170919) (240-85395-13) and AMW-22B-(20170919) (240-85395-15).3236867
3154249
3141111

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: AMW-20-(20170920) (240-85395-7), DUP-02-(20170920) (240-85395-9), AMW-23-(20170920) (240-85395-17), AMW-23B-(20170920) (240-85395-19), AMW-25-(20170920) (240-85395-23) and AMW-26-(20170920) (240-85395-25).
3261310
3154250
3141113

Method(s) 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-296554.

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

**DISSOLVED METALS (ICP)**

Samples AMW-07-(20170919) (240-85395-1), AMW-19-(20170919) (240-85395-5), AMW-20-(20170920) (240-85395-7), DUP-02-(20170920) (240-85395-9), AMW-21-(20170919) (240-85395-11), AMW-22-(20170919) (240-85395-13), AMW-22B-(20170919) (240-85395-15), AMW-23-(20170920) (240-85395-17), AMW-23B-(20170920) (240-85395-19), AMW-24-(20170920) (240-85395-21), AMW-25-(20170920) (240-85395-23) and AMW-26-(20170920) (240-85395-25) were analyzed for dissolved metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 09/25/2017 and analyzed on 09/26/2017.

Method(s) 200.7 Rev 4.4, 6010B: Some requested practical quantitation limits (PQLs) on the following samples fall below the laboratory's verified standard quantitation limit: AMW-07-(20170919) (240-85395-1), AMW-19-(20170919) (240-85395-5), AMW-20-(20170920) (240-85395-7), DUP-02-(20170920) (240-85395-9), AMW-21-(20170919) (240-85395-11), AMW-22-(20170919) (240-85395-13), AMW-22B-(20170919) (240-85395-15), AMW-23-(20170920) (240-85395-17), AMW-23B-(20170920) (240-85395-19), AMW-24-(20170920) (240-85395-21), AMW-25-(20170920) (240-85395-23) and AMW-26-(20170920) (240-85395-25). The continuing calibration blanks and method blanks may not support the lower PQL.

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

**DISSOLVED METALS (ICPMS)**

Samples AMW-07-(20170919) (240-85395-1), AMW-19-(20170919) (240-85395-5), AMW-20-(20170920) (240-85395-7), DUP-02-(20170920) (240-85395-9), AMW-21-(20170919) (240-85395-11), AMW-22-(20170919) (240-85395-13), AMW-22B-(20170919) (240-85395-15), AMW-23-(20170920) (240-85395-17), AMW-23B-(20170920) (240-85395-19), AMW-24-(20170920) (240-85395-21), AMW-25-(20170920) (240-85395-23) and AMW-26-(20170920) (240-85395-25) were analyzed for dissolved metals (ICPMS) in accordance with EPA SW-846 Methods 6020A. The samples were prepared on 09/25/2017 and analyzed on 09/26/2017.

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

**DISSOLVED MERCURY (CVAA)**

Samples AMW-07-(20170919) (240-85395-1), AMW-19-(20170919) (240-85395-5), AMW-20-(20170920) (240-85395-7), DUP-02-(20170920) (240-85395-9), AMW-21-(20170919) (240-85395-11), AMW-22-(20170919) (240-85395-13), AMW-22B-(20170919) (240-85395-15), AMW-23-(20170920) (240-85395-17), AMW-23B-(20170920) (240-85395-19), AMW-24-(20170920) (240-85395-21), AMW-25-(20170920) (240-85395-23) and AMW-26-(20170920) (240-85395-25) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 09/25/2017 and analyzed on 09/26/2017.

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

**TOTAL CYANIDE**

Samples AMW-07-(20170919) (240-85395-1), AMW-19-(20170919) (240-85395-5), AMW-20-(20170920) (240-85395-7), DUP-02-(20170920) (240-85395-9), AMW-21-(20170919) (240-85395-11), AMW-22-(20170919) (240-85395-13), AMW-22B-(20170919) (240-85395-15), AMW-23-(20170920) (240-85395-17), AMW-23B-(20170920) (240-85395-19), AMW-24-(20170920) (240-85395-21), AMW-25-(20170920) (240-85395-23) and AMW-26-(20170920) (240-85395-25) were analyzed for total cyanide in accordance with EPA

## Job ID: 240-85395-1 (Continued)

### Laboratory: TestAmerica Canton (Continued)

SW-846 Method 9012B. The samples were prepared on 09/27/2017 and 09/28/2017 and analyzed on 09/28/2017.

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

# Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260B | Volatile Organic Compounds (GC/MS) | SW846 | TAL CAN |
| 8270C | Semivolatile Organic Compounds (GC/MS) | SW846 | TAL CAN |
| WI-GRO | Wisconsin - Gasoline Range Organics (GC) | WI-GRO | TAL CAN |
| 8082 | Polychlorinated Biphenyls (PCBs) by Gas Chromatography | SW846 | TAL CAN |
| WI-DRO | Wisconsin - Diesel Range Organics (GC) | WI-DRO | TAL CAN |
| 6010B | Metals (ICP) | SW846 | TAL CAN |
| 6020A | Metals (ICP/MS) | SW846 | TAL CAN |
| 7470A | Mercury (CVAA) | SW846 | TAL CAN |
| 9012B | Cyanide, Total andor Amenable | SW846 | TAL NSH |

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
WI-DRO = "Modified DRO: Method For Determining Diesel Range Organics", Wisconsin DNR, Publ-SW-141, September, 1995.
WI-GRO = "Modified GRO: Method For Determining Gasoline Range Organics", Wisconsin DNR, Publ-SW-140, September, 1995.

**Laboratory References:**

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396
TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

# Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 240-85395-1 | AMW-07-(20170919) | Water | 09/19/17 09:25 | 09/22/17 09:00 |
| 240-85395-2 | TRIP BLANK1 | Water | 09/19/17 00:00 | 09/22/17 09:00 |
| 240-85395-5 | AMW-19-(20170919) | Water | 09/19/17 16:05 | 09/22/17 09:00 |
| 240-85395-6 | TRIP BLANK3 | Water | 09/19/17 00:00 | 09/22/17 09:00 |
| 240-85395-7 | AMW-20-(20170920) | Water | 09/20/17 09:33 | 09/22/17 09:00 |
| 240-85395-8 | TRIP BLANK4 | Water | 09/20/17 00:00 | 09/22/17 09:00 |
| 240-85395-9 | DUP-02-(20170920) | Water | 09/20/17 00:00 | 09/22/17 09:00 |
| 240-85395-10 | TRIP BLANK5 | Water | 09/20/17 00:00 | 09/22/17 09:00 |
| 240-85395-11 | AMW-21-(20170919) | Water | 09/19/17 10:45 | 09/22/17 09:00 |
| 240-85395-12 | TRIP BLANK6 | Water | 09/19/17 00:00 | 09/22/17 09:00 |
| 240-85395-13 | AMW-22-(20170919) | Water | 09/19/17 12:00 | 09/22/17 09:00 |
| 240-85395-14 | TRIP BLANK7 | Water | 09/19/17 00:00 | 09/22/17 09:00 |
| 240-85395-15 | AMW-22B-(20170919) | Water | 09/19/17 13:00 | 09/22/17 09:00 |
| 240-85395-16 | TRIP BLANK8 | Water | 09/19/17 00:00 | 09/22/17 09:00 |
| 240-85395-17 | AMW-23-(20170920) | Water | 09/20/17 13:00 | 09/22/17 09:00 |
| 240-85395-18 | TRIP BLANK9 | Water | 09/20/17 00:00 | 09/22/17 09:00 |
| 240-85395-19 | AMW-23B-(20170920) | Water | 09/20/17 12:00 | 09/22/17 09:00 |
| 240-85395-20 | TRIP BLANK10 | Water | 09/20/17 00:00 | 09/22/17 09:00 |
| 240-85395-21 | AMW-24-(20170920) | Water | 09/20/17 14:40 | 09/22/17 09:00 |
| 240-85395-22 | TRIP BLANK11 | Water | 09/20/17 00:00 | 09/22/17 09:00 |
| 240-85395-23 | AMW-25-(20170920) | Water | 09/20/17 15:48 | 09/22/17 09:00 |
| 240-85395-24 | TRIP BLANK12 | Water | 09/20/17 00:00 | 09/22/17 09:00 |
| 240-85395-25 | AMW-26-(20170920) | Water | 09/20/17 17:15 | 09/23/17 09:20 |
| 240-85395-26 | TRIP BLANK13 | Water | 09/20/17 00:00 | 09/23/17 09:20 |

# Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

## Client Sample ID: AMW-07-(20170919) — Lab Sample ID: 240-85395-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | 3.8 | | 1.0 | 0.33 | ug/L | 1 | | 8260B | Total/NA |
| Benzo[a]anthracene | 0.18 | J | 0.20 | 0.029 | ug/L | 1 | | 8270C | Total/NA |
| Caprolactam | 0.77 | J | 4.9 | 0.20 | ug/L | 1 | | 8270C | Total/NA |
| Chrysene | 0.19 | J | 0.20 | 0.049 | ug/L | 1 | | 8270C | Total/NA |
| Diethyl phthalate | 1.2 | J | 2.0 | 0.59 | ug/L | 1 | | 8270C | Total/NA |
| Fluoranthene | 0.24 | | 0.20 | 0.044 | ug/L | 1 | | 8270C | Total/NA |
| Phenanthrene | 0.12 | J | 0.20 | 0.061 | ug/L | 1 | | 8270C | Total/NA |
| Pyrene | 0.33 | | 0.20 | 0.041 | ug/L | 1 | | 8270C | Total/NA |
| WI Diesel Range Organics (C10-C28) | 0.18 | B | 0.099 | 0.020 | mg/L | 1 | | WI-DRO | Total/NA |
| Barium | 11 | J | 200 | 2.4 | ug/L | 1 | | 6010B | Dissolved |
| Aluminum | 1900 | | 200 | 40 | ug/L | 1 | | 6010B | Dissolved |
| Cadmium | 0.40 | J | 5.0 | 0.29 | ug/L | 1 | | 6010B | Dissolved |
| Chromium | 2.2 | J | 10 | 0.55 | ug/L | 1 | | 6010B | Dissolved |
| Beryllium | 1.2 | J | 5.0 | 0.21 | ug/L | 1 | | 6010B | Dissolved |
| Calcium | 76000 | | 5000 | 710 | ug/L | 1 | | 6010B | Dissolved |
| Cobalt | 13 | | 7.0 | 0.84 | ug/L | 1 | | 6010B | Dissolved |
| Potassium | 5000 | | 5000 | 70 | ug/L | 1 | | 6010B | Dissolved |
| Magnesium | 32000 | | 5000 | 230 | ug/L | 1 | | 6010B | Dissolved |
| Manganese | 140 | | 15 | 5.1 | ug/L | 1 | | 6010B | Dissolved |
| Sodium | 18000 | | 5000 | 330 | ug/L | 1 | | 6010B | Dissolved |
| Nickel | 51 | | 40 | 1.6 | ug/L | 1 | | 6010B | Dissolved |
| Zinc | 91 | | 50 | 16 | ug/L | 1 | | 6010B | Dissolved |
| Thallium | 2.5 | | 1.0 | 0.20 | ug/L | 1 | | 6020A | Dissolved |
| Selenium | 2.2 | J | 5.0 | 0.89 | ug/L | 1 | | 6020A | Dissolved |

## Client Sample ID: TRIP BLANK1 — Lab Sample ID: 240-85395-2

No Detections.

## Client Sample ID: AMW-19-(20170919) — Lab Sample ID: 240-85395-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| WI Diesel Range Organics (C10-C28) | 0.052 | J B | 0.096 | 0.019 | mg/L | 1 | | WI-DRO | Total/NA |
| Barium | 130 | J | 200 | 2.4 | ug/L | 1 | | 6010B | Dissolved |
| Chromium | 5.0 | J | 10 | 0.55 | ug/L | 1 | | 6010B | Dissolved |
| Calcium | 140000 | | 5000 | 710 | ug/L | 1 | | 6010B | Dissolved |
| Iron | 28 | J | 100 | 25 | ug/L | 1 | | 6010B | Dissolved |
| Potassium | 3200 | J | 5000 | 70 | ug/L | 1 | | 6010B | Dissolved |
| Magnesium | 41000 | | 5000 | 230 | ug/L | 1 | | 6010B | Dissolved |
| Manganese | 140 | | 15 | 5.1 | ug/L | 1 | | 6010B | Dissolved |
| Sodium | 36000 | | 5000 | 330 | ug/L | 1 | | 6010B | Dissolved |
| Nickel | 2.7 | J | 40 | 1.6 | ug/L | 1 | | 6010B | Dissolved |

## Client Sample ID: TRIP BLANK3 — Lab Sample ID: 240-85395-6

No Detections.

## Client Sample ID: AMW-20-(20170920) — Lab Sample ID: 240-85395-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 2.7 | J | 10 | 1.8 | ug/L | 1 | | 8260B | Total/NA |

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

## Client Sample ID: AMW-20-(20170920) (Continued) — Lab Sample ID: 240-85395-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Diethyl phthalate | 0.62 | J B | 1.9 | 0.57 | ug/L | 1 | | 8270C | Total/NA |
| WI Diesel Range Organics (C10-C28) | 0.060 | J B | 0.096 | 0.019 | mg/L | 1 | | WI-DRO | Total/NA |
| Barium | 160 | J | 200 | 2.4 | ug/L | 1 | | 6010B | Dissolved |
| Chromium | 0.78 | J | 10 | 0.55 | ug/L | 1 | | 6010B | Dissolved |
| Calcium | 170000 | | 5000 | 710 | ug/L | 1 | | 6010B | Dissolved |
| Cobalt | 1.4 | J | 7.0 | 0.84 | ug/L | 1 | | 6010B | Dissolved |
| Iron | 240 | | 100 | 25 | ug/L | 1 | | 6010B | Dissolved |
| Potassium | 3000 | J | 5000 | 70 | ug/L | 1 | | 6010B | Dissolved |
| Magnesium | 49000 | | 5000 | 230 | ug/L | 1 | | 6010B | Dissolved |
| Manganese | 790 | | 15 | 5.1 | ug/L | 1 | | 6010B | Dissolved |
| Sodium | 54000 | | 5000 | 330 | ug/L | 1 | | 6010B | Dissolved |
| Nickel | 3.4 | J | 40 | 1.6 | ug/L | 1 | | 6010B | Dissolved |

## Client Sample ID: TRIP BLANK4 — Lab Sample ID: 240-85395-8

No Detections.

## Client Sample ID: DUP-02-(20170920) — Lab Sample ID: 240-85395-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| WI Diesel Range Organics (C10-C28) | 0.056 | J B | 0.096 | 0.019 | mg/L | 1 | | WI-DRO | Total/NA |
| Barium | 160 | J | 200 | 2.4 | ug/L | 1 | | 6010B | Dissolved |
| Chromium | 1.6 | J | 10 | 0.55 | ug/L | 1 | | 6010B | Dissolved |
| Calcium | 170000 | | 5000 | 710 | ug/L | 1 | | 6010B | Dissolved |
| Cobalt | 1.5 | J | 7.0 | 0.84 | ug/L | 1 | | 6010B | Dissolved |
| Iron | 270 | | 100 | 25 | ug/L | 1 | | 6010B | Dissolved |
| Potassium | 3000 | J | 5000 | 70 | ug/L | 1 | | 6010B | Dissolved |
| Magnesium | 49000 | | 5000 | 230 | ug/L | 1 | | 6010B | Dissolved |
| Manganese | 810 | | 15 | 5.1 | ug/L | 1 | | 6010B | Dissolved |
| Sodium | 54000 | | 5000 | 330 | ug/L | 1 | | 6010B | Dissolved |
| Nickel | 3.6 | J | 40 | 1.6 | ug/L | 1 | | 6010B | Dissolved |

## Client Sample ID: TRIP BLANK5 — Lab Sample ID: 240-85395-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 2.1 | J | 10 | 1.8 | ug/L | 1 | | 8260B | Total/NA |

## Client Sample ID: AMW-21-(20170919) — Lab Sample ID: 240-85395-11

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Carbon disulfide | 3.8 | | 1.0 | 0.34 | ug/L | 1 | | 8260B | Total/NA |
| Benzo[a]anthracene | 0.16 | J | 0.20 | 0.029 | ug/L | 1 | | 8270C | Total/NA |
| Benzo[b]fluoranthene | 0.11 | J | 0.20 | 0.039 | ug/L | 1 | | 8270C | Total/NA |
| Benzo[a]pyrene | 0.10 | J | 0.20 | 0.050 | ug/L | 1 | | 8270C | Total/NA |
| Bis(2-ethylhexyl) phthalate | 1.8 | J | 4.9 | 1.7 | ug/L | 1 | | 8270C | Total/NA |
| Caprolactam | 0.36 | J | 4.9 | 0.20 | ug/L | 1 | | 8270C | Total/NA |
| Chrysene | 0.16 | J | 0.20 | 0.049 | ug/L | 1 | | 8270C | Total/NA |
| Fluoranthene | 0.21 | | 0.20 | 0.044 | ug/L | 1 | | 8270C | Total/NA |
| Pyrene | 0.24 | | 0.20 | 0.041 | ug/L | 1 | | 8270C | Total/NA |
| WI Diesel Range Organics (C10-C28) | 0.66 | B | 0.097 | 0.019 | mg/L | 1 | | WI-DRO | Total/NA |
| Barium | 94 | J | 200 | 2.4 | ug/L | 1 | | 6010B | Dissolved |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: AMW-21-(20170919) (Continued) — Lab Sample ID: 240-85395-11

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 160 | J | 200 | 40 | ug/L | 1 | | 6010B | Dissolved |
| Chromium | 1.4 | J | 10 | 0.55 | ug/L | 1 | | 6010B | Dissolved |
| Calcium | 150000 | | 5000 | 710 | ug/L | 1 | | 6010B | Dissolved |
| Cobalt | 0.89 | J | 7.0 | 0.84 | ug/L | 1 | | 6010B | Dissolved |
| Iron | 1900 | | 100 | 25 | ug/L | 1 | | 6010B | Dissolved |
| Potassium | 5600 | | 5000 | 70 | ug/L | 1 | | 6010B | Dissolved |
| Magnesium | 44000 | | 5000 | 230 | ug/L | 1 | | 6010B | Dissolved |
| Manganese | 2100 | | 15 | 5.1 | ug/L | 1 | | 6010B | Dissolved |
| Sodium | 33000 | | 5000 | 330 | ug/L | 1 | | 6010B | Dissolved |
| Nickel | 4.7 | J | 40 | 1.6 | ug/L | 1 | | 6010B | Dissolved |

## Client Sample ID: TRIP BLANK6 — Lab Sample ID: 240-85395-12

No Detections.

## Client Sample ID: AMW-22-(20170919) — Lab Sample ID: 240-85395-13

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | 1.5 | | 1.0 | 0.30 | ug/L | 1 | | 8260B | Total/NA |
| WI Diesel Range Organics (C10-C28) | 0.063 | J B | 0.096 | 0.019 | mg/L | 1 | | WI-DRO | Total/NA |
| Barium | 150 | J | 200 | 2.4 | ug/L | 1 | | 6010B | Dissolved |
| Chromium | 0.58 | J | 10 | 0.55 | ug/L | 1 | | 6010B | Dissolved |
| Arsenic | 7.4 | J | 10 | 3.3 | ug/L | 1 | | 6010B | Dissolved |
| Calcium | 120000 | | 5000 | 710 | ug/L | 1 | | 6010B | Dissolved |
| Cobalt | 0.85 | J | 7.0 | 0.84 | ug/L | 1 | | 6010B | Dissolved |
| Iron | 6700 | | 100 | 25 | ug/L | 1 | | 6010B | Dissolved |
| Potassium | 3900 | J | 5000 | 70 | ug/L | 1 | | 6010B | Dissolved |
| Magnesium | 34000 | | 5000 | 230 | ug/L | 1 | | 6010B | Dissolved |
| Manganese | 1700 | | 15 | 5.1 | ug/L | 1 | | 6010B | Dissolved |
| Sodium | 24000 | | 5000 | 330 | ug/L | 1 | | 6010B | Dissolved |

## Client Sample ID: TRIP BLANK7 — Lab Sample ID: 240-85395-14

No Detections.

## Client Sample ID: AMW-22B-(20170919) — Lab Sample ID: 240-85395-15

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | 0.80 | J | 1.0 | 0.30 | ug/L | 1 | | 8260B | Total/NA |
| WI Diesel Range Organics (C10-C28) | 0.055 | J B | 0.096 | 0.019 | mg/L | 1 | | WI-DRO | Total/NA |
| Barium | 180 | J | 200 | 2.4 | ug/L | 1 | | 6010B | Dissolved |
| Chromium | 1.1 | J | 10 | 0.55 | ug/L | 1 | | 6010B | Dissolved |
| Calcium | 79000 | | 5000 | 710 | ug/L | 1 | | 6010B | Dissolved |
| Iron | 3100 | | 100 | 25 | ug/L | 1 | | 6010B | Dissolved |
| Potassium | 2200 | J | 5000 | 70 | ug/L | 1 | | 6010B | Dissolved |
| Magnesium | 30000 | | 5000 | 230 | ug/L | 1 | | 6010B | Dissolved |
| Manganese | 170 | | 15 | 5.1 | ug/L | 1 | | 6010B | Dissolved |
| Sodium | 5900 | | 5000 | 330 | ug/L | 1 | | 6010B | Dissolved |
| Thallium | 0.21 | J | 1.0 | 0.20 | ug/L | 1 | | 6020A | Dissolved |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

## Client Sample ID: TRIP BLANK8 — Lab Sample ID: 240-85395-16

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 87 | E | 10 | 1.8 | ug/L | 1 | | 8260B | Total/NA |
| 2-Butanone (MEK) | 1.5 | J | 10 | 1.0 | ug/L | 1 | | 8260B | Total/NA |

## Client Sample ID: AMW-23-(20170920) — Lab Sample ID: 240-85395-17

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 1.9 | J | 10 | 1.8 | ug/L | 1 | | 8260B | Total/NA |
| Diethyl phthalate | 0.92 | J B | 1.9 | 0.57 | ug/L | 1 | | 8270C | Total/NA |
| WI Diesel Range Organics (C10-C28) | 0.050 | J B | 0.095 | 0.019 | mg/L | 1 | | WI-DRO | Total/NA |
| Barium | 190 | J | 200 | 2.4 | ug/L | 1 | | 6010B | Dissolved |
| Chromium | 1.6 | J | 10 | 0.55 | ug/L | 1 | | 6010B | Dissolved |
| Calcium | 160000 | | 5000 | 710 | ug/L | 1 | | 6010B | Dissolved |
| Cobalt | 3.1 | J | 7.0 | 0.84 | ug/L | 1 | | 6010B | Dissolved |
| Iron | 720 | | 100 | 25 | ug/L | 1 | | 6010B | Dissolved |
| Potassium | 3900 | J | 5000 | 70 | ug/L | 1 | | 6010B | Dissolved |
| Magnesium | 44000 | | 5000 | 230 | ug/L | 1 | | 6010B | Dissolved |
| Manganese | 2700 | | 15 | 5.1 | ug/L | 1 | | 6010B | Dissolved |
| Sodium | 54000 | | 5000 | 330 | ug/L | 1 | | 6010B | Dissolved |
| Nickel | 2.7 | J | 40 | 1.6 | ug/L | 1 | | 6010B | Dissolved |

## Client Sample ID: TRIP BLANK9 — Lab Sample ID: 240-85395-18

No Detections.

## Client Sample ID: AMW-23B-(20170920) — Lab Sample ID: 240-85395-19

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Diethyl phthalate | 1.9 | B | 1.9 | 0.57 | ug/L | 1 | | 8270C | Total/NA |
| WI Diesel Range Organics (C10-C28) | 0.046 | J B | 0.097 | 0.019 | mg/L | 1 | | WI-DRO | Total/NA |
| Barium | 190 | J | 200 | 2.4 | ug/L | 1 | | 6010B | Dissolved |
| Chromium | 1.3 | J | 10 | 0.55 | ug/L | 1 | | 6010B | Dissolved |
| Arsenic | 3.4 | J | 10 | 3.3 | ug/L | 1 | | 6010B | Dissolved |
| Calcium | 77000 | | 5000 | 710 | ug/L | 1 | | 6010B | Dissolved |
| Cobalt | 1.1 | J | 7.0 | 0.84 | ug/L | 1 | | 6010B | Dissolved |
| Iron | 3200 | | 100 | 25 | ug/L | 1 | | 6010B | Dissolved |
| Potassium | 1800 | J | 5000 | 70 | ug/L | 1 | | 6010B | Dissolved |
| Magnesium | 27000 | | 5000 | 230 | ug/L | 1 | | 6010B | Dissolved |
| Manganese | 230 | | 15 | 5.1 | ug/L | 1 | | 6010B | Dissolved |
| Sodium | 9500 | | 5000 | 330 | ug/L | 1 | | 6010B | Dissolved |

## Client Sample ID: TRIP BLANK10 — Lab Sample ID: 240-85395-20

No Detections.

## Client Sample ID: AMW-24-(20170920) — Lab Sample ID: 240-85395-21

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Diethyl phthalate | 1.0 | J B | 1.9 | 0.57 | ug/L | 1 | | 8270C | Total/NA |
| WI Diesel Range Organics (C10-C28) | 0.066 | J B | 0.096 | 0.019 | mg/L | 1 | | WI-DRO | Total/NA |
| Barium | 88 | J | 200 | 2.4 | ug/L | 1 | | 6010B | Dissolved |
| Cadmium | 0.32 | J | 5.0 | 0.29 | ug/L | 1 | | 6010B | Dissolved |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: AMW-24-(20170920) (Continued) — Lab Sample ID: 240-85395-21

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Chromium | 0.70 | J | 10 | 0.55 | ug/L | 1 | | 6010B | Dissolved |
| Calcium | 170000 | | 5000 | 710 | ug/L | 1 | | 6010B | Dissolved |
| Cobalt | 2.2 | J | 7.0 | 0.84 | ug/L | 1 | | 6010B | Dissolved |
| Iron | 1900 | | 100 | 25 | ug/L | 1 | | 6010B | Dissolved |
| Potassium | 7500 | | 5000 | 70 | ug/L | 1 | | 6010B | Dissolved |
| Magnesium | 43000 | | 5000 | 230 | ug/L | 1 | | 6010B | Dissolved |
| Manganese | 1900 | | 15 | 5.1 | ug/L | 1 | | 6010B | Dissolved |
| Sodium | 80000 | | 5000 | 330 | ug/L | 1 | | 6010B | Dissolved |
| Nickel | 3.5 | J | 40 | 1.6 | ug/L | 1 | | 6010B | Dissolved |

## Client Sample ID: TRIP BLANK11 — Lab Sample ID: 240-85395-22

No Detections.

## Client Sample ID: AMW-25-(20170920) — Lab Sample ID: 240-85395-23

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trimethylbenzene | 68 | | 20 | 4.8 | ug/L | 20 | | 8260B | Total/NA |
| Ethylbenzene | 59 | | 20 | 5.2 | ug/L | 20 | | 8260B | Total/NA |
| m-Xylene & p-Xylene | 43 | | 40 | 4.8 | ug/L | 20 | | 8260B | Total/NA |
| n-Butylbenzene | 150 | | 20 | 4.2 | ug/L | 20 | | 8260B | Total/NA |
| Isopropylbenzene | 7.1 | J | 20 | 4.2 | ug/L | 20 | | 8260B | Total/NA |
| N-Propylbenzene | 25 | | 20 | 9.0 | ug/L | 20 | | 8260B | Total/NA |
| sec-Butylbenzene | 12 | J | 20 | 5.4 | ug/L | 20 | | 8260B | Total/NA |
| Diethyl phthalate | 0.85 | J B | 1.9 | 0.57 | ug/L | 1 | | 8270C | Total/NA |
| WI Gasoline Range Organics (C6-C10) | 5700 | | 1000 | 200 | ug/L | 10 | | WI-GRO | Total/NA |
| WI Diesel Range Organics (C10-C28) | 7.0 | B | 0.95 | 0.19 | mg/L | 10 | | WI-DRO | Total/NA |
| Barium | 130 | J | 200 | 2.4 | ug/L | 1 | | 6010B | Dissolved |
| Chromium | 1.4 | J | 10 | 0.55 | ug/L | 1 | | 6010B | Dissolved |
| Calcium | 170000 | | 5000 | 710 | ug/L | 1 | | 6010B | Dissolved |
| Iron | 1700 | | 100 | 25 | ug/L | 1 | | 6010B | Dissolved |
| Potassium | 3300 | J | 5000 | 70 | ug/L | 1 | | 6010B | Dissolved |
| Magnesium | 54000 | | 5000 | 230 | ug/L | 1 | | 6010B | Dissolved |
| Manganese | 950 | | 15 | 5.1 | ug/L | 1 | | 6010B | Dissolved |
| Sodium | 48000 | | 5000 | 330 | ug/L | 1 | | 6010B | Dissolved |

## Client Sample ID: TRIP BLANK12 — Lab Sample ID: 240-85395-24

No Detections.

## Client Sample ID: AMW-26-(20170920) — Lab Sample ID: 240-85395-25

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Chlorobenzene | 3.6 | | 1.0 | 0.32 | ug/L | 1 | | 8260B | Total/NA |
| cis-1,2-Dichloroethene | 1.2 | | 1.0 | 0.30 | ug/L | 1 | | 8260B | Total/NA |
| Acenaphthene | 0.72 | | 0.19 | 0.042 | ug/L | 1 | | 8270C | Total/NA |
| Acenaphthylene | 0.19 | | 0.19 | 0.046 | ug/L | 1 | | 8270C | Total/NA |
| Anthracene | 0.60 | | 0.19 | 0.084 | ug/L | 1 | | 8270C | Total/NA |
| Benzo[a]anthracene | 1.8 | | 0.19 | 0.028 | ug/L | 1 | | 8270C | Total/NA |
| Benzo[b]fluoranthene | 1.8 | | 0.19 | 0.038 | ug/L | 1 | | 8270C | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: AMW-26-(20170920) (Continued) — Lab Sample ID: 240-85395-25

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Benzo[k]fluoranthene | 0.93 | | 0.19 | 0.043 | ug/L | 1 | | 8270C | Total/NA |
| Benzo[g,h,i]perylene | 0.98 | | 0.19 | 0.044 | ug/L | 1 | | 8270C | Total/NA |
| Benzo[a]pyrene | 1.8 | | 0.19 | 0.049 | ug/L | 1 | | 8270C | Total/NA |
| Bis(2-ethylhexyl) phthalate | 1.8 | J | 4.8 | 1.6 | ug/L | 1 | | 8270C | Total/NA |
| Caprolactam | 11 | | 4.8 | 0.19 | ug/L | 1 | | 8270C | Total/NA |
| Carbazole | 0.33 | J | 0.95 | 0.27 | ug/L | 1 | | 8270C | Total/NA |
| Chrysene | 1.9 | | 0.19 | 0.048 | ug/L | 1 | | 8270C | Total/NA |
| 2-Methylnaphthalene | 0.24 | | 0.19 | 0.086 | ug/L | 1 | | 8270C | Total/NA |
| Dibenzofuran | 0.55 | J | 0.95 | 0.019 | ug/L | 1 | | 8270C | Total/NA |
| Diethyl phthalate | 1.9 | B | 1.9 | 0.57 | ug/L | 1 | | 8270C | Total/NA |
| Fluoranthene | 3.8 | | 0.19 | 0.042 | ug/L | 1 | | 8270C | Total/NA |
| Fluorene | 1.3 | | 0.19 | 0.039 | ug/L | 1 | | 8270C | Total/NA |
| Indeno[1,2,3-cd]pyrene | 0.79 | | 0.19 | 0.041 | ug/L | 1 | | 8270C | Total/NA |
| Naphthalene | 0.19 | | 0.19 | 0.060 | ug/L | 1 | | 8270C | Total/NA |
| Phenanthrene | 1.8 | | 0.19 | 0.059 | ug/L | 1 | | 8270C | Total/NA |
| Pyrene | 3.7 | | 0.19 | 0.040 | ug/L | 1 | | 8270C | Total/NA |
| WI Diesel Range Organics (C10-C28) | 1.2 | B | 0.095 | 0.019 | mg/L | 1 | | WI-DRO | Total/NA |
| Barium | 220 | | 200 | 2.4 | ug/L | 1 | | 6010B | Dissolved |
| Aluminum | 62 | J | 200 | 40 | ug/L | 1 | | 6010B | Dissolved |
| Chromium | 1.4 | J | 10 | 0.55 | ug/L | 1 | | 6010B | Dissolved |
| Arsenic | 9.0 | J | 10 | 3.3 | ug/L | 1 | | 6010B | Dissolved |
| Calcium | 150000 | | 5000 | 710 | ug/L | 1 | | 6010B | Dissolved |
| Cobalt | 0.90 | J | 7.0 | 0.84 | ug/L | 1 | | 6010B | Dissolved |
| Iron | 12000 | | 100 | 25 | ug/L | 1 | | 6010B | Dissolved |
| Potassium | 5700 | | 5000 | 70 | ug/L | 1 | | 6010B | Dissolved |
| Magnesium | 46000 | | 5000 | 230 | ug/L | 1 | | 6010B | Dissolved |
| Manganese | 2300 | | 15 | 5.1 | ug/L | 1 | | 6010B | Dissolved |
| Sodium | 56000 | | 5000 | 330 | ug/L | 1 | | 6010B | Dissolved |
| Nickel | 3.0 | J | 40 | 1.6 | ug/L | 1 | | 6010B | Dissolved |

## Client Sample ID: TRIP BLANK13 — Lab Sample ID: 240-85395-26

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 2.3 | J | 10 | 1.8 | ug/L | 1 | | 8260B | Total/NA |

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-07-(20170919)**
**Date Collected: 09/19/17 09:25**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-1**
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:12 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/01/17 21:12 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 21:12 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:12 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/01/17 21:12 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 21:12 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/01/17 21:12 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:12 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 21:12 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/01/17 21:12 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:12 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 21:12 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/01/17 21:12 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 21:12 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 21:12 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 21:12 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 21:12 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 21:12 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 21:12 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:12 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:12 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/01/17 21:12 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/01/17 21:12 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 21:12 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:12 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/01/17 21:12 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/01/17 21:12 | 1 |
| Ethyl ether | ND | * | 2.0 | 0.35 | ug/L | | | 10/01/17 21:12 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:12 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:12 | 1 |

**Client Sample ID: AMW-07-(20170919)**
**Date Collected: 09/19/17 09:25**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-1**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 21:12 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/01/17 21:12 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 21:12 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 21:12 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/01/17 21:12 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 21:12 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/01/17 21:12 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/01/17 21:12 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:12 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:12 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/01/17 21:12 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:12 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:12 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:12 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:12 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/01/17 21:12 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:12 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 21:12 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 21:12 | 1 |
| **Trichloroethene** | **3.8** | | 1.0 | 0.33 | ug/L | | | 10/01/17 21:12 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/01/17 21:12 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 21:12 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 21:12 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 21:12 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *117* | | *61 - 138* | | *10/01/17 21:12* | *1* |
| *4-Bromofluorobenzene (Surr)* | *118* | | *69 - 120* | | *10/01/17 21:12* | *1* |
| *Toluene-d8 (Surr)* | *100* | | *73 - 120* | | *10/01/17 21:12* | *1* |
| *Dibromofluoromethane (Surr)* | *120* | | *69 - 124* | | *10/01/17 21:12* | *1* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.20 | 0.043 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Acenaphthylene | ND | | 0.20 | 0.047 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Acetophenone | ND | | 0.98 | 0.33 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Anthracene | ND | | 0.20 | 0.086 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Atrazine | ND | | 2.0 | 0.33 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Benzaldehyde | ND | | 2.0 | 0.38 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| **Benzo[a]anthracene** | **0.18** | **J** | 0.20 | 0.029 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Benzo[b]fluoranthene | ND | | 0.20 | 0.039 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Benzo[k]fluoranthene | ND | | 0.20 | 0.044 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.20 | 0.045 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Benzo[a]pyrene | ND | | 0.20 | 0.050 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Butyl benzyl phthalate | ND | | 2.0 | 0.25 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 1,1'-Biphenyl | ND | | 0.98 | 0.13 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.98 | 0.31 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.98 | 0.098 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 4.9 | 1.7 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 2.0 | 0.22 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-07-(20170919)**
**Date Collected: 09/19/17 09:25**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-1**
**Matrix: Water**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Caprolactam** | **0.77** | **J** | 4.9 | 0.20 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Carbazole | ND | | 0.98 | 0.27 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 4-Chloroaniline | ND | | 2.0 | 0.21 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 4-Chloro-3-methylphenol | ND | | 2.0 | 0.21 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 2-Chloronaphthalene | ND | | 0.98 | 0.098 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 2-Chlorophenol | ND | | 0.98 | 0.28 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 2.0 | 0.29 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| **Chrysene** | **0.19** | **J** | 0.20 | 0.049 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 2-Methylnaphthalene | ND | | 0.20 | 0.089 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 3 & 4 Methylphenol | ND | | 2.0 | 0.78 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.20 | 0.044 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Dibenzofuran | ND | | 0.98 | 0.020 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 4.9 | 0.36 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 2,4-Dichlorophenol | ND | | 2.0 | 0.19 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| **Diethyl phthalate** | **1.2** | **J** | 2.0 | 0.59 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 2,4-Dimethylphenol | ND | | 2.0 | 0.25 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Dimethyl phthalate | ND | | 2.0 | 0.28 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 4.9 | 2.4 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 2,4-Dinitrophenol | ND | | 4.9 | 0.31 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 2,4-Dinitrotoluene | ND | | 4.9 | 0.25 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Di-n-butyl phthalate | ND | | 4.9 | 1.7 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Di-n-octyl phthalate | ND | | 2.0 | 0.23 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| **Fluoranthene** | **0.24** | | 0.20 | 0.044 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Fluorene | ND | | 0.20 | 0.040 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Hexachlorobenzene | ND | | 0.20 | 0.084 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Hexachlorobutadiene | ND | | 0.98 | 0.26 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Hexachlorocyclopentadiene | ND | | 9.8 | 0.24 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Hexachloroethane | ND | | 0.98 | 0.19 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.20 | 0.042 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Isophorone | ND | | 0.98 | 0.26 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 2-Methylphenol | ND | | 0.98 | 0.17 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Naphthalene | ND | | 0.20 | 0.061 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 2-Nitroaniline | ND | | 2.0 | 0.21 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 3-Nitroaniline | ND | | 2.0 | 0.27 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 4-Nitroaniline | ND | | 2.0 | 0.22 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Nitrobenzene | ND | | 0.98 | 0.039 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 2-Nitrophenol | ND | | 2.0 | 0.27 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 4-Nitrophenol | ND | | 4.9 | 0.28 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.98 | 0.30 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.98 | 0.24 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 2,2'-oxybis[1-chloropropane] | ND | | 0.98 | 0.39 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Pentachlorophenol | ND | | 4.9 | 0.26 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| **Phenanthrene** | **0.12** | **J** | 0.20 | 0.061 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| Phenol | ND | | 0.98 | 0.59 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| **Pyrene** | **0.33** | | 0.20 | 0.041 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 2,4,5-Trichlorophenol | ND | | 4.9 | 0.29 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 2,4,6-Trichlorophenol | ND | | 4.9 | 0.24 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |
| 2,6-Dinitrotoluene | ND | | 4.9 | 0.78 | ug/L | | 09/26/17 08:36 | 09/29/17 18:07 | 1 |

## Client Sample ID: AMW-07-(20170919)

**Date Collected: 09/19/17 09:25**
**Date Received: 09/22/17 09:00**

## Lab Sample ID: 240-85395-1

**Matrix: Water**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorobiphenyl (Surr)* | *84* | | *38 - 120* | *09/26/17 08:36* | *09/29/17 18:07* | *1* |
| *2-Fluorophenol (Surr)* | *36* | | *10 - 120* | *09/26/17 08:36* | *09/29/17 18:07* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *52* | | *28 - 120* | *09/26/17 08:36* | *09/29/17 18:07* | *1* |
| *Nitrobenzene-d5 (Surr)* | *64* | | *32 - 120* | *09/26/17 08:36* | *09/29/17 18:07* | *1* |
| *Phenol-d5 (Surr)* | *23* | | *10 - 120* | *09/26/17 08:36* | *09/29/17 18:07* | *1* |
| *Terphenyl-d14 (Surr)* | *97* | | *23 - 127* | *09/26/17 08:36* | *09/29/17 18:07* | *1* |

### Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| WI Gasoline Range Organics (C6-C10) | ND | | 100 | 20 | ug/L | | | 10/02/17 22:30 | 1 |

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | ND | | 0.19 | 0.049 | ug/L | | 09/26/17 14:40 | 09/28/17 16:52 | 1 |
| Aroclor-1221 | ND | | 0.19 | 0.087 | ug/L | | 09/26/17 14:40 | 09/28/17 16:52 | 1 |
| Aroclor-1232 | ND | | 0.19 | 0.068 | ug/L | | 09/26/17 14:40 | 09/28/17 16:52 | 1 |
| Aroclor-1242 | ND | | 0.19 | 0.058 | ug/L | | 09/26/17 14:40 | 09/28/17 16:52 | 1 |
| Aroclor-1248 | ND | | 0.19 | 0.049 | ug/L | | 09/26/17 14:40 | 09/28/17 16:52 | 1 |
| Aroclor-1254 | ND | | 0.19 | 0.029 | ug/L | | 09/26/17 14:40 | 09/28/17 16:52 | 1 |
| Aroclor-1260 | ND | | 0.19 | 0.039 | ug/L | | 09/26/17 14:40 | 09/28/17 16:52 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *28* | | *10 - 120* | *09/26/17 14:40* | *09/28/17 16:52* | *1* |
| *Tetrachloro-m-xylene* | *43* | | *21 - 120* | *09/26/17 14:40* | *09/28/17 16:52* | *1* |

### Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **WI Diesel Range Organics (C10-C28)** | **0.18** | **B** | 0.099 | 0.020 | mg/L | | 09/26/17 14:46 | 09/27/17 18:18 | 1 |

### Method: 6010B - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Barium** | **11** | **J** | 200 | 2.4 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |
| **Aluminum** | **1900** | | 200 | 40 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |
| **Cadmium** | **0.40** | **J** | 5.0 | 0.29 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |
| **Chromium** | **2.2** | **J** | 10 | 0.55 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |
| Silver | ND | | 10 | 0.92 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |
| Arsenic | ND | | 10 | 3.3 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |
| **Beryllium** | **1.2** | **J** | 5.0 | 0.21 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |
| Lead | ND | | 3.0 | 1.9 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |
| **Calcium** | **76000** | | 5000 | 710 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |
| **Cobalt** | **13** | | 7.0 | 0.84 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |
| Copper | ND | | 25 | 3.9 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |
| Iron | ND | | 100 | 25 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |
| **Potassium** | **5000** | | 5000 | 70 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |
| **Magnesium** | **32000** | | 5000 | 230 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |
| **Manganese** | **140** | | 15 | 5.1 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |
| **Sodium** | **18000** | | 5000 | 330 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |
| **Nickel** | **51** | | 40 | 1.6 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |
| Antimony | ND | | 10 | 3.1 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |
| Vanadium | ND | | 10 | 4.4 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-07-(20170919)**
**Date Collected: 09/19/17 09:25**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-1**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Zinc | 91 | | 50 | 16 | ug/L | | 09/25/17 14:00 | 09/26/17 20:14 | 1 |

### Method: 6020A - Metals (ICP/MS) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Thallium | 2.5 | | 1.0 | 0.20 | ug/L | | 09/25/17 14:00 | 09/26/17 15:15 | 1 |
| Selenium | 2.2 | J | 5.0 | 0.89 | ug/L | | 09/25/17 14:00 | 09/26/17 15:15 | 1 |

### Method: 7470A - Mercury (CVAA) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.20 | 0.13 | ug/L | | 09/25/17 14:00 | 09/26/17 11:44 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | 0.010 | 0.0070 | mg/L | | 09/27/17 13:01 | 09/28/17 16:25 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK1**
**Date Collected: 09/19/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-2**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:34 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/01/17 21:34 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 21:34 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:34 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/01/17 21:34 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 21:34 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/01/17 21:34 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:34 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 21:34 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/01/17 21:34 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:34 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 21:34 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/01/17 21:34 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 21:34 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 21:34 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 21:34 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 21:34 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 21:34 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 21:34 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:34 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:34 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/01/17 21:34 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/01/17 21:34 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 21:34 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:34 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/01/17 21:34 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/01/17 21:34 | 1 |
| Ethyl ether | ND | * | 2.0 | 0.35 | ug/L | | | 10/01/17 21:34 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:34 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:34 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK1**
**Date Collected: 09/19/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-2**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 21:34 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/01/17 21:34 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 21:34 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 21:34 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/01/17 21:34 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 21:34 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/01/17 21:34 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/01/17 21:34 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:34 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:34 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/01/17 21:34 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:34 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:34 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:34 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:34 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/01/17 21:34 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:34 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 21:34 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 21:34 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/01/17 21:34 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/01/17 21:34 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 21:34 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 21:34 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 21:34 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *117* | | *61 - 138* | | *10/01/17 21:34* | *1* |
| *4-Bromofluorobenzene (Surr)* | *113* | | *69 - 120* | | *10/01/17 21:34* | *1* |
| *Toluene-d8 (Surr)* | *103* | | *73 - 120* | | *10/01/17 21:34* | *1* |
| *Dibromofluoromethane (Surr)* | *121* | | *69 - 124* | | *10/01/17 21:34* | *1* |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-19-(20170919)**
**Date Collected: 09/19/17 16:05**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-5**
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:56 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/01/17 21:56 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 21:56 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:56 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/01/17 21:56 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 21:56 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/01/17 21:56 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:56 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 21:56 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/01/17 21:56 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:56 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 21:56 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/01/17 21:56 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 21:56 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 21:56 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 21:56 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 21:56 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 21:56 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 21:56 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:56 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:56 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/01/17 21:56 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/01/17 21:56 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 21:56 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:56 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/01/17 21:56 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/01/17 21:56 | 1 |
| Ethyl ether | ND | * | 2.0 | 0.35 | ug/L | | | 10/01/17 21:56 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:56 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:56 | 1 |

**Client Sample ID: AMW-19-(20170919)**
**Date Collected: 09/19/17 16:05**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-5**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 21:56 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/01/17 21:56 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 21:56 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 21:56 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/01/17 21:56 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 21:56 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/01/17 21:56 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/01/17 21:56 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:56 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:56 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/01/17 21:56 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:56 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:56 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:56 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:56 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/01/17 21:56 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:56 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 21:56 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 21:56 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/01/17 21:56 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/01/17 21:56 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 21:56 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 21:56 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 21:56 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *117* | | *61 - 138* | | *10/01/17 21:56* | *1* |
| *4-Bromofluorobenzene (Surr)* | *119* | | *69 - 120* | | *10/01/17 21:56* | *1* |
| *Toluene-d8 (Surr)* | *103* | | *73 - 120* | | *10/01/17 21:56* | *1* |
| *Dibromofluoromethane (Surr)* | *119* | | *69 - 124* | | *10/01/17 21:56* | *1* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.19 | 0.042 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Acenaphthylene | ND | | 0.19 | 0.046 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Acetophenone | ND | | 0.95 | 0.32 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Anthracene | ND | | 0.19 | 0.084 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Atrazine | ND | | 1.9 | 0.32 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Benzaldehyde | ND | | 1.9 | 0.37 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Benzo[a]anthracene | ND | | 0.19 | 0.028 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Benzo[b]fluoranthene | ND | | 0.19 | 0.038 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Benzo[k]fluoranthene | ND | | 0.19 | 0.043 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.19 | 0.044 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Benzo[a]pyrene | ND | | 0.19 | 0.049 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Butyl benzyl phthalate | ND | | 1.9 | 0.25 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 1,1'-Biphenyl | ND | | 0.95 | 0.12 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.95 | 0.30 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.95 | 0.095 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 1.9 | 0.21 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-19-(20170919)**
**Date Collected: 09/19/17 16:05**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-5**
**Matrix: Water**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Caprolactam | ND | | 4.8 | 0.19 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Carbazole | ND | | 0.95 | 0.27 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 4-Chloroaniline | ND | | 1.9 | 0.20 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 4-Chloro-3-methylphenol | ND | | 1.9 | 0.20 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 2-Chloronaphthalene | ND | | 0.95 | 0.095 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 2-Chlorophenol | ND | | 0.95 | 0.28 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 1.9 | 0.29 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Chrysene | ND | | 0.19 | 0.048 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 2-Methylnaphthalene | ND | | 0.19 | 0.086 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 3 & 4 Methylphenol | ND | | 1.9 | 0.76 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.19 | 0.042 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Dibenzofuran | ND | | 0.95 | 0.019 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 4.8 | 0.35 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 2,4-Dichlorophenol | ND | | 1.9 | 0.18 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Diethyl phthalate | ND | | 1.9 | 0.57 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 2,4-Dimethylphenol | ND | | 1.9 | 0.24 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Dimethyl phthalate | ND | | 1.9 | 0.28 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 4.8 | 2.3 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 2,4-Dinitrophenol | ND | | 4.8 | 0.30 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 2,4-Dinitrotoluene | ND | | 4.8 | 0.24 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Di-n-butyl phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Di-n-octyl phthalate | ND | | 1.9 | 0.22 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Fluoranthene | ND | | 0.19 | 0.042 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Fluorene | ND | | 0.19 | 0.039 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Hexachlorobenzene | ND | | 0.19 | 0.081 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Hexachlorobutadiene | ND | | 0.95 | 0.26 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Hexachlorocyclopentadiene | ND | | 9.5 | 0.23 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Hexachloroethane | ND | | 0.95 | 0.18 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.19 | 0.041 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Isophorone | ND | | 0.95 | 0.26 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 2-Methylphenol | ND | | 0.95 | 0.16 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Naphthalene | ND | | 0.19 | 0.060 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 2-Nitroaniline | ND | | 1.9 | 0.20 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 3-Nitroaniline | ND | | 1.9 | 0.27 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 4-Nitroaniline | ND | | 1.9 | 0.21 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Nitrobenzene | ND | | 0.95 | 0.038 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 2-Nitrophenol | ND | | 1.9 | 0.27 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 4-Nitrophenol | ND | | 4.8 | 0.28 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.95 | 0.30 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.95 | 0.23 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 2,2'-oxybis[1-chloropropane] | ND | | 0.95 | 0.38 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Pentachlorophenol | ND | | 4.8 | 0.26 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Phenanthrene | ND | | 0.19 | 0.059 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Phenol | ND | | 0.95 | 0.57 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Pyrene | ND | | 0.19 | 0.040 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 2,4,5-Trichlorophenol | ND | | 4.8 | 0.29 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 2,4,6-Trichlorophenol | ND | | 4.8 | 0.23 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 2,6-Dinitrotoluene | ND | | 4.8 | 0.76 | ug/L | | 09/26/17 08:36 | 09/29/17 16:06 | 1 |

## Client Sample ID: AMW-19-(20170919)

**Date Collected: 09/19/17 16:05**
**Date Received: 09/22/17 09:00**

## Lab Sample ID: 240-85395-5

**Matrix: Water**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 2-Fluorobiphenyl (Surr) | 70 | | 38 - 120 | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 2-Fluorophenol (Surr) | 34 | | 10 - 120 | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| 2,4,6-Tribromophenol (Surr) | 40 | | 28 - 120 | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Nitrobenzene-d5 (Surr) | 61 | | 32 - 120 | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Phenol-d5 (Surr) | 21 | | 10 - 120 | 09/26/17 08:36 | 09/29/17 16:06 | 1 |
| Terphenyl-d14 (Surr) | 98 | | 23 - 127 | 09/26/17 08:36 | 09/29/17 16:06 | 1 |

### Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| WI Gasoline Range Organics (C6-C10) | ND | | 100 | 20 | ug/L | | | 10/02/17 23:10 | 1 |

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | ND | | 0.19 | 0.048 | ug/L | | 09/26/17 14:40 | 09/28/17 17:11 | 1 |
| Aroclor-1221 | ND | | 0.19 | 0.086 | ug/L | | 09/26/17 14:40 | 09/28/17 17:11 | 1 |
| Aroclor-1232 | ND | | 0.19 | 0.067 | ug/L | | 09/26/17 14:40 | 09/28/17 17:11 | 1 |
| Aroclor-1242 | ND | | 0.19 | 0.057 | ug/L | | 09/26/17 14:40 | 09/28/17 17:11 | 1 |
| Aroclor-1248 | ND | | 0.19 | 0.048 | ug/L | | 09/26/17 14:40 | 09/28/17 17:11 | 1 |
| Aroclor-1254 | ND | | 0.19 | 0.029 | ug/L | | 09/26/17 14:40 | 09/28/17 17:11 | 1 |
| Aroclor-1260 | ND | | 0.19 | 0.038 | ug/L | | 09/26/17 14:40 | 09/28/17 17:11 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| DCB Decachlorobiphenyl | 52 | | 10 - 120 | 09/26/17 14:40 | 09/28/17 17:11 | 1 |
| Tetrachloro-m-xylene | 51 | | 21 - 120 | 09/26/17 14:40 | 09/28/17 17:11 | 1 |

### Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **WI Diesel Range Organics (C10-C28)** | **0.052** | **J B** | 0.096 | 0.019 | mg/L | | 09/26/17 14:46 | 09/27/17 18:46 | 1 |

### Method: 6010B - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Barium** | **130** | **J** | 200 | 2.4 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |
| Aluminum | ND | | 200 | 40 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |
| Cadmium | ND | | 5.0 | 0.29 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |
| **Chromium** | **5.0** | **J** | 10 | 0.55 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |
| Silver | ND | | 10 | 0.92 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |
| Arsenic | ND | | 10 | 3.3 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |
| Beryllium | ND | | 5.0 | 0.21 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |
| Lead | ND | | 3.0 | 1.9 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |
| **Calcium** | **140000** | | 5000 | 710 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |
| Cobalt | ND | | 7.0 | 0.84 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |
| Copper | ND | | 25 | 3.9 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |
| **Iron** | **28** | **J** | 100 | 25 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |
| **Potassium** | **3200** | **J** | 5000 | 70 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |
| **Magnesium** | **41000** | | 5000 | 230 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |
| **Manganese** | **140** | | 15 | 5.1 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |
| **Sodium** | **36000** | | 5000 | 330 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |
| **Nickel** | **2.7** | **J** | 40 | 1.6 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |
| Antimony | ND | | 10 | 3.1 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |
| Vanadium | ND | | 10 | 4.4 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-19-(20170919)**
**Date Collected: 09/19/17 16:05**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-5**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Zinc | ND | | 50 | 16 | ug/L | | 09/25/17 14:00 | 09/26/17 20:18 | 1 |

### Method: 6020A - Metals (ICP/MS) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Thallium | ND | | 1.0 | 0.20 | ug/L | | 09/25/17 14:00 | 09/26/17 15:19 | 1 |
| Selenium | ND | | 5.0 | 0.89 | ug/L | | 09/25/17 14:00 | 09/26/17 15:19 | 1 |

### Method: 7470A - Mercury (CVAA) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.20 | 0.13 | ug/L | | 09/25/17 14:00 | 09/26/17 11:46 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | 0.010 | 0.0070 | mg/L | | 09/27/17 13:01 | 09/28/17 16:26 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK3**
**Date Collected: 09/19/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-6**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 23:22 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/01/17 23:22 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 23:22 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 23:22 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/01/17 23:22 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 23:22 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/01/17 23:22 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 23:22 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 23:22 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/01/17 23:22 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 23:22 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 23:22 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/01/17 23:22 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 23:22 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 23:22 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 23:22 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 23:22 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 23:22 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 23:22 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 23:22 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 23:22 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/01/17 23:22 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/01/17 23:22 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 23:22 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 23:22 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/01/17 23:22 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/01/17 23:22 | 1 |
| Ethyl ether | ND | * | 2.0 | 0.35 | ug/L | | | 10/01/17 23:22 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 23:22 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 23:22 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK3**
**Date Collected: 09/19/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-6**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 23:22 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/01/17 23:22 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 23:22 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 23:22 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/01/17 23:22 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 23:22 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/01/17 23:22 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/01/17 23:22 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 23:22 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 23:22 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/01/17 23:22 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 23:22 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 23:22 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 23:22 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 23:22 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/01/17 23:22 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 23:22 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 23:22 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 23:22 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/01/17 23:22 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/01/17 23:22 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 23:22 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 23:22 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 23:22 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *108* | | *61 - 138* | | *10/01/17 23:22* | *1* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *69 - 120* | | *10/01/17 23:22* | *1* |
| *Toluene-d8 (Surr)* | *105* | | *73 - 120* | | *10/01/17 23:22* | *1* |
| *Dibromofluoromethane (Surr)* | *99* | | *69 - 124* | | *10/01/17 23:22* | *1* |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-20-(20170920)**
**Date Collected: 09/20/17 09:33**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-7**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 23:44 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/01/17 23:44 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 23:44 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 23:44 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/01/17 23:44 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 23:44 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/01/17 23:44 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 23:44 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 23:44 | 1 |
| **Acetone** | **2.7** | **J** | 10 | 1.8 | ug/L | | | 10/01/17 23:44 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 23:44 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 23:44 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/01/17 23:44 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 23:44 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 23:44 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 23:44 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 23:44 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 23:44 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 23:44 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 23:44 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 23:44 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/01/17 23:44 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/01/17 23:44 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 23:44 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 23:44 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/01/17 23:44 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/01/17 23:44 | 1 |
| Ethyl ether | ND | * | 2.0 | 0.35 | ug/L | | | 10/01/17 23:44 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 23:44 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 23:44 | 1 |

**Client Sample ID: AMW-20-(20170920)**
**Date Collected: 09/20/17 09:33**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-7**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 23:44 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/01/17 23:44 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 23:44 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 23:44 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/01/17 23:44 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 23:44 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/01/17 23:44 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/01/17 23:44 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 23:44 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 23:44 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/01/17 23:44 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 23:44 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 23:44 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 23:44 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 23:44 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/01/17 23:44 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 23:44 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 23:44 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 23:44 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/01/17 23:44 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/01/17 23:44 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 23:44 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 23:44 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 23:44 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *112* | | *61 - 138* | | *10/01/17 23:44* | *1* |
| *4-Bromofluorobenzene (Surr)* | *114* | | *69 - 120* | | *10/01/17 23:44* | *1* |
| *Toluene-d8 (Surr)* | *103* | | *73 - 120* | | *10/01/17 23:44* | *1* |
| *Dibromofluoromethane (Surr)* | *115* | | *69 - 124* | | *10/01/17 23:44* | *1* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Acenaphthylene | ND | | 0.19 | 0.046 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Acetophenone | ND | | 0.95 | 0.32 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Anthracene | ND | | 0.19 | 0.084 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Atrazine | ND | | 1.9 | 0.32 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Benzaldehyde | ND | | 1.9 | 0.37 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Benzo[a]anthracene | ND | | 0.19 | 0.028 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Benzo[b]fluoranthene | ND | | 0.19 | 0.038 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Benzo[k]fluoranthene | ND | | 0.19 | 0.043 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.19 | 0.044 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Benzo[a]pyrene | ND | | 0.19 | 0.049 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Butyl benzyl phthalate | ND | | 1.9 | 0.25 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 1,1'-Biphenyl | ND | | 0.95 | 0.12 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.95 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.95 | 0.095 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 1.9 | 0.21 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-20-(20170920)**
**Date Collected: 09/20/17 09:33**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-7**
**Matrix: Water**

**Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Caprolactam | ND | | 4.8 | 0.19 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Carbazole | ND | | 0.95 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 4-Chloroaniline | ND | | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 4-Chloro-3-methylphenol | ND | | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 2-Chloronaphthalene | ND | | 0.95 | 0.095 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 2-Chlorophenol | ND | | 0.95 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 1.9 | 0.29 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Chrysene | ND | | 0.19 | 0.048 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 2-Methylnaphthalene | ND | | 0.19 | 0.086 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 3 & 4 Methylphenol | ND | | 1.9 | 0.76 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Dibenzofuran | ND | | 0.95 | 0.019 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 4.8 | 0.35 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 2,4-Dichlorophenol | ND | | 1.9 | 0.18 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| **Diethyl phthalate** | **0.62** | **J B** | 1.9 | 0.57 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 2,4-Dimethylphenol | ND | | 1.9 | 0.24 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Dimethyl phthalate | ND | | 1.9 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 4.8 | 2.3 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 2,4-Dinitrophenol | ND | | 4.8 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 2,4-Dinitrotoluene | ND | | 4.8 | 0.24 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Di-n-butyl phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Di-n-octyl phthalate | ND | | 1.9 | 0.22 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Fluoranthene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Fluorene | ND | | 0.19 | 0.039 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Hexachlorobenzene | ND | | 0.19 | 0.081 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Hexachlorobutadiene | ND | | 0.95 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Hexachlorocyclopentadiene | ND | | 9.5 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Hexachloroethane | ND | | 0.95 | 0.18 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.19 | 0.041 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Isophorone | ND | | 0.95 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 2-Methylphenol | ND | | 0.95 | 0.16 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Naphthalene | ND | | 0.19 | 0.060 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 2-Nitroaniline | ND | * | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 3-Nitroaniline | ND | | 1.9 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 4-Nitroaniline | ND | | 1.9 | 0.21 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Nitrobenzene | ND | | 0.95 | 0.038 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 2-Nitrophenol | ND | | 1.9 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 4-Nitrophenol | ND | | 4.8 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.95 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.95 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 2,2'-oxybis[1-chloropropane] | ND | | 0.95 | 0.38 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Pentachlorophenol | ND | | 4.8 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Phenanthrene | ND | | 0.19 | 0.059 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Phenol | ND | | 0.95 | 0.57 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| Pyrene | ND | | 0.19 | 0.040 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 2,4,5-Trichlorophenol | ND | | 4.8 | 0.29 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 2,4,6-Trichlorophenol | ND | | 4.8 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |
| 2,6-Dinitrotoluene | ND | | 4.8 | 0.76 | ug/L | | 09/27/17 09:28 | 09/29/17 13:40 | 1 |

## Client Sample ID: AMW-20-(20170920)

**Date Collected: 09/20/17 09:33**
**Date Received: 09/22/17 09:00**

## Lab Sample ID: 240-85395-7

**Matrix: Water**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorobiphenyl (Surr)* | *80* | | *38 - 120* | *09/27/17 09:28* | *09/29/17 13:40* | *1* |
| *2-Fluorophenol (Surr)* | *38* | | *10 - 120* | *09/27/17 09:28* | *09/29/17 13:40* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *62* | | *28 - 120* | *09/27/17 09:28* | *09/29/17 13:40* | *1* |
| *Nitrobenzene-d5 (Surr)* | *65* | | *32 - 120* | *09/27/17 09:28* | *09/29/17 13:40* | *1* |
| *Phenol-d5 (Surr)* | *24* | | *10 - 120* | *09/27/17 09:28* | *09/29/17 13:40* | *1* |
| *Terphenyl-d14 (Surr)* | *91* | | *23 - 127* | *09/27/17 09:28* | *09/29/17 13:40* | *1* |

### Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| WI Gasoline Range Organics (C6-C10) | ND | | 100 | 20 | ug/L | | | 10/02/17 23:50 | 1 |

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | ND | | 0.19 | 0.048 | ug/L | | 09/27/17 13:47 | 09/29/17 10:46 | 1 |
| Aroclor-1221 | ND | | 0.19 | 0.087 | ug/L | | 09/27/17 13:47 | 09/29/17 10:46 | 1 |
| Aroclor-1232 | ND | | 0.19 | 0.067 | ug/L | | 09/27/17 13:47 | 09/29/17 10:46 | 1 |
| Aroclor-1242 | ND | | 0.19 | 0.058 | ug/L | | 09/27/17 13:47 | 09/29/17 10:46 | 1 |
| Aroclor-1248 | ND | | 0.19 | 0.048 | ug/L | | 09/27/17 13:47 | 09/29/17 10:46 | 1 |
| Aroclor-1254 | ND | | 0.19 | 0.029 | ug/L | | 09/27/17 13:47 | 09/29/17 10:46 | 1 |
| Aroclor-1260 | ND | | 0.19 | 0.038 | ug/L | | 09/27/17 13:47 | 09/29/17 10:46 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *48* | | *10 - 120* | *09/27/17 13:47* | *09/29/17 10:46* | *1* |
| *Tetrachloro-m-xylene* | *54* | | *21 - 120* | *09/27/17 13:47* | *09/29/17 10:46* | *1* |

### Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **WI Diesel Range Organics (C10-C28)** | **0.060** | **J B** | 0.096 | 0.019 | mg/L | | 09/26/17 14:46 | 09/27/17 19:13 | 1 |

### Method: 6010B - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Barium** | **160** | **J** | 200 | 2.4 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |
| Aluminum | ND | | 200 | 40 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |
| Cadmium | ND | | 5.0 | 0.29 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |
| **Chromium** | **0.78** | **J** | 10 | 0.55 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |
| Silver | ND | | 10 | 0.92 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |
| Arsenic | ND | | 10 | 3.3 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |
| Beryllium | ND | | 5.0 | 0.21 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |
| Lead | ND | | 3.0 | 1.9 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |
| **Calcium** | **170000** | | 5000 | 710 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |
| **Cobalt** | **1.4** | **J** | 7.0 | 0.84 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |
| Copper | ND | | 25 | 3.9 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |
| **Iron** | **240** | | 100 | 25 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |
| **Potassium** | **3000** | **J** | 5000 | 70 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |
| **Magnesium** | **49000** | | 5000 | 230 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |
| **Manganese** | **790** | | 15 | 5.1 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |
| **Sodium** | **54000** | | 5000 | 330 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |
| **Nickel** | **3.4** | **J** | 40 | 1.6 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |
| Antimony | ND | | 10 | 3.1 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |
| Vanadium | ND | | 10 | 4.4 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-20-(20170920)**
**Date Collected: 09/20/17 09:33**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-7**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Zinc | ND | | 50 | 16 | ug/L | | 09/25/17 14:00 | 09/26/17 20:23 | 1 |

### Method: 6020A - Metals (ICP/MS) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Thallium | ND | | 1.0 | 0.20 | ug/L | | 09/25/17 14:00 | 09/26/17 15:23 | 1 |
| Selenium | ND | | 5.0 | 0.89 | ug/L | | 09/25/17 14:00 | 09/26/17 15:23 | 1 |

### Method: 7470A - Mercury (CVAA) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.20 | 0.13 | ug/L | | 09/25/17 14:00 | 09/26/17 11:48 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | 0.010 | 0.0070 | mg/L | | 09/27/17 13:01 | 09/28/17 16:28 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK4**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-8**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 00:06 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/02/17 00:06 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 00:06 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 00:06 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/02/17 00:06 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 00:06 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/02/17 00:06 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 00:06 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 00:06 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/02/17 00:06 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 00:06 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 00:06 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/02/17 00:06 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 00:06 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 00:06 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 00:06 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 00:06 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 00:06 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 00:06 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 00:06 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 00:06 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/02/17 00:06 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/02/17 00:06 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 00:06 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 00:06 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 00:06 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/02/17 00:06 | 1 |
| Ethyl ether | ND | * | 2.0 | 0.35 | ug/L | | | 10/02/17 00:06 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 00:06 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 00:06 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK4**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-8**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 00:06 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/02/17 00:06 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 00:06 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 00:06 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/02/17 00:06 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 00:06 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/02/17 00:06 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/02/17 00:06 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 00:06 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 00:06 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/02/17 00:06 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 00:06 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 00:06 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 00:06 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 00:06 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/02/17 00:06 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 00:06 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 00:06 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 00:06 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/02/17 00:06 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 00:06 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 00:06 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 00:06 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 00:06 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *118* | | *61 - 138* | | *10/02/17 00:06* | *1* |
| *4-Bromofluorobenzene (Surr)* | *121* | *X* | *69 - 120* | | *10/02/17 00:06* | *1* |
| *Toluene-d8 (Surr)* | *102* | | *73 - 120* | | *10/02/17 00:06* | *1* |
| *Dibromofluoromethane (Surr)* | *119* | | *69 - 124* | | *10/02/17 00:06* | *1* |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: DUP-02-(20170920)**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-9**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 00:28 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/02/17 00:28 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 00:28 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 00:28 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/02/17 00:28 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 00:28 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/02/17 00:28 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 00:28 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 00:28 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/02/17 00:28 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 00:28 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 00:28 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/02/17 00:28 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 00:28 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 00:28 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 00:28 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 00:28 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 00:28 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 00:28 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 00:28 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 00:28 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/02/17 00:28 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/02/17 00:28 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 00:28 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 00:28 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 00:28 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/02/17 00:28 | 1 |
| Ethyl ether | ND | * | 2.0 | 0.35 | ug/L | | | 10/02/17 00:28 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 00:28 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 00:28 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: DUP-02-(20170920)**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-9**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 00:28 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/02/17 00:28 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 00:28 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 00:28 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/02/17 00:28 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 00:28 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/02/17 00:28 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/02/17 00:28 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 00:28 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 00:28 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/02/17 00:28 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 00:28 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 00:28 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 00:28 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 00:28 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/02/17 00:28 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 00:28 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 00:28 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 00:28 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/02/17 00:28 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 00:28 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 00:28 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 00:28 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 00:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *114* | | *61 - 138* | | *10/02/17 00:28* | *1* |
| *4-Bromofluorobenzene (Surr)* | *120* | | *69 - 120* | | *10/02/17 00:28* | *1* |
| *Toluene-d8 (Surr)* | *103* | | *73 - 120* | | *10/02/17 00:28* | *1* |
| *Dibromofluoromethane (Surr)* | *116* | | *69 - 124* | | *10/02/17 00:28* | *1* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Acenaphthylene | ND | | 0.19 | 0.046 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Acetophenone | ND | | 0.95 | 0.32 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Anthracene | ND | | 0.19 | 0.084 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Atrazine | ND | | 1.9 | 0.32 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Benzaldehyde | ND | | 1.9 | 0.37 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Benzo[a]anthracene | ND | | 0.19 | 0.028 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Benzo[b]fluoranthene | ND | | 0.19 | 0.038 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Benzo[k]fluoranthene | ND | | 0.19 | 0.043 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.19 | 0.044 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Benzo[a]pyrene | ND | | 0.19 | 0.049 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Butyl benzyl phthalate | ND | | 1.9 | 0.25 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 1,1'-Biphenyl | ND | | 0.95 | 0.12 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.95 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.95 | 0.095 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 1.9 | 0.21 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |

**Client Sample ID: DUP-02-(20170920)**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-9**
**Matrix: Water**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Caprolactam | ND | | 4.8 | 0.19 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Carbazole | ND | | 0.95 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 4-Chloroaniline | ND | | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 4-Chloro-3-methylphenol | ND | | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 2-Chloronaphthalene | ND | | 0.95 | 0.095 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 2-Chlorophenol | ND | | 0.95 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 1.9 | 0.29 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Chrysene | ND | | 0.19 | 0.048 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 2-Methylnaphthalene | ND | | 0.19 | 0.086 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 3 & 4 Methylphenol | ND | | 1.9 | 0.76 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Dibenzofuran | ND | | 0.95 | 0.019 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 4.8 | 0.35 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 2,4-Dichlorophenol | ND | | 1.9 | 0.18 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Diethyl phthalate | ND | | 1.9 | 0.57 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 2,4-Dimethylphenol | ND | | 1.9 | 0.24 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Dimethyl phthalate | ND | | 1.9 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 4.8 | 2.3 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 2,4-Dinitrophenol | ND | | 4.8 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 2,4-Dinitrotoluene | ND | | 4.8 | 0.24 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Di-n-butyl phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Di-n-octyl phthalate | ND | | 1.9 | 0.22 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Fluoranthene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Fluorene | ND | | 0.19 | 0.039 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Hexachlorobenzene | ND | | 0.19 | 0.081 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Hexachlorobutadiene | ND | | 0.95 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Hexachlorocyclopentadiene | ND | | 9.5 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Hexachloroethane | ND | | 0.95 | 0.18 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.19 | 0.041 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Isophorone | ND | | 0.95 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 2-Methylphenol | ND | | 0.95 | 0.16 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Naphthalene | ND | | 0.19 | 0.060 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 2-Nitroaniline | ND | * | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 3-Nitroaniline | ND | | 1.9 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 4-Nitroaniline | ND | | 1.9 | 0.21 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Nitrobenzene | ND | | 0.95 | 0.038 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 2-Nitrophenol | ND | | 1.9 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 4-Nitrophenol | ND | | 4.8 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.95 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.95 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 2,2'-oxybis[1-chloropropane] | ND | | 0.95 | 0.38 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Pentachlorophenol | ND | | 4.8 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Phenanthrene | ND | | 0.19 | 0.059 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Phenol | ND | | 0.95 | 0.57 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Pyrene | ND | | 0.19 | 0.040 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 2,4,5-Trichlorophenol | ND | | 4.8 | 0.29 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 2,4,6-Trichlorophenol | ND | | 4.8 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 2,6-Dinitrotoluene | ND | | 4.8 | 0.76 | ug/L | | 09/27/17 09:28 | 09/29/17 14:04 | 1 |

## Client Sample ID: DUP-02-(20170920)

**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

## Lab Sample ID: 240-85395-9

**Matrix: Water**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 2-Fluorobiphenyl (Surr) | 77 | | 38 - 120 | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 2-Fluorophenol (Surr) | 35 | | 10 - 120 | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| 2,4,6-Tribromophenol (Surr) | 60 | | 28 - 120 | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Nitrobenzene-d5 (Surr) | 61 | | 32 - 120 | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Phenol-d5 (Surr) | 21 | | 10 - 120 | 09/27/17 09:28 | 09/29/17 14:04 | 1 |
| Terphenyl-d14 (Surr) | 88 | | 23 - 127 | 09/27/17 09:28 | 09/29/17 14:04 | 1 |

### Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| WI Gasoline Range Organics (C6-C10) | ND | | 100 | 20 | ug/L | | | 10/03/17 00:30 | 1 |

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | ND | | 0.19 | 0.048 | ug/L | | 09/27/17 13:47 | 09/29/17 11:07 | 1 |
| Aroclor-1221 | ND | | 0.19 | 0.087 | ug/L | | 09/27/17 13:47 | 09/29/17 11:07 | 1 |
| Aroclor-1232 | ND | | 0.19 | 0.067 | ug/L | | 09/27/17 13:47 | 09/29/17 11:07 | 1 |
| Aroclor-1242 | ND | | 0.19 | 0.058 | ug/L | | 09/27/17 13:47 | 09/29/17 11:07 | 1 |
| Aroclor-1248 | ND | | 0.19 | 0.048 | ug/L | | 09/27/17 13:47 | 09/29/17 11:07 | 1 |
| Aroclor-1254 | ND | | 0.19 | 0.029 | ug/L | | 09/27/17 13:47 | 09/29/17 11:07 | 1 |
| Aroclor-1260 | ND | | 0.19 | 0.038 | ug/L | | 09/27/17 13:47 | 09/29/17 11:07 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| DCB Decachlorobiphenyl | 43 | | 10 - 120 | 09/27/17 13:47 | 09/29/17 11:07 | 1 |
| Tetrachloro-m-xylene | 48 | | 21 - 120 | 09/27/17 13:47 | 09/29/17 11:07 | 1 |

### Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **WI Diesel Range Organics (C10-C28)** | **0.056** | **J B** | 0.096 | 0.019 | mg/L | | 09/26/17 14:46 | 09/27/17 19:41 | 1 |

### Method: 6010B - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Barium** | **160** | **J** | 200 | 2.4 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |
| Aluminum | ND | | 200 | 40 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |
| Cadmium | ND | | 5.0 | 0.29 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |
| **Chromium** | **1.6** | **J** | 10 | 0.55 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |
| Silver | ND | | 10 | 0.92 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |
| Arsenic | ND | | 10 | 3.3 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |
| Beryllium | ND | | 5.0 | 0.21 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |
| Lead | ND | | 3.0 | 1.9 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |
| **Calcium** | **170000** | | 5000 | 710 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |
| **Cobalt** | **1.5** | **J** | 7.0 | 0.84 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |
| Copper | ND | | 25 | 3.9 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |
| **Iron** | **270** | | 100 | 25 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |
| **Potassium** | **3000** | **J** | 5000 | 70 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |
| **Magnesium** | **49000** | | 5000 | 230 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |
| **Manganese** | **810** | | 15 | 5.1 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |
| **Sodium** | **54000** | | 5000 | 330 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |
| **Nickel** | **3.6** | **J** | 40 | 1.6 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |
| Antimony | ND | | 10 | 3.1 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |
| Vanadium | ND | | 10 | 4.4 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: DUP-02-(20170920)**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-9**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Zinc | ND | | 50 | 16 | ug/L | | 09/25/17 14:00 | 09/26/17 20:27 | 1 |

### Method: 6020A - Metals (ICP/MS) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Thallium | ND | | 1.0 | 0.20 | ug/L | | 09/25/17 14:00 | 09/26/17 15:28 | 1 |
| Selenium | ND | | 5.0 | 0.89 | ug/L | | 09/25/17 14:00 | 09/26/17 15:28 | 1 |

### Method: 7470A - Mercury (CVAA) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.20 | 0.13 | ug/L | | 09/25/17 14:00 | 09/26/17 11:50 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | 0.010 | 0.0070 | mg/L | | 09/27/17 13:01 | 09/28/17 16:30 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK5**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-10**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 00:50 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/02/17 00:50 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 00:50 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 00:50 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/02/17 00:50 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 00:50 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/02/17 00:50 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 00:50 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 00:50 | 1 |
| **Acetone** | **2.1** | **J** | 10 | 1.8 | ug/L | | | 10/02/17 00:50 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 00:50 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 00:50 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/02/17 00:50 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 00:50 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 00:50 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 00:50 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 00:50 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 00:50 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 00:50 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 00:50 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 00:50 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/02/17 00:50 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/02/17 00:50 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 00:50 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 00:50 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 00:50 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/02/17 00:50 | 1 |
| Ethyl ether | ND | * | 2.0 | 0.35 | ug/L | | | 10/02/17 00:50 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 00:50 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 00:50 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK5**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-10**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 00:50 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/02/17 00:50 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 00:50 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 00:50 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/02/17 00:50 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 00:50 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/02/17 00:50 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/02/17 00:50 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 00:50 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 00:50 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/02/17 00:50 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 00:50 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 00:50 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 00:50 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 00:50 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/02/17 00:50 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 00:50 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 00:50 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 00:50 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/02/17 00:50 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 00:50 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 00:50 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 00:50 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 00:50 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *116* | | *61 - 138* | | *10/02/17 00:50* | *1* |
| *4-Bromofluorobenzene (Surr)* | *112* | | *69 - 120* | | *10/02/17 00:50* | *1* |
| *Toluene-d8 (Surr)* | *103* | | *73 - 120* | | *10/02/17 00:50* | *1* |
| *Dibromofluoromethane (Surr)* | *116* | | *69 - 124* | | *10/02/17 00:50* | *1* |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-21-(20170919)**
**Date Collected: 09/19/17 10:45**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-11**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 01:13 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/02/17 01:13 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 01:13 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 01:13 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/02/17 01:13 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 01:13 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/02/17 01:13 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 01:13 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 01:13 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/02/17 01:13 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 01:13 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 01:13 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/02/17 01:13 | 1 |
| **Carbon disulfide** | **3.8** | | 1.0 | 0.34 | ug/L | | | 10/02/17 01:13 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 01:13 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 01:13 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 01:13 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 01:13 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 01:13 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 01:13 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 01:13 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/02/17 01:13 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/02/17 01:13 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 01:13 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 01:13 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 01:13 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/02/17 01:13 | 1 |
| Ethyl ether | ND | * | 2.0 | 0.35 | ug/L | | | 10/02/17 01:13 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 01:13 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 01:13 | 1 |

**Client Sample ID: AMW-21-(20170919)**
**Date Collected: 09/19/17 10:45**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-11**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 01:13 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/02/17 01:13 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 01:13 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 01:13 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/02/17 01:13 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 01:13 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/02/17 01:13 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/02/17 01:13 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 01:13 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 01:13 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/02/17 01:13 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 01:13 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 01:13 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 01:13 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 01:13 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/02/17 01:13 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 01:13 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 01:13 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 01:13 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/02/17 01:13 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 01:13 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 01:13 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 01:13 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 01:13 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *111* | | *61 - 138* | | *10/02/17 01:13* | *1* |
| *4-Bromofluorobenzene (Surr)* | *102* | | *69 - 120* | | *10/02/17 01:13* | *1* |
| *Toluene-d8 (Surr)* | *105* | | *73 - 120* | | *10/02/17 01:13* | *1* |
| *Dibromofluoromethane (Surr)* | *101* | | *69 - 124* | | *10/02/17 01:13* | *1* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.20 | 0.043 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Acenaphthylene | ND | | 0.20 | 0.047 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Acetophenone | ND | | 0.98 | 0.33 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Anthracene | ND | | 0.20 | 0.086 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Atrazine | ND | | 2.0 | 0.33 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Benzaldehyde | ND | | 2.0 | 0.38 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| **Benzo[a]anthracene** | **0.16** | **J** | 0.20 | 0.029 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| **Benzo[b]fluoranthene** | **0.11** | **J** | 0.20 | 0.039 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Benzo[k]fluoranthene | ND | | 0.20 | 0.044 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.20 | 0.045 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| **Benzo[a]pyrene** | **0.10** | **J** | 0.20 | 0.050 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Butyl benzyl phthalate | ND | | 2.0 | 0.25 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 1,1'-Biphenyl | ND | | 0.98 | 0.13 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.98 | 0.31 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.98 | 0.098 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| **Bis(2-ethylhexyl) phthalate** | **1.8** | **J** | 4.9 | 1.7 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 2.0 | 0.22 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-21-(20170919)**
**Date Collected: 09/19/17 10:45**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-11**
**Matrix: Water**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Caprolactam** | **0.36** | **J** | 4.9 | 0.20 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Carbazole | ND | | 0.98 | 0.27 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 4-Chloroaniline | ND | | 2.0 | 0.21 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 4-Chloro-3-methylphenol | ND | | 2.0 | 0.21 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 2-Chloronaphthalene | ND | | 0.98 | 0.098 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 2-Chlorophenol | ND | | 0.98 | 0.28 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 2.0 | 0.29 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| **Chrysene** | **0.16** | **J** | 0.20 | 0.049 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 2-Methylnaphthalene | ND | | 0.20 | 0.089 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 3 & 4 Methylphenol | ND | | 2.0 | 0.78 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.20 | 0.044 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Dibenzofuran | ND | | 0.98 | 0.020 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 4.9 | 0.36 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 2,4-Dichlorophenol | ND | | 2.0 | 0.19 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Diethyl phthalate | ND | | 2.0 | 0.59 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 2,4-Dimethylphenol | ND | | 2.0 | 0.25 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Dimethyl phthalate | ND | | 2.0 | 0.28 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 4.9 | 2.4 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 2,4-Dinitrophenol | ND | | 4.9 | 0.31 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 2,4-Dinitrotoluene | ND | | 4.9 | 0.25 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Di-n-butyl phthalate | ND | | 4.9 | 1.7 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Di-n-octyl phthalate | ND | | 2.0 | 0.23 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| **Fluoranthene** | **0.21** | | 0.20 | 0.044 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Fluorene | ND | | 0.20 | 0.040 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Hexachlorobenzene | ND | | 0.20 | 0.084 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Hexachlorobutadiene | ND | | 0.98 | 0.26 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Hexachlorocyclopentadiene | ND | | 9.8 | 0.24 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Hexachloroethane | ND | | 0.98 | 0.19 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.20 | 0.042 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Isophorone | ND | | 0.98 | 0.26 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 2-Methylphenol | ND | | 0.98 | 0.17 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Naphthalene | ND | | 0.20 | 0.061 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 2-Nitroaniline | ND | | 2.0 | 0.21 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 3-Nitroaniline | ND | | 2.0 | 0.27 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 4-Nitroaniline | ND | | 2.0 | 0.22 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Nitrobenzene | ND | | 0.98 | 0.039 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 2-Nitrophenol | ND | | 2.0 | 0.27 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 4-Nitrophenol | ND | | 4.9 | 0.28 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.98 | 0.30 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.98 | 0.24 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 2,2'-oxybis[1-chloropropane] | ND | | 0.98 | 0.39 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Pentachlorophenol | ND | | 4.9 | 0.26 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Phenanthrene | ND | | 0.20 | 0.061 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| Phenol | ND | | 0.98 | 0.59 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| **Pyrene** | **0.24** | | 0.20 | 0.041 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 2,4,5-Trichlorophenol | ND | | 4.9 | 0.29 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 2,4,6-Trichlorophenol | ND | | 4.9 | 0.24 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |
| 2,6-Dinitrotoluene | ND | | 4.9 | 0.78 | ug/L | | 09/26/17 08:36 | 09/29/17 18:31 | 1 |

## Client Sample ID: AMW-21-(20170919)

**Date Collected: 09/19/17 10:45**
**Date Received: 09/22/17 09:00**

## Lab Sample ID: 240-85395-11

**Matrix: Water**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorobiphenyl (Surr)* | *92* | | *38 - 120* | *09/26/17 08:36* | *09/29/17 18:31* | *1* |
| *2-Fluorophenol (Surr)* | *45* | | *10 - 120* | *09/26/17 08:36* | *09/29/17 18:31* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *65* | | *28 - 120* | *09/26/17 08:36* | *09/29/17 18:31* | *1* |
| *Nitrobenzene-d5 (Surr)* | *73* | | *32 - 120* | *09/26/17 08:36* | *09/29/17 18:31* | *1* |
| *Phenol-d5 (Surr)* | *27* | | *10 - 120* | *09/26/17 08:36* | *09/29/17 18:31* | *1* |
| *Terphenyl-d14 (Surr)* | *85* | | *23 - 127* | *09/26/17 08:36* | *09/29/17 18:31* | *1* |

### Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| WI Gasoline Range Organics (C6-C10) | ND | | 100 | 20 | ug/L | | | 10/03/17 01:11 | 1 |

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | ND | | 0.19 | 0.048 | ug/L | | 09/26/17 14:40 | 09/30/17 20:04 | 1 |
| Aroclor-1221 | ND | | 0.19 | 0.087 | ug/L | | 09/26/17 14:40 | 09/30/17 20:04 | 1 |
| Aroclor-1232 | ND | | 0.19 | 0.067 | ug/L | | 09/26/17 14:40 | 09/30/17 20:04 | 1 |
| Aroclor-1242 | ND | | 0.19 | 0.058 | ug/L | | 09/26/17 14:40 | 09/30/17 20:04 | 1 |
| Aroclor-1248 | ND | | 0.19 | 0.048 | ug/L | | 09/26/17 14:40 | 09/30/17 20:04 | 1 |
| Aroclor-1254 | ND | | 0.19 | 0.029 | ug/L | | 09/26/17 14:40 | 09/30/17 20:04 | 1 |
| Aroclor-1260 | ND | | 0.19 | 0.038 | ug/L | | 09/26/17 14:40 | 09/30/17 20:04 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *11* | | *10 - 120* | *09/26/17 14:40* | *09/30/17 20:04* | *1* |
| *Tetrachloro-m-xylene* | *46* | | *21 - 120* | *09/26/17 14:40* | *09/30/17 20:04* | *1* |

### Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **WI Diesel Range Organics (C10-C28)** | **0.66** | **B** | 0.097 | 0.019 | mg/L | | 09/26/17 14:46 | 09/27/17 20:08 | 1 |

### Method: 6010B - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Barium** | **94** | **J** | 200 | 2.4 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |
| **Aluminum** | **160** | **J** | 200 | 40 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |
| Cadmium | ND | | 5.0 | 0.29 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |
| **Chromium** | **1.4** | **J** | 10 | 0.55 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |
| Silver | ND | | 10 | 0.92 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |
| Arsenic | ND | | 10 | 3.3 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |
| Beryllium | ND | | 5.0 | 0.21 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |
| Lead | ND | | 3.0 | 1.9 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |
| **Calcium** | **150000** | | 5000 | 710 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |
| **Cobalt** | **0.89** | **J** | 7.0 | 0.84 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |
| Copper | ND | | 25 | 3.9 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |
| **Iron** | **1900** | | 100 | 25 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |
| **Potassium** | **5600** | | 5000 | 70 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |
| **Magnesium** | **44000** | | 5000 | 230 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |
| **Manganese** | **2100** | | 15 | 5.1 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |
| **Sodium** | **33000** | | 5000 | 330 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |
| **Nickel** | **4.7** | **J** | 40 | 1.6 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |
| Antimony | ND | | 10 | 3.1 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |
| Vanadium | ND | | 10 | 4.4 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-21-(20170919)**
**Date Collected: 09/19/17 10:45**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-11**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Zinc | ND | | 50 | 16 | ug/L | | 09/25/17 14:00 | 09/26/17 20:31 | 1 |

### Method: 6020A - Metals (ICP/MS) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Thallium | ND | | 1.0 | 0.20 | ug/L | | 09/25/17 14:00 | 09/26/17 15:32 | 1 |
| Selenium | ND | | 5.0 | 0.89 | ug/L | | 09/25/17 14:00 | 09/26/17 15:32 | 1 |

### Method: 7470A - Mercury (CVAA) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.20 | 0.13 | ug/L | | 09/25/17 14:00 | 09/26/17 11:52 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | 0.010 | 0.0070 | mg/L | | 09/27/17 13:01 | 09/28/17 16:32 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK6**
**Date Collected: 09/19/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-12**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,2,4-Trimethylbenzene | ND | * | 1.0 | 0.24 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,3,5-Trimethylbenzene | ND | * | 1.0 | 0.24 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:00 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/01/17 21:00 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 21:00 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:00 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/01/17 21:00 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 21:00 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/01/17 21:00 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:00 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 21:00 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/01/17 21:00 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:00 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 21:00 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/01/17 21:00 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 21:00 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 21:00 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 21:00 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 21:00 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 21:00 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 21:00 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:00 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:00 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/01/17 21:00 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/01/17 21:00 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 21:00 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:00 | 1 |
| Dichlorodifluoromethane | ND | * | 1.0 | 0.50 | ug/L | | | 10/01/17 21:00 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/01/17 21:00 | 1 |
| Ethyl ether | ND | | 2.0 | 0.35 | ug/L | | | 10/01/17 21:00 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:00 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:00 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK6**
**Date Collected: 09/19/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-12**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 21:00 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/01/17 21:00 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 21:00 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 21:00 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/01/17 21:00 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 21:00 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/01/17 21:00 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/01/17 21:00 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:00 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:00 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/01/17 21:00 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:00 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:00 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:00 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:00 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/01/17 21:00 | 1 |
| Toluene | ND | * | 1.0 | 0.23 | ug/L | | | 10/01/17 21:00 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 21:00 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 21:00 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/01/17 21:00 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/01/17 21:00 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 21:00 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 21:00 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 21:00 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *109* | | *61 - 138* | | *10/01/17 21:00* | *1* |
| *4-Bromofluorobenzene (Surr)* | *90* | | *69 - 120* | | *10/01/17 21:00* | *1* |
| *Toluene-d8 (Surr)* | *94* | | *73 - 120* | | *10/01/17 21:00* | *1* |
| *Dibromofluoromethane (Surr)* | *109* | | *69 - 124* | | *10/01/17 21:00* | *1* |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-22-(20170919)**
**Date Collected: 09/19/17 12:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-13**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,2,4-Trimethylbenzene | ND | * | 1.0 | 0.24 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,3,5-Trimethylbenzene | ND | * | 1.0 | 0.24 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:23 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/01/17 21:23 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 21:23 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:23 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/01/17 21:23 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 21:23 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/01/17 21:23 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:23 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 21:23 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/01/17 21:23 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:23 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 21:23 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/01/17 21:23 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 21:23 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 21:23 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 21:23 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 21:23 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 21:23 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 21:23 | 1 |
| **cis-1,2-Dichloroethene** | **1.5** | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:23 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:23 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/01/17 21:23 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/01/17 21:23 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 21:23 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:23 | 1 |
| Dichlorodifluoromethane | ND | * | 1.0 | 0.50 | ug/L | | | 10/01/17 21:23 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/01/17 21:23 | 1 |
| Ethyl ether | ND | | 2.0 | 0.35 | ug/L | | | 10/01/17 21:23 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:23 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:23 | 1 |

**Client Sample ID: AMW-22-(20170919)** **Lab Sample ID: 240-85395-13**
**Date Collected: 09/19/17 12:00** **Matrix: Water**
**Date Received: 09/22/17 09:00**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 21:23 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/01/17 21:23 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 21:23 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 21:23 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/01/17 21:23 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 21:23 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/01/17 21:23 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/01/17 21:23 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:23 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:23 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/01/17 21:23 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:23 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:23 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:23 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:23 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/01/17 21:23 | 1 |
| Toluene | ND | * | 1.0 | 0.23 | ug/L | | | 10/01/17 21:23 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 21:23 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 21:23 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/01/17 21:23 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/01/17 21:23 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 21:23 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 21:23 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 21:23 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *109* | | *61 - 138* | | *10/01/17 21:23* | *1* |
| *4-Bromofluorobenzene (Surr)* | *91* | | *69 - 120* | | *10/01/17 21:23* | *1* |
| *Toluene-d8 (Surr)* | *94* | | *73 - 120* | | *10/01/17 21:23* | *1* |
| *Dibromofluoromethane (Surr)* | *107* | | *69 - 124* | | *10/01/17 21:23* | *1* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.19 | 0.042 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Acenaphthylene | ND | | 0.19 | 0.046 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Acetophenone | ND | | 0.95 | 0.32 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Anthracene | ND | | 0.19 | 0.084 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Atrazine | ND | | 1.9 | 0.32 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Benzaldehyde | ND | | 1.9 | 0.37 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Benzo[a]anthracene | ND | | 0.19 | 0.028 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Benzo[b]fluoranthene | ND | | 0.19 | 0.038 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Benzo[k]fluoranthene | ND | | 0.19 | 0.043 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.19 | 0.044 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Benzo[a]pyrene | ND | | 0.19 | 0.049 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Butyl benzyl phthalate | ND | | 1.9 | 0.25 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 1,1'-Biphenyl | ND | | 0.95 | 0.12 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.95 | 0.30 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.95 | 0.095 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 1.9 | 0.21 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-22-(20170919)**
**Date Collected: 09/19/17 12:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-13**
**Matrix: Water**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Caprolactam | ND | | 4.8 | 0.19 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Carbazole | ND | | 0.95 | 0.27 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 4-Chloroaniline | ND | | 1.9 | 0.20 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 4-Chloro-3-methylphenol | ND | | 1.9 | 0.20 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 2-Chloronaphthalene | ND | | 0.95 | 0.095 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 2-Chlorophenol | ND | | 0.95 | 0.28 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 1.9 | 0.29 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Chrysene | ND | | 0.19 | 0.048 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 2-Methylnaphthalene | ND | | 0.19 | 0.086 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 3 & 4 Methylphenol | ND | | 1.9 | 0.76 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.19 | 0.042 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Dibenzofuran | ND | | 0.95 | 0.019 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 4.8 | 0.35 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 2,4-Dichlorophenol | ND | | 1.9 | 0.18 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Diethyl phthalate | ND | | 1.9 | 0.57 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 2,4-Dimethylphenol | ND | | 1.9 | 0.24 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Dimethyl phthalate | ND | | 1.9 | 0.28 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 4.8 | 2.3 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 2,4-Dinitrophenol | ND | | 4.8 | 0.30 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 2,4-Dinitrotoluene | ND | | 4.8 | 0.24 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Di-n-butyl phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Di-n-octyl phthalate | ND | | 1.9 | 0.22 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Fluoranthene | ND | | 0.19 | 0.042 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Fluorene | ND | | 0.19 | 0.039 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Hexachlorobenzene | ND | | 0.19 | 0.081 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Hexachlorobutadiene | ND | | 0.95 | 0.26 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Hexachlorocyclopentadiene | ND | | 9.5 | 0.23 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Hexachloroethane | ND | | 0.95 | 0.18 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.19 | 0.041 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Isophorone | ND | | 0.95 | 0.26 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 2-Methylphenol | ND | | 0.95 | 0.16 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Naphthalene | ND | | 0.19 | 0.060 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 2-Nitroaniline | ND | | 1.9 | 0.20 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 3-Nitroaniline | ND | | 1.9 | 0.27 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 4-Nitroaniline | ND | | 1.9 | 0.21 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Nitrobenzene | ND | | 0.95 | 0.038 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 2-Nitrophenol | ND | | 1.9 | 0.27 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 4-Nitrophenol | ND | | 4.8 | 0.28 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.95 | 0.30 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.95 | 0.23 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 2,2'-oxybis[1-chloropropane] | ND | | 0.95 | 0.38 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Pentachlorophenol | ND | | 4.8 | 0.26 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Phenanthrene | ND | | 0.19 | 0.059 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Phenol | ND | | 0.95 | 0.57 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| Pyrene | ND | | 0.19 | 0.040 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 2,4,5-Trichlorophenol | ND | | 4.8 | 0.29 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 2,4,6-Trichlorophenol | ND | | 4.8 | 0.23 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |
| 2,6-Dinitrotoluene | ND | | 4.8 | 0.76 | ug/L | | 09/26/17 08:36 | 09/29/17 16:30 | 1 |

## Client Sample ID: AMW-22-(20170919)

**Date Collected: 09/19/17 12:00**
**Date Received: 09/22/17 09:00**

## Lab Sample ID: 240-85395-13

**Matrix: Water**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorobiphenyl (Surr)* | *80* | | *38 - 120* | *09/26/17 08:36* | *09/29/17 16:30* | *1* |
| *2-Fluorophenol (Surr)* | *37* | | *10 - 120* | *09/26/17 08:36* | *09/29/17 16:30* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *41* | | *28 - 120* | *09/26/17 08:36* | *09/29/17 16:30* | *1* |
| *Nitrobenzene-d5 (Surr)* | *65* | | *32 - 120* | *09/26/17 08:36* | *09/29/17 16:30* | *1* |
| *Phenol-d5 (Surr)* | *25* | | *10 - 120* | *09/26/17 08:36* | *09/29/17 16:30* | *1* |
| *Terphenyl-d14 (Surr)* | *98* | | *23 - 127* | *09/26/17 08:36* | *09/29/17 16:30* | *1* |

### Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| WI Gasoline Range Organics (C6-C10) | ND | | 100 | 20 | ug/L | | | 10/03/17 01:51 | 1 |

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | ND | | 0.19 | 0.048 | ug/L | | 09/26/17 14:40 | 09/28/17 17:49 | 1 |
| Aroclor-1221 | ND | | 0.19 | 0.087 | ug/L | | 09/26/17 14:40 | 09/28/17 17:49 | 1 |
| Aroclor-1232 | ND | | 0.19 | 0.067 | ug/L | | 09/26/17 14:40 | 09/28/17 17:49 | 1 |
| Aroclor-1242 | ND | | 0.19 | 0.058 | ug/L | | 09/26/17 14:40 | 09/28/17 17:49 | 1 |
| Aroclor-1248 | ND | | 0.19 | 0.048 | ug/L | | 09/26/17 14:40 | 09/28/17 17:49 | 1 |
| Aroclor-1254 | ND | | 0.19 | 0.029 | ug/L | | 09/26/17 14:40 | 09/28/17 17:49 | 1 |
| Aroclor-1260 | ND | | 0.19 | 0.038 | ug/L | | 09/26/17 14:40 | 09/28/17 17:49 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *40* | | *10 - 120* | *09/26/17 14:40* | *09/28/17 17:49* | *1* |
| *Tetrachloro-m-xylene* | *41* | | *21 - 120* | *09/26/17 14:40* | *09/28/17 17:49* | *1* |

### Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **WI Diesel Range Organics (C10-C28)** | **0.063** | **J B** | 0.096 | 0.019 | mg/L | | 09/26/17 14:46 | 09/27/17 20:35 | 1 |

### Method: 6010B - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Barium** | **150** | **J** | 200 | 2.4 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |
| Aluminum | ND | | 200 | 40 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |
| Cadmium | ND | | 5.0 | 0.29 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |
| **Chromium** | **0.58** | **J** | 10 | 0.55 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |
| Silver | ND | | 10 | 0.92 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |
| **Arsenic** | **7.4** | **J** | 10 | 3.3 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |
| Beryllium | ND | | 5.0 | 0.21 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |
| Lead | ND | | 3.0 | 1.9 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |
| **Calcium** | **120000** | | 5000 | 710 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |
| **Cobalt** | **0.85** | **J** | 7.0 | 0.84 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |
| Copper | ND | | 25 | 3.9 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |
| **Iron** | **6700** | | 100 | 25 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |
| **Potassium** | **3900** | **J** | 5000 | 70 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |
| **Magnesium** | **34000** | | 5000 | 230 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |
| **Manganese** | **1700** | | 15 | 5.1 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |
| **Sodium** | **24000** | | 5000 | 330 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |
| Nickel | ND | | 40 | 1.6 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |
| Antimony | ND | | 10 | 3.1 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |
| Vanadium | ND | | 10 | 4.4 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-22-(20170919)**
**Date Collected: 09/19/17 12:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-13**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Zinc | ND | | 50 | 16 | ug/L | | 09/25/17 14:00 | 09/26/17 20:44 | 1 |

### Method: 6020A - Metals (ICP/MS) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Thallium | ND | | 1.0 | 0.20 | ug/L | | 09/25/17 14:00 | 09/26/17 15:46 | 1 |
| Selenium | ND | | 5.0 | 0.89 | ug/L | | 09/25/17 14:00 | 09/26/17 15:46 | 1 |

### Method: 7470A - Mercury (CVAA) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.20 | 0.13 | ug/L | | 09/25/17 14:00 | 09/26/17 11:53 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | 0.010 | 0.0070 | mg/L | | 09/27/17 13:01 | 09/28/17 16:34 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK7**
**Date Collected: 09/19/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-14**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,2,4-Trimethylbenzene | ND | * | 1.0 | 0.24 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,3,5-Trimethylbenzene | ND | * | 1.0 | 0.24 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:46 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/01/17 21:46 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 21:46 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:46 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/01/17 21:46 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 21:46 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/01/17 21:46 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:46 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 21:46 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/01/17 21:46 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:46 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 21:46 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/01/17 21:46 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 21:46 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 21:46 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 21:46 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 21:46 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 21:46 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 21:46 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:46 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:46 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/01/17 21:46 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/01/17 21:46 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 21:46 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:46 | 1 |
| Dichlorodifluoromethane | ND | * | 1.0 | 0.50 | ug/L | | | 10/01/17 21:46 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/01/17 21:46 | 1 |
| Ethyl ether | ND | | 2.0 | 0.35 | ug/L | | | 10/01/17 21:46 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:46 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:46 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK7**
**Date Collected: 09/19/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-14**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 21:46 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/01/17 21:46 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 21:46 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 21:46 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/01/17 21:46 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 21:46 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/01/17 21:46 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/01/17 21:46 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:46 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 21:46 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/01/17 21:46 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 21:46 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 21:46 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 21:46 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 21:46 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/01/17 21:46 | 1 |
| Toluene | ND | * | 1.0 | 0.23 | ug/L | | | 10/01/17 21:46 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 21:46 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 21:46 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/01/17 21:46 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/01/17 21:46 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 21:46 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 21:46 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 21:46 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *107* | | *61 - 138* | | *10/01/17 21:46* | *1* |
| *4-Bromofluorobenzene (Surr)* | *90* | | *69 - 120* | | *10/01/17 21:46* | *1* |
| *Toluene-d8 (Surr)* | *90* | | *73 - 120* | | *10/01/17 21:46* | *1* |
| *Dibromofluoromethane (Surr)* | *107* | | *69 - 124* | | *10/01/17 21:46* | *1* |

**Client Sample ID: AMW-22B-(20170919)**
**Date Collected: 09/19/17 13:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-15**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | F1 | 1.0 | 0.32 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,2,4-Trimethylbenzene | ND | * | 1.0 | 0.24 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,3,5-Trimethylbenzene | ND | * | 1.0 | 0.24 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 22:09 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/01/17 22:09 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 22:09 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 22:09 | 1 |
| 2-Hexanone | ND | F2 | 10 | 1.2 | ug/L | | | 10/01/17 22:09 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 22:09 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/01/17 22:09 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 22:09 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 22:09 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/01/17 22:09 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 22:09 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 22:09 | 1 |
| Bromomethane | ND | F2 | 1.0 | 0.42 | ug/L | | | 10/01/17 22:09 | 1 |
| Carbon disulfide | ND | F1 | 1.0 | 0.34 | ug/L | | | 10/01/17 22:09 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 22:09 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 22:09 | 1 |
| Chloroethane | ND | F2 | 1.0 | 0.41 | ug/L | | | 10/01/17 22:09 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 22:09 | 1 |
| Chloromethane | ND | F1 | 1.0 | 0.43 | ug/L | | | 10/01/17 22:09 | 1 |
| **cis-1,2-Dichloroethene** | **0.80** | **J** | 1.0 | 0.30 | ug/L | | | 10/01/17 22:09 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 22:09 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/01/17 22:09 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/01/17 22:09 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 22:09 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 22:09 | 1 |
| Dichlorodifluoromethane | ND | * F1 | 1.0 | 0.50 | ug/L | | | 10/01/17 22:09 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/01/17 22:09 | 1 |
| Ethyl ether | ND | | 2.0 | 0.35 | ug/L | | | 10/01/17 22:09 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 22:09 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 22:09 | 1 |

**Client Sample ID: AMW-22B-(20170919)**
**Date Collected: 09/19/17 13:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-15**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 22:09 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/01/17 22:09 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 22:09 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 22:09 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/01/17 22:09 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 22:09 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/01/17 22:09 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | F2 | 10 | 0.71 | ug/L | | | 10/01/17 22:09 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 22:09 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 22:09 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/01/17 22:09 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 22:09 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 22:09 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 22:09 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 22:09 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/01/17 22:09 | 1 |
| Toluene | ND | * | 1.0 | 0.23 | ug/L | | | 10/01/17 22:09 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 22:09 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 22:09 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/01/17 22:09 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/01/17 22:09 | 1 |
| Vinyl chloride | ND | F2 | 1.0 | 0.45 | ug/L | | | 10/01/17 22:09 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 22:09 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 22:09 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *107* | | *61 - 138* | | *10/01/17 22:09* | *1* |
| *4-Bromofluorobenzene (Surr)* | *87* | | *69 - 120* | | *10/01/17 22:09* | *1* |
| *Toluene-d8 (Surr)* | *93* | | *73 - 120* | | *10/01/17 22:09* | *1* |
| *Dibromofluoromethane (Surr)* | *102* | | *69 - 124* | | *10/01/17 22:09* | *1* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.19 | 0.042 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Acenaphthylene | ND | | 0.19 | 0.046 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Acetophenone | ND | | 0.95 | 0.32 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Anthracene | ND | | 0.19 | 0.084 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Atrazine | ND | | 1.9 | 0.32 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Benzaldehyde | ND | | 1.9 | 0.37 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Benzo[a]anthracene | ND | | 0.19 | 0.028 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Benzo[b]fluoranthene | ND | | 0.19 | 0.038 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Benzo[k]fluoranthene | ND | | 0.19 | 0.043 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.19 | 0.044 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Benzo[a]pyrene | ND | | 0.19 | 0.049 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Butyl benzyl phthalate | ND | | 1.9 | 0.25 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 1,1'-Biphenyl | ND | | 0.95 | 0.12 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.95 | 0.30 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.95 | 0.095 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 1.9 | 0.21 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-22B-(20170919)**
**Date Collected: 09/19/17 13:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-15**
**Matrix: Water**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Caprolactam | ND | | 4.8 | 0.19 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Carbazole | ND | | 0.95 | 0.27 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 4-Chloroaniline | ND | | 1.9 | 0.20 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 4-Chloro-3-methylphenol | ND | | 1.9 | 0.20 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 2-Chloronaphthalene | ND | | 0.95 | 0.095 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 2-Chlorophenol | ND | | 0.95 | 0.28 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 1.9 | 0.29 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Chrysene | ND | | 0.19 | 0.048 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 2-Methylnaphthalene | ND | | 0.19 | 0.086 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 3 & 4 Methylphenol | ND | | 1.9 | 0.76 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.19 | 0.042 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Dibenzofuran | ND | | 0.95 | 0.019 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 4.8 | 0.35 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 2,4-Dichlorophenol | ND | | 1.9 | 0.18 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Diethyl phthalate | ND | | 1.9 | 0.57 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 2,4-Dimethylphenol | ND | | 1.9 | 0.24 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Dimethyl phthalate | ND | | 1.9 | 0.28 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 4.8 | 2.3 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 2,4-Dinitrophenol | ND | | 4.8 | 0.30 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 2,4-Dinitrotoluene | ND | | 4.8 | 0.24 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Di-n-butyl phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Di-n-octyl phthalate | ND | | 1.9 | 0.22 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Fluoranthene | ND | | 0.19 | 0.042 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Fluorene | ND | | 0.19 | 0.039 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Hexachlorobenzene | ND | | 0.19 | 0.081 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Hexachlorobutadiene | ND | | 0.95 | 0.26 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Hexachlorocyclopentadiene | ND | | 9.5 | 0.23 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Hexachloroethane | ND | | 0.95 | 0.18 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.19 | 0.041 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Isophorone | ND | | 0.95 | 0.26 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 2-Methylphenol | ND | | 0.95 | 0.16 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Naphthalene | ND | | 0.19 | 0.060 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 2-Nitroaniline | ND | | 1.9 | 0.20 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 3-Nitroaniline | ND | | 1.9 | 0.27 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 4-Nitroaniline | ND | | 1.9 | 0.21 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Nitrobenzene | ND | | 0.95 | 0.038 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 2-Nitrophenol | ND | | 1.9 | 0.27 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 4-Nitrophenol | ND | | 4.8 | 0.28 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.95 | 0.30 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.95 | 0.23 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 2,2'-oxybis[1-chloropropane] | ND | | 0.95 | 0.38 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Pentachlorophenol | ND | | 4.8 | 0.26 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Phenanthrene | ND | | 0.19 | 0.059 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Phenol | ND | | 0.95 | 0.57 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| Pyrene | ND | | 0.19 | 0.040 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 2,4,5-Trichlorophenol | ND | | 4.8 | 0.29 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 2,4,6-Trichlorophenol | ND | | 4.8 | 0.23 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |
| 2,6-Dinitrotoluene | ND | | 4.8 | 0.76 | ug/L | | 09/26/17 08:36 | 09/28/17 19:40 | 1 |

## Client Sample ID: AMW-22B-(20170919)

**Date Collected: 09/19/17 13:00**
**Date Received: 09/22/17 09:00**

## Lab Sample ID: 240-85395-15

**Matrix: Water**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorobiphenyl (Surr)* | *82* | | *38 - 120* | *09/26/17 08:36* | *09/28/17 19:40* | *1* |
| *2-Fluorophenol (Surr)* | *40* | | *10 - 120* | *09/26/17 08:36* | *09/28/17 19:40* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *68* | | *28 - 120* | *09/26/17 08:36* | *09/28/17 19:40* | *1* |
| *Nitrobenzene-d5 (Surr)* | *67* | | *32 - 120* | *09/26/17 08:36* | *09/28/17 19:40* | *1* |
| *Phenol-d5 (Surr)* | *22* | | *10 - 120* | *09/26/17 08:36* | *09/28/17 19:40* | *1* |
| *Terphenyl-d14 (Surr)* | *88* | | *23 - 127* | *09/26/17 08:36* | *09/28/17 19:40* | *1* |

### Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| WI Gasoline Range Organics (C6-C10) | ND | | 100 | 20 | ug/L | | | 10/03/17 02:31 | 1 |

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | ND | | 0.19 | 0.048 | ug/L | | 09/26/17 14:40 | 09/28/17 18:08 | 1 |
| Aroclor-1221 | ND | | 0.19 | 0.087 | ug/L | | 09/26/17 14:40 | 09/28/17 18:08 | 1 |
| Aroclor-1232 | ND | | 0.19 | 0.067 | ug/L | | 09/26/17 14:40 | 09/28/17 18:08 | 1 |
| Aroclor-1242 | ND | | 0.19 | 0.058 | ug/L | | 09/26/17 14:40 | 09/28/17 18:08 | 1 |
| Aroclor-1248 | ND | | 0.19 | 0.048 | ug/L | | 09/26/17 14:40 | 09/28/17 18:08 | 1 |
| Aroclor-1254 | ND | | 0.19 | 0.029 | ug/L | | 09/26/17 14:40 | 09/28/17 18:08 | 1 |
| Aroclor-1260 | ND | | 0.19 | 0.038 | ug/L | | 09/26/17 14:40 | 09/28/17 18:08 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *37* | | *10 - 120* | *09/26/17 14:40* | *09/28/17 18:08* | *1* |
| *Tetrachloro-m-xylene* | *42* | | *21 - 120* | *09/26/17 14:40* | *09/28/17 18:08* | *1* |

### Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **WI Diesel Range Organics (C10-C28)** | **0.055** | **J B** | 0.096 | 0.019 | mg/L | | 09/26/17 14:46 | 09/27/17 21:03 | 1 |

### Method: 6010B - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Barium** | **180** | **J** | 200 | 2.4 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |
| Aluminum | ND | | 200 | 40 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |
| Cadmium | ND | | 5.0 | 0.29 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |
| **Chromium** | **1.1** | **J** | 10 | 0.55 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |
| Silver | ND | | 10 | 0.92 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |
| Arsenic | ND | | 10 | 3.3 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |
| Beryllium | ND | | 5.0 | 0.21 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |
| Lead | ND | | 3.0 | 1.9 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |
| **Calcium** | **79000** | | 5000 | 710 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |
| Cobalt | ND | | 7.0 | 0.84 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |
| Copper | ND | | 25 | 3.9 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |
| **Iron** | **3100** | | 100 | 25 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |
| **Potassium** | **2200** | **J** | 5000 | 70 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |
| **Magnesium** | **30000** | | 5000 | 230 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |
| **Manganese** | **170** | | 15 | 5.1 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |
| **Sodium** | **5900** | | 5000 | 330 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |
| Nickel | ND | | 40 | 1.6 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |
| Antimony | ND | | 10 | 3.1 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |
| Vanadium | ND | | 10 | 4.4 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-22B-(20170919)**
**Date Collected: 09/19/17 13:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-15**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Zinc | ND | | 50 | 16 | ug/L | | 09/25/17 14:00 | 09/26/17 13:27 | 1 |

### Method: 6020A - Metals (ICP/MS) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Thallium** | **0.21** | **J** | 1.0 | 0.20 | ug/L | | 09/25/17 14:00 | 09/26/17 14:08 | 1 |
| Selenium | ND | | 5.0 | 0.89 | ug/L | | 09/25/17 14:00 | 09/26/17 14:08 | 1 |

### Method: 7470A - Mercury (CVAA) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.20 | 0.13 | ug/L | | 09/25/17 14:00 | 09/26/17 11:19 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | 0.010 | 0.0070 | mg/L | | 09/27/17 13:01 | 09/28/17 16:38 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK8**
**Date Collected: 09/19/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-16**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 01:35 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/02/17 01:35 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 01:35 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 01:35 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/02/17 01:35 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 01:35 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/02/17 01:35 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 01:35 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 01:35 | 1 |
| **Acetone** | **87** | **E** | 10 | 1.8 | ug/L | | | 10/02/17 01:35 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 01:35 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 01:35 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/02/17 01:35 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 01:35 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 01:35 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 01:35 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 01:35 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 01:35 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 01:35 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 01:35 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 01:35 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/02/17 01:35 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/02/17 01:35 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 01:35 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 01:35 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 01:35 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/02/17 01:35 | 1 |
| Ethyl ether | ND | * | 2.0 | 0.35 | ug/L | | | 10/02/17 01:35 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 01:35 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 01:35 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK8**
**Date Collected: 09/19/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-16**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 01:35 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/02/17 01:35 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 01:35 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 01:35 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/02/17 01:35 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 01:35 | 1 |
| **2-Butanone (MEK)** | **1.5** | **J** | 10 | 1.0 | ug/L | | | 10/02/17 01:35 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/02/17 01:35 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 01:35 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 01:35 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/02/17 01:35 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 01:35 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 01:35 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 01:35 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 01:35 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/02/17 01:35 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 01:35 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 01:35 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 01:35 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/02/17 01:35 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 01:35 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 01:35 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 01:35 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 01:35 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *113* | | *61 - 138* | | *10/02/17 01:35* | *1* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *69 - 120* | | *10/02/17 01:35* | *1* |
| *Toluene-d8 (Surr)* | *104* | | *73 - 120* | | *10/02/17 01:35* | *1* |
| *Dibromofluoromethane (Surr)* | *98* | | *69 - 124* | | *10/02/17 01:35* | *1* |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-23-(20170920)**
**Date Collected: 09/20/17 13:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-17**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 16:38 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/02/17 16:38 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 16:38 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 16:38 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/02/17 16:38 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 16:38 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/02/17 16:38 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 16:38 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 16:38 | 1 |
| **Acetone** | **1.9** | **J** | 10 | 1.8 | ug/L | | | 10/02/17 16:38 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 16:38 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 16:38 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/02/17 16:38 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 16:38 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 16:38 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 16:38 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 16:38 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 16:38 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 16:38 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 16:38 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 16:38 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/02/17 16:38 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/02/17 16:38 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 16:38 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 16:38 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 16:38 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/02/17 16:38 | 1 |
| Ethyl ether | ND | | 2.0 | 0.35 | ug/L | | | 10/02/17 16:38 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 16:38 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 16:38 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-23-(20170920)**
**Date Collected: 09/20/17 13:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-17**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 16:38 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/02/17 16:38 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 16:38 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 16:38 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/02/17 16:38 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 16:38 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/02/17 16:38 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/02/17 16:38 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 16:38 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 16:38 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/02/17 16:38 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 16:38 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 16:38 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 16:38 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 16:38 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/02/17 16:38 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 16:38 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 16:38 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 16:38 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/02/17 16:38 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 16:38 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 16:38 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 16:38 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 16:38 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *121* | | *61 - 138* | | *10/02/17 16:38* | *1* |
| *4-Bromofluorobenzene (Surr)* | *102* | | *69 - 120* | | *10/02/17 16:38* | *1* |
| *Toluene-d8 (Surr)* | *104* | | *73 - 120* | | *10/02/17 16:38* | *1* |
| *Dibromofluoromethane (Surr)* | *125* | *X* | *69 - 124* | | *10/02/17 16:38* | *1* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Acenaphthylene | ND | | 0.19 | 0.046 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Acetophenone | ND | | 0.95 | 0.32 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Anthracene | ND | | 0.19 | 0.084 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Atrazine | ND | | 1.9 | 0.32 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Benzaldehyde | ND | | 1.9 | 0.37 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Benzo[a]anthracene | ND | | 0.19 | 0.028 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Benzo[b]fluoranthene | ND | | 0.19 | 0.038 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Benzo[k]fluoranthene | ND | | 0.19 | 0.043 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.19 | 0.044 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Benzo[a]pyrene | ND | | 0.19 | 0.049 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Butyl benzyl phthalate | ND | | 1.9 | 0.25 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 1,1'-Biphenyl | ND | | 0.95 | 0.12 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.95 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.95 | 0.095 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 1.9 | 0.21 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-23-(20170920)**
**Date Collected: 09/20/17 13:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-17**
**Matrix: Water**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Caprolactam | ND | | 4.8 | 0.19 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Carbazole | ND | | 0.95 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 4-Chloroaniline | ND | | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 4-Chloro-3-methylphenol | ND | | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 2-Chloronaphthalene | ND | | 0.95 | 0.095 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 2-Chlorophenol | ND | | 0.95 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 1.9 | 0.29 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Chrysene | ND | | 0.19 | 0.048 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 2-Methylnaphthalene | ND | | 0.19 | 0.086 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 3 & 4 Methylphenol | ND | | 1.9 | 0.76 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Dibenzofuran | ND | | 0.95 | 0.019 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 4.8 | 0.35 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 2,4-Dichlorophenol | ND | | 1.9 | 0.18 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| **Diethyl phthalate** | **0.92** | **J B** | 1.9 | 0.57 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 2,4-Dimethylphenol | ND | | 1.9 | 0.24 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Dimethyl phthalate | ND | | 1.9 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 4.8 | 2.3 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 2,4-Dinitrophenol | ND | | 4.8 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 2,4-Dinitrotoluene | ND | | 4.8 | 0.24 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Di-n-butyl phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Di-n-octyl phthalate | ND | | 1.9 | 0.22 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Fluoranthene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Fluorene | ND | | 0.19 | 0.039 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Hexachlorobenzene | ND | | 0.19 | 0.081 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Hexachlorobutadiene | ND | | 0.95 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Hexachlorocyclopentadiene | ND | | 9.5 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Hexachloroethane | ND | | 0.95 | 0.18 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.19 | 0.041 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Isophorone | ND | | 0.95 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 2-Methylphenol | ND | | 0.95 | 0.16 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Naphthalene | ND | | 0.19 | 0.060 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 2-Nitroaniline | ND | * | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 3-Nitroaniline | ND | | 1.9 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 4-Nitroaniline | ND | | 1.9 | 0.21 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Nitrobenzene | ND | | 0.95 | 0.038 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 2-Nitrophenol | ND | | 1.9 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 4-Nitrophenol | ND | | 4.8 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.95 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.95 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 2,2'-oxybis[1-chloropropane] | ND | | 0.95 | 0.38 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Pentachlorophenol | ND | | 4.8 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Phenanthrene | ND | | 0.19 | 0.059 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Phenol | ND | | 0.95 | 0.57 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Pyrene | ND | | 0.19 | 0.040 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 2,4,5-Trichlorophenol | ND | | 4.8 | 0.29 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 2,4,6-Trichlorophenol | ND | | 4.8 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 2,6-Dinitrotoluene | ND | | 4.8 | 0.76 | ug/L | | 09/27/17 09:28 | 09/29/17 14:28 | 1 |

## Client Sample ID: AMW-23-(20170920)

**Date Collected: 09/20/17 13:00**
**Date Received: 09/22/17 09:00**

## Lab Sample ID: 240-85395-17

**Matrix: Water**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 2-Fluorobiphenyl (Surr) | 80 | | 38 - 120 | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 2-Fluorophenol (Surr) | 41 | | 10 - 120 | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| 2,4,6-Tribromophenol (Surr) | 65 | | 28 - 120 | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Nitrobenzene-d5 (Surr) | 67 | | 32 - 120 | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Phenol-d5 (Surr) | 24 | | 10 - 120 | 09/27/17 09:28 | 09/29/17 14:28 | 1 |
| Terphenyl-d14 (Surr) | 96 | | 23 - 127 | 09/27/17 09:28 | 09/29/17 14:28 | 1 |

### Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| WI Gasoline Range Organics (C6-C10) | ND | | 100 | 20 | ug/L | | | 10/03/17 03:10 | 1 |

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | ND | | 0.19 | 0.048 | ug/L | | 09/27/17 13:47 | 09/29/17 11:26 | 1 |
| Aroclor-1221 | ND | | 0.19 | 0.087 | ug/L | | 09/27/17 13:47 | 09/29/17 11:26 | 1 |
| Aroclor-1232 | ND | | 0.19 | 0.067 | ug/L | | 09/27/17 13:47 | 09/29/17 11:26 | 1 |
| Aroclor-1242 | ND | | 0.19 | 0.058 | ug/L | | 09/27/17 13:47 | 09/29/17 11:26 | 1 |
| Aroclor-1248 | ND | | 0.19 | 0.048 | ug/L | | 09/27/17 13:47 | 09/29/17 11:26 | 1 |
| Aroclor-1254 | ND | | 0.19 | 0.029 | ug/L | | 09/27/17 13:47 | 09/29/17 11:26 | 1 |
| Aroclor-1260 | ND | | 0.19 | 0.038 | ug/L | | 09/27/17 13:47 | 09/29/17 11:26 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| DCB Decachlorobiphenyl | 51 | | 10 - 120 | 09/27/17 13:47 | 09/29/17 11:26 | 1 |
| Tetrachloro-m-xylene | 65 | | 21 - 120 | 09/27/17 13:47 | 09/29/17 11:26 | 1 |

### Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **WI Diesel Range Organics (C10-C28)** | **0.050** | **J B** | 0.095 | 0.019 | mg/L | | 09/27/17 17:14 | 09/28/17 18:43 | 1 |

### Method: 6010B - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Barium** | **190** | **J** | 200 | 2.4 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |
| Aluminum | ND | | 200 | 40 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |
| Cadmium | ND | | 5.0 | 0.29 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |
| **Chromium** | **1.6** | **J** | 10 | 0.55 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |
| Silver | ND | | 10 | 0.92 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |
| Arsenic | ND | | 10 | 3.3 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |
| Beryllium | ND | | 5.0 | 0.21 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |
| Lead | ND | | 3.0 | 1.9 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |
| **Calcium** | **160000** | | 5000 | 710 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |
| **Cobalt** | **3.1** | **J** | 7.0 | 0.84 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |
| Copper | ND | | 25 | 3.9 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |
| **Iron** | **720** | | 100 | 25 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |
| **Potassium** | **3900** | **J** | 5000 | 70 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |
| **Magnesium** | **44000** | | 5000 | 230 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |
| **Manganese** | **2700** | | 15 | 5.1 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |
| **Sodium** | **54000** | | 5000 | 330 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |
| **Nickel** | **2.7** | **J** | 40 | 1.6 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |
| Antimony | ND | | 10 | 3.1 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |
| Vanadium | ND | | 10 | 4.4 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-23-(20170920)**
**Date Collected: 09/20/17 13:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-17**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Zinc | ND | | 50 | 16 | ug/L | | 09/25/17 14:00 | 09/26/17 20:48 | 1 |

### Method: 6020A - Metals (ICP/MS) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Thallium | ND | | 1.0 | 0.20 | ug/L | | 09/25/17 14:00 | 09/26/17 15:50 | 1 |
| Selenium | ND | | 5.0 | 0.89 | ug/L | | 09/25/17 14:00 | 09/26/17 15:50 | 1 |

### Method: 7470A - Mercury (CVAA) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.20 | 0.13 | ug/L | | 09/25/17 14:00 | 09/26/17 11:55 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | 0.010 | 0.0070 | mg/L | | 09/28/17 08:48 | 09/28/17 16:53 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK9**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-18**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 17:00 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/02/17 17:00 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 17:00 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 17:00 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/02/17 17:00 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 17:00 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/02/17 17:00 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 17:00 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 17:00 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/02/17 17:00 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 17:00 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 17:00 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/02/17 17:00 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 17:00 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 17:00 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 17:00 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 17:00 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 17:00 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 17:00 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 17:00 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 17:00 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/02/17 17:00 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/02/17 17:00 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 17:00 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 17:00 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 17:00 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/02/17 17:00 | 1 |
| Ethyl ether | ND | | 2.0 | 0.35 | ug/L | | | 10/02/17 17:00 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 17:00 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 17:00 | 1 |

**Client Sample ID: TRIP BLANK9**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-18**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 17:00 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/02/17 17:00 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 17:00 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 17:00 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/02/17 17:00 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 17:00 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/02/17 17:00 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/02/17 17:00 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 17:00 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 17:00 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/02/17 17:00 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 17:00 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 17:00 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 17:00 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 17:00 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/02/17 17:00 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 17:00 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 17:00 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 17:00 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/02/17 17:00 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 17:00 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 17:00 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 17:00 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 17:00 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *127* | | *61 - 138* | | *10/02/17 17:00* | *1* |
| *4-Bromofluorobenzene (Surr)* | *103* | | *69 - 120* | | *10/02/17 17:00* | *1* |
| *Toluene-d8 (Surr)* | *100* | | *73 - 120* | | *10/02/17 17:00* | *1* |
| *Dibromofluoromethane (Surr)* | *127* | *X* | *69 - 124* | | *10/02/17 17:00* | *1* |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-23B-(20170920)**
**Date Collected: 09/20/17 12:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-19**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 17:22 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/02/17 17:22 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 17:22 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 17:22 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/02/17 17:22 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 17:22 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/02/17 17:22 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 17:22 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 17:22 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/02/17 17:22 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 17:22 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 17:22 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/02/17 17:22 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 17:22 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 17:22 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 17:22 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 17:22 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 17:22 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 17:22 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 17:22 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 17:22 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/02/17 17:22 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/02/17 17:22 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 17:22 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 17:22 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 17:22 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/02/17 17:22 | 1 |
| Ethyl ether | ND | | 2.0 | 0.35 | ug/L | | | 10/02/17 17:22 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 17:22 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 17:22 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-23B-(20170920)**
**Date Collected: 09/20/17 12:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-19**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 17:22 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/02/17 17:22 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 17:22 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 17:22 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/02/17 17:22 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 17:22 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/02/17 17:22 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/02/17 17:22 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 17:22 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 17:22 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/02/17 17:22 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 17:22 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 17:22 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 17:22 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 17:22 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/02/17 17:22 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 17:22 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 17:22 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 17:22 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/02/17 17:22 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 17:22 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 17:22 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 17:22 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 17:22 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *126* | | *61 - 138* | | *10/02/17 17:22* | *1* |
| *4-Bromofluorobenzene (Surr)* | *106* | | *69 - 120* | | *10/02/17 17:22* | *1* |
| *Toluene-d8 (Surr)* | *104* | | *73 - 120* | | *10/02/17 17:22* | *1* |
| *Dibromofluoromethane (Surr)* | *125* | *X* | *69 - 124* | | *10/02/17 17:22* | *1* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Acenaphthylene | ND | | 0.19 | 0.046 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Acetophenone | ND | | 0.95 | 0.32 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Anthracene | ND | | 0.19 | 0.084 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Atrazine | ND | | 1.9 | 0.32 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Benzaldehyde | ND | | 1.9 | 0.37 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Benzo[a]anthracene | ND | | 0.19 | 0.028 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Benzo[b]fluoranthene | ND | | 0.19 | 0.038 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Benzo[k]fluoranthene | ND | | 0.19 | 0.043 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.19 | 0.044 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Benzo[a]pyrene | ND | | 0.19 | 0.049 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Butyl benzyl phthalate | ND | | 1.9 | 0.25 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 1,1'-Biphenyl | ND | | 0.95 | 0.12 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.95 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.95 | 0.095 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 1.9 | 0.21 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-23B-(20170920)**
**Date Collected: 09/20/17 12:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-19**
**Matrix: Water**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Caprolactam | ND | | 4.8 | 0.19 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Carbazole | ND | | 0.95 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 4-Chloroaniline | ND | | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 4-Chloro-3-methylphenol | ND | | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 2-Chloronaphthalene | ND | | 0.95 | 0.095 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 2-Chlorophenol | ND | | 0.95 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 1.9 | 0.29 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Chrysene | ND | | 0.19 | 0.048 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 2-Methylnaphthalene | ND | | 0.19 | 0.086 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 3 & 4 Methylphenol | ND | | 1.9 | 0.76 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Dibenzofuran | ND | | 0.95 | 0.019 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 4.8 | 0.35 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 2,4-Dichlorophenol | ND | | 1.9 | 0.18 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| **Diethyl phthalate** | **1.9** | **B** | 1.9 | 0.57 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 2,4-Dimethylphenol | ND | | 1.9 | 0.24 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Dimethyl phthalate | ND | | 1.9 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 4.8 | 2.3 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 2,4-Dinitrophenol | ND | | 4.8 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 2,4-Dinitrotoluene | ND | | 4.8 | 0.24 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Di-n-butyl phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Di-n-octyl phthalate | ND | | 1.9 | 0.22 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Fluoranthene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Fluorene | ND | | 0.19 | 0.039 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Hexachlorobenzene | ND | | 0.19 | 0.081 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Hexachlorobutadiene | ND | | 0.95 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Hexachlorocyclopentadiene | ND | | 9.5 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Hexachloroethane | ND | | 0.95 | 0.18 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.19 | 0.041 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Isophorone | ND | | 0.95 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 2-Methylphenol | ND | | 0.95 | 0.16 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Naphthalene | ND | | 0.19 | 0.060 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 2-Nitroaniline | ND | * | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 3-Nitroaniline | ND | | 1.9 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 4-Nitroaniline | ND | | 1.9 | 0.21 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Nitrobenzene | ND | | 0.95 | 0.038 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 2-Nitrophenol | ND | | 1.9 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 4-Nitrophenol | ND | | 4.8 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.95 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.95 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 2,2'-oxybis[1-chloropropane] | ND | | 0.95 | 0.38 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Pentachlorophenol | ND | | 4.8 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Phenanthrene | ND | | 0.19 | 0.059 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Phenol | ND | | 0.95 | 0.57 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| Pyrene | ND | | 0.19 | 0.040 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 2,4,5-Trichlorophenol | ND | | 4.8 | 0.29 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 2,4,6-Trichlorophenol | ND | | 4.8 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |
| 2,6-Dinitrotoluene | ND | | 4.8 | 0.76 | ug/L | | 09/27/17 09:28 | 09/29/17 14:53 | 1 |

## Client Sample ID: AMW-23B-(20170920)

**Date Collected: 09/20/17 12:00**
**Date Received: 09/22/17 09:00**

## Lab Sample ID: 240-85395-19

**Matrix: Water**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorobiphenyl (Surr)* | *84* | | *38 - 120* | *09/27/17 09:28* | *09/29/17 14:53* | *1* |
| *2-Fluorophenol (Surr)* | *36* | | *10 - 120* | *09/27/17 09:28* | *09/29/17 14:53* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *67* | | *28 - 120* | *09/27/17 09:28* | *09/29/17 14:53* | *1* |
| *Nitrobenzene-d5 (Surr)* | *69* | | *32 - 120* | *09/27/17 09:28* | *09/29/17 14:53* | *1* |
| *Phenol-d5 (Surr)* | *21* | | *10 - 120* | *09/27/17 09:28* | *09/29/17 14:53* | *1* |
| *Terphenyl-d14 (Surr)* | *93* | | *23 - 127* | *09/27/17 09:28* | *09/29/17 14:53* | *1* |

### Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| WI Gasoline Range Organics (C6-C10) | ND | | 100 | 20 | ug/L | | | 10/03/17 04:27 | 1 |

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | ND | | 0.20 | 0.049 | ug/L | | 09/27/17 13:47 | 09/29/17 11:45 | 1 |
| Aroclor-1221 | ND | | 0.20 | 0.088 | ug/L | | 09/27/17 13:47 | 09/29/17 11:45 | 1 |
| Aroclor-1232 | ND | | 0.20 | 0.069 | ug/L | | 09/27/17 13:47 | 09/29/17 11:45 | 1 |
| Aroclor-1242 | ND | | 0.20 | 0.059 | ug/L | | 09/27/17 13:47 | 09/29/17 11:45 | 1 |
| Aroclor-1248 | ND | | 0.20 | 0.049 | ug/L | | 09/27/17 13:47 | 09/29/17 11:45 | 1 |
| Aroclor-1254 | ND | | 0.20 | 0.029 | ug/L | | 09/27/17 13:47 | 09/29/17 11:45 | 1 |
| Aroclor-1260 | ND | | 0.20 | 0.039 | ug/L | | 09/27/17 13:47 | 09/29/17 11:45 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *56* | | *10 - 120* | *09/27/17 13:47* | *09/29/17 11:45* | *1* |
| *Tetrachloro-m-xylene* | *56* | | *21 - 120* | *09/27/17 13:47* | *09/29/17 11:45* | *1* |

### Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **WI Diesel Range Organics (C10-C28)** | **0.046** | **J B** | 0.097 | 0.019 | mg/L | | 09/27/17 17:14 | 09/28/17 19:11 | 1 |

### Method: 6010B - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Barium** | **190** | **J** | 200 | 2.4 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |
| Aluminum | ND | | 200 | 40 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |
| Cadmium | ND | | 5.0 | 0.29 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |
| **Chromium** | **1.3** | **J** | 10 | 0.55 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |
| Silver | ND | | 10 | 0.92 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |
| **Arsenic** | **3.4** | **J** | 10 | 3.3 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |
| Beryllium | ND | | 5.0 | 0.21 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |
| Lead | ND | | 3.0 | 1.9 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |
| **Calcium** | **77000** | | 5000 | 710 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |
| **Cobalt** | **1.1** | **J** | 7.0 | 0.84 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |
| Copper | ND | | 25 | 3.9 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |
| **Iron** | **3200** | | 100 | 25 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |
| **Potassium** | **1800** | **J** | 5000 | 70 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |
| **Magnesium** | **27000** | | 5000 | 230 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |
| **Manganese** | **230** | | 15 | 5.1 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |
| **Sodium** | **9500** | | 5000 | 330 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |
| Nickel | ND | | 40 | 1.6 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |
| Antimony | ND | | 10 | 3.1 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |
| Vanadium | ND | | 10 | 4.4 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-23B-(20170920)**
**Date Collected: 09/20/17 12:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-19**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Zinc | ND | | 50 | 16 | ug/L | | 09/25/17 14:00 | 09/26/17 20:53 | 1 |

### Method: 6020A - Metals (ICP/MS) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Thallium | ND | | 1.0 | 0.20 | ug/L | | 09/25/17 14:00 | 09/26/17 15:55 | 1 |
| Selenium | ND | | 5.0 | 0.89 | ug/L | | 09/25/17 14:00 | 09/26/17 15:55 | 1 |

### Method: 7470A - Mercury (CVAA) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.20 | 0.13 | ug/L | | 09/25/17 14:00 | 09/26/17 11:57 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | 0.010 | 0.0070 | mg/L | | 09/28/17 08:48 | 09/28/17 16:54 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK10**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-20**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 17:44 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/02/17 17:44 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 17:44 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 17:44 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/02/17 17:44 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 17:44 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/02/17 17:44 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 17:44 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 17:44 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/02/17 17:44 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 17:44 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 17:44 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/02/17 17:44 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 17:44 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 17:44 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 17:44 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 17:44 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 17:44 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 17:44 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 17:44 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 17:44 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/02/17 17:44 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/02/17 17:44 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 17:44 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 17:44 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 17:44 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/02/17 17:44 | 1 |
| Ethyl ether | ND | | 2.0 | 0.35 | ug/L | | | 10/02/17 17:44 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 17:44 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 17:44 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK10**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-20**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 17:44 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/02/17 17:44 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 17:44 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 17:44 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/02/17 17:44 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 17:44 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/02/17 17:44 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/02/17 17:44 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 17:44 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 17:44 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/02/17 17:44 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 17:44 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 17:44 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 17:44 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 17:44 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/02/17 17:44 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 17:44 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 17:44 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 17:44 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/02/17 17:44 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 17:44 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 17:44 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 17:44 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 17:44 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *125* | | *61 - 138* | | *10/02/17 17:44* | *1* |
| *4-Bromofluorobenzene (Surr)* | *102* | | *69 - 120* | | *10/02/17 17:44* | *1* |
| *Toluene-d8 (Surr)* | *102* | | *73 - 120* | | *10/02/17 17:44* | *1* |
| *Dibromofluoromethane (Surr)* | *122* | | *69 - 124* | | *10/02/17 17:44* | *1* |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-24-(20170920)**
**Date Collected: 09/20/17 14:40**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-21**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 18:06 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/02/17 18:06 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 18:06 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 18:06 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/02/17 18:06 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 18:06 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/02/17 18:06 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 18:06 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 18:06 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/02/17 18:06 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 18:06 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 18:06 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/02/17 18:06 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 18:06 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 18:06 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 18:06 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 18:06 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 18:06 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 18:06 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 18:06 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 18:06 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/02/17 18:06 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/02/17 18:06 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 18:06 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 18:06 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 18:06 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/02/17 18:06 | 1 |
| Ethyl ether | ND | | 2.0 | 0.35 | ug/L | | | 10/02/17 18:06 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 18:06 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 18:06 | 1 |

**Client Sample ID: AMW-24-(20170920)**
**Date Collected: 09/20/17 14:40**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-21**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 18:06 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/02/17 18:06 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 18:06 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 18:06 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/02/17 18:06 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 18:06 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/02/17 18:06 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/02/17 18:06 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 18:06 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 18:06 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/02/17 18:06 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 18:06 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 18:06 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 18:06 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 18:06 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/02/17 18:06 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 18:06 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 18:06 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 18:06 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/02/17 18:06 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 18:06 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 18:06 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 18:06 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 18:06 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *128* | | *61 - 138* | | *10/02/17 18:06* | *1* |
| *4-Bromofluorobenzene (Surr)* | *104* | | *69 - 120* | | *10/02/17 18:06* | *1* |
| *Toluene-d8 (Surr)* | *105* | | *73 - 120* | | *10/02/17 18:06* | *1* |
| *Dibromofluoromethane (Surr)* | *123* | | *69 - 124* | | *10/02/17 18:06* | *1* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Acenaphthylene | ND | | 0.19 | 0.046 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Acetophenone | ND | | 0.95 | 0.32 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Anthracene | ND | | 0.19 | 0.084 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Atrazine | ND | | 1.9 | 0.32 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Benzaldehyde | ND | | 1.9 | 0.37 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Benzo[a]anthracene | ND | | 0.19 | 0.028 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Benzo[b]fluoranthene | ND | | 0.19 | 0.038 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Benzo[k]fluoranthene | ND | | 0.19 | 0.043 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.19 | 0.044 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Benzo[a]pyrene | ND | | 0.19 | 0.049 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Butyl benzyl phthalate | ND | | 1.9 | 0.25 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 1,1'-Biphenyl | ND | | 0.95 | 0.12 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 0.95 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.95 | 0.095 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 1.9 | 0.21 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-24-(20170920)**
**Date Collected: 09/20/17 14:40**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-21**
**Matrix: Water**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Caprolactam | ND | | 4.8 | 0.19 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Carbazole | ND | | 0.95 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 4-Chloroaniline | ND | | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 4-Chloro-3-methylphenol | ND | | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 2-Chloronaphthalene | ND | | 0.95 | 0.095 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 2-Chlorophenol | ND | | 0.95 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 1.9 | 0.29 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Chrysene | ND | | 0.19 | 0.048 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 2-Methylnaphthalene | ND | | 0.19 | 0.086 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 3 & 4 Methylphenol | ND | | 1.9 | 0.76 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Dibenzofuran | ND | | 0.95 | 0.019 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 4.8 | 0.35 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 2,4-Dichlorophenol | ND | | 1.9 | 0.18 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| **Diethyl phthalate** | **1.0** | **J B** | 1.9 | 0.57 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 2,4-Dimethylphenol | ND | | 1.9 | 0.24 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Dimethyl phthalate | ND | | 1.9 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 4.8 | 2.3 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 2,4-Dinitrophenol | ND | | 4.8 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 2,4-Dinitrotoluene | ND | | 4.8 | 0.24 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Di-n-butyl phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Di-n-octyl phthalate | ND | | 1.9 | 0.22 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Fluoranthene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Fluorene | ND | | 0.19 | 0.039 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Hexachlorobenzene | ND | | 0.19 | 0.081 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Hexachlorobutadiene | ND | | 0.95 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Hexachlorocyclopentadiene | ND | | 9.5 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Hexachloroethane | ND | | 0.95 | 0.18 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.19 | 0.041 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Isophorone | ND | | 0.95 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 2-Methylphenol | ND | | 0.95 | 0.16 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Naphthalene | ND | | 0.19 | 0.060 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 2-Nitroaniline | ND | * | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 3-Nitroaniline | ND | | 1.9 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 4-Nitroaniline | ND | | 1.9 | 0.21 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Nitrobenzene | ND | | 0.95 | 0.038 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 2-Nitrophenol | ND | | 1.9 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 4-Nitrophenol | ND | | 4.8 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.95 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.95 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 2,2'-oxybis[1-chloropropane] | ND | | 0.95 | 0.38 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Pentachlorophenol | ND | | 4.8 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Phenanthrene | ND | | 0.19 | 0.059 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Phenol | ND | | 0.95 | 0.57 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| Pyrene | ND | | 0.19 | 0.040 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 2,4,5-Trichlorophenol | ND | | 4.8 | 0.29 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 2,4,6-Trichlorophenol | ND | | 4.8 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |
| 2,6-Dinitrotoluene | ND | | 4.8 | 0.76 | ug/L | | 09/27/17 09:28 | 09/29/17 15:17 | 1 |

## Client Sample ID: AMW-24-(20170920)

**Date Collected: 09/20/17 14:40**
**Date Received: 09/22/17 09:00**

## Lab Sample ID: 240-85395-21

**Matrix: Water**

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorobiphenyl (Surr)* | *87* | | *38 - 120* | *09/27/17 09:28* | *09/29/17 15:17* | *1* |
| *2-Fluorophenol (Surr)* | *43* | | *10 - 120* | *09/27/17 09:28* | *09/29/17 15:17* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *73* | | *28 - 120* | *09/27/17 09:28* | *09/29/17 15:17* | *1* |
| *Nitrobenzene-d5 (Surr)* | *72* | | *32 - 120* | *09/27/17 09:28* | *09/29/17 15:17* | *1* |
| *Phenol-d5 (Surr)* | *26* | | *10 - 120* | *09/27/17 09:28* | *09/29/17 15:17* | *1* |
| *Terphenyl-d14 (Surr)* | *96* | | *23 - 127* | *09/27/17 09:28* | *09/29/17 15:17* | *1* |

### Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| WI Gasoline Range Organics (C6-C10) | ND | | 100 | 20 | ug/L | | | 10/03/17 05:06 | 1 |

### Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | ND | | 0.19 | 0.048 | ug/L | | 09/27/17 13:47 | 09/29/17 12:05 | 1 |
| Aroclor-1221 | ND | | 0.19 | 0.086 | ug/L | | 09/27/17 13:47 | 09/29/17 12:05 | 1 |
| Aroclor-1232 | ND | | 0.19 | 0.067 | ug/L | | 09/27/17 13:47 | 09/29/17 12:05 | 1 |
| Aroclor-1242 | ND | | 0.19 | 0.057 | ug/L | | 09/27/17 13:47 | 09/29/17 12:05 | 1 |
| Aroclor-1248 | ND | | 0.19 | 0.048 | ug/L | | 09/27/17 13:47 | 09/29/17 12:05 | 1 |
| Aroclor-1254 | ND | | 0.19 | 0.029 | ug/L | | 09/27/17 13:47 | 09/29/17 12:05 | 1 |
| Aroclor-1260 | ND | | 0.19 | 0.038 | ug/L | | 09/27/17 13:47 | 09/29/17 12:05 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *58* | | *10 - 120* | *09/27/17 13:47* | *09/29/17 12:05* | *1* |
| *Tetrachloro-m-xylene* | *56* | | *21 - 120* | *09/27/17 13:47* | *09/29/17 12:05* | *1* |

### Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **WI Diesel Range Organics (C10-C28)** | **0.066** | **J B** | 0.096 | 0.019 | mg/L | | 09/27/17 17:14 | 09/28/17 19:38 | 1 |

### Method: 6010B - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Barium** | **88** | **J** | 200 | 2.4 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |
| Aluminum | ND | | 200 | 40 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |
| **Cadmium** | **0.32** | **J** | 5.0 | 0.29 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |
| **Chromium** | **0.70** | **J** | 10 | 0.55 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |
| Silver | ND | | 10 | 0.92 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |
| Arsenic | ND | | 10 | 3.3 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |
| Beryllium | ND | | 5.0 | 0.21 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |
| Lead | ND | | 3.0 | 1.9 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |
| **Calcium** | **170000** | | 5000 | 710 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |
| **Cobalt** | **2.2** | **J** | 7.0 | 0.84 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |
| Copper | ND | | 25 | 3.9 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |
| **Iron** | **1900** | | 100 | 25 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |
| **Potassium** | **7500** | | 5000 | 70 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |
| **Magnesium** | **43000** | | 5000 | 230 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |
| **Manganese** | **1900** | | 15 | 5.1 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |
| **Sodium** | **80000** | | 5000 | 330 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |
| **Nickel** | **3.5** | **J** | 40 | 1.6 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |
| Antimony | ND | | 10 | 3.1 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |
| Vanadium | ND | | 10 | 4.4 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-24-(20170920)**
**Date Collected: 09/20/17 14:40**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-21**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Zinc | ND | | 50 | 16 | ug/L | | 09/25/17 14:00 | 09/26/17 20:57 | 1 |

### Method: 6020A - Metals (ICP/MS) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Thallium | ND | | 1.0 | 0.20 | ug/L | | 09/25/17 14:00 | 09/26/17 15:59 | 1 |
| Selenium | ND | | 5.0 | 0.89 | ug/L | | 09/25/17 14:00 | 09/26/17 15:59 | 1 |

### Method: 7470A - Mercury (CVAA) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.20 | 0.13 | ug/L | | 09/25/17 14:00 | 09/26/17 12:04 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | 0.010 | 0.0070 | mg/L | | 09/28/17 08:48 | 09/28/17 16:56 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK11**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-22**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 18:28 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/02/17 18:28 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 18:28 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 18:28 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/02/17 18:28 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 18:28 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/02/17 18:28 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 18:28 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 18:28 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/02/17 18:28 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 18:28 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 18:28 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/02/17 18:28 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 18:28 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 18:28 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 18:28 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 18:28 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 18:28 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 18:28 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 18:28 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 18:28 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/02/17 18:28 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/02/17 18:28 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 18:28 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 18:28 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 18:28 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/02/17 18:28 | 1 |
| Ethyl ether | ND | | 2.0 | 0.35 | ug/L | | | 10/02/17 18:28 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 18:28 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 18:28 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK11**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-22**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 18:28 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/02/17 18:28 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 18:28 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 18:28 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/02/17 18:28 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 18:28 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/02/17 18:28 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/02/17 18:28 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 18:28 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 18:28 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/02/17 18:28 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 18:28 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 18:28 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 18:28 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 18:28 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/02/17 18:28 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 18:28 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 18:28 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 18:28 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/02/17 18:28 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 18:28 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 18:28 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 18:28 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 18:28 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *127* | | *61 - 138* | | *10/02/17 18:28* | *1* |
| *4-Bromofluorobenzene (Surr)* | *112* | | *69 - 120* | | *10/02/17 18:28* | *1* |
| *Toluene-d8 (Surr)* | *102* | | *73 - 120* | | *10/02/17 18:28* | *1* |
| *Dibromofluoromethane (Surr)* | *127* | *X* | *69 - 124* | | *10/02/17 18:28* | *1* |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-25-(20170920)**
**Date Collected: 09/20/17 15:48**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-23**
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 20 | 9.2 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,1,1-Trichloroethane | ND | | 20 | 4.6 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,1,2,2-Tetrachloroethane | ND | | 20 | 6.4 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 20 | 8.2 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,1,2-Trichloroethane | ND | | 20 | 6.8 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,1-Dichloroethane | ND | | 20 | 5.0 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,1-Dichloroethene | ND | | 20 | 5.4 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,1-Dichloropropene | ND | | 20 | 5.6 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,2,3-Trichlorobenzene | ND | | 20 | 7.0 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,2,3-Trichloropropane | ND | | 20 | 11 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,2,4-Trichlorobenzene | ND | | 20 | 5.4 | ug/L | | | 10/03/17 15:45 | 20 |
| **1,2,4-Trimethylbenzene** | **68** | | 20 | 4.8 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,2-Dibromo-3-Chloropropane | ND | | 40 | 9.4 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,2-Dichlorobenzene | ND | | 20 | 5.2 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,2-Dichloroethane | ND | | 20 | 6.0 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,2-Dichloropropane | ND | | 20 | 6.0 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,3,5-Trimethylbenzene | ND | | 20 | 4.8 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,3-Dichlorobenzene | ND | | 20 | 6.4 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,3-Dichloropropane | ND | | 20 | 5.8 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,4-Dichlorobenzene | ND | | 20 | 4.6 | ug/L | | | 10/03/17 15:45 | 20 |
| Allyl chloride | ND | | 40 | 7.6 | ug/L | | | 10/03/17 15:45 | 20 |
| 2,2-Dichloropropane | ND | | 20 | 6.8 | ug/L | | | 10/03/17 15:45 | 20 |
| 2-Chlorotoluene | ND | | 20 | 5.6 | ug/L | | | 10/03/17 15:45 | 20 |
| 2-Hexanone | ND | | 200 | 25 | ug/L | | | 10/03/17 15:45 | 20 |
| Bromobenzene | ND | | 20 | 6.2 | ug/L | | | 10/03/17 15:45 | 20 |
| Bromochloromethane | ND | | 20 | 9.4 | ug/L | | | 10/03/17 15:45 | 20 |
| 4-Chlorotoluene | ND | | 20 | 4.6 | ug/L | | | 10/03/17 15:45 | 20 |
| p-Isopropyltoluene | ND | | 20 | 5.8 | ug/L | | | 10/03/17 15:45 | 20 |
| Acetone | ND | | 200 | 35 | ug/L | | | 10/03/17 15:45 | 20 |
| Benzene | ND | | 20 | 5.6 | ug/L | | | 10/03/17 15:45 | 20 |
| Bromoform | ND | | 20 | 8.6 | ug/L | | | 10/03/17 15:45 | 20 |
| Bromomethane | ND | | 20 | 8.4 | ug/L | | | 10/03/17 15:45 | 20 |
| Carbon disulfide | ND | | 20 | 6.8 | ug/L | | | 10/03/17 15:45 | 20 |
| Carbon tetrachloride | ND | | 20 | 7.0 | ug/L | | | 10/03/17 15:45 | 20 |
| Chlorobenzene | ND | | 20 | 6.4 | ug/L | | | 10/03/17 15:45 | 20 |
| Chloroethane | ND | | 20 | 8.2 | ug/L | | | 10/03/17 15:45 | 20 |
| Chloroform | ND | | 20 | 6.2 | ug/L | | | 10/03/17 15:45 | 20 |
| Chloromethane | ND | | 20 | 8.6 | ug/L | | | 10/03/17 15:45 | 20 |
| cis-1,2-Dichloroethene | ND | | 20 | 6.0 | ug/L | | | 10/03/17 15:45 | 20 |
| cis-1,3-Dichloropropene | ND | | 20 | 5.2 | ug/L | | | 10/03/17 15:45 | 20 |
| Cyclohexane | ND | | 20 | 8.8 | ug/L | | | 10/03/17 15:45 | 20 |
| Hexachlorobutadiene | ND | | 20 | 7.2 | ug/L | | | 10/03/17 15:45 | 20 |
| Dibromomethane | ND | | 20 | 9.2 | ug/L | | | 10/03/17 15:45 | 20 |
| Bromodichloromethane | ND | | 20 | 6.0 | ug/L | | | 10/03/17 15:45 | 20 |
| Dichlorodifluoromethane | ND | | 20 | 10 | ug/L | | | 10/03/17 15:45 | 20 |
| Dichlorofluoromethane | ND | | 40 | 8.6 | ug/L | | | 10/03/17 15:45 | 20 |
| Ethyl ether | ND | | 40 | 7.0 | ug/L | | | 10/03/17 15:45 | 20 |
| **Ethylbenzene** | **59** | | 20 | 5.2 | ug/L | | | 10/03/17 15:45 | 20 |
| 1,2-Dibromoethane | ND | | 20 | 4.6 | ug/L | | | 10/03/17 15:45 | 20 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-25-(20170920)**
**Date Collected: 09/20/17 15:48**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-23**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 20 | 5.0 | ug/L | | | 10/03/17 15:45 | 20 |
| **m-Xylene & p-Xylene** | **43** | | 40 | 4.8 | ug/L | | | 10/03/17 15:45 | 20 |
| **n-Butylbenzene** | **150** | | 20 | 4.2 | ug/L | | | 10/03/17 15:45 | 20 |
| **Isopropylbenzene** | **7.1** | **J** | 20 | 4.2 | ug/L | | | 10/03/17 15:45 | 20 |
| Methyl acetate | ND | | 200 | 29 | ug/L | | | 10/03/17 15:45 | 20 |
| **N-Propylbenzene** | **25** | | 20 | 9.0 | ug/L | | | 10/03/17 15:45 | 20 |
| 2-Butanone (MEK) | ND | | 200 | 20 | ug/L | | | 10/03/17 15:45 | 20 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 200 | 14 | ug/L | | | 10/03/17 15:45 | 20 |
| **sec-Butylbenzene** | **12** | **J** | 20 | 5.4 | ug/L | | | 10/03/17 15:45 | 20 |
| Methyl tert butyl ether | ND | | 20 | 5.4 | ug/L | | | 10/02/17 18:50 | 20 |
| Methylene Chloride | ND | | 20 | 11 | ug/L | | | 10/03/17 15:45 | 20 |
| o-Xylene | ND | | 20 | 5.6 | ug/L | | | 10/03/17 15:45 | 20 |
| Styrene | ND | | 20 | 4.6 | ug/L | | | 10/03/17 15:45 | 20 |
| tert-Butylbenzene | ND | | 20 | 5.2 | ug/L | | | 10/03/17 15:45 | 20 |
| Tetrachloroethene | ND | | 20 | 6.0 | ug/L | | | 10/03/17 15:45 | 20 |
| Tetrahydrofuran | ND | | 100 | 17 | ug/L | | | 10/03/17 15:45 | 20 |
| Toluene | ND | | 20 | 4.6 | ug/L | | | 10/03/17 15:45 | 20 |
| trans-1,2-Dichloroethene | ND | | 20 | 5.8 | ug/L | | | 10/03/17 15:45 | 20 |
| trans-1,3-Dichloropropene | ND | | 20 | 6.2 | ug/L | | | 10/03/17 15:45 | 20 |
| Trichloroethene | ND | | 20 | 6.6 | ug/L | | | 10/03/17 15:45 | 20 |
| Trichlorofluoromethane | ND | | 20 | 10 | ug/L | | | 10/03/17 15:45 | 20 |
| Vinyl chloride | ND | | 20 | 9.0 | ug/L | | | 10/03/17 15:45 | 20 |
| Methylcyclohexane | ND | | 20 | 9.0 | ug/L | | | 10/03/17 15:45 | 20 |
| Chlorodibromomethane | ND | | 20 | 5.0 | ug/L | | | 10/03/17 15:45 | 20 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *131* | | *61 - 138* | | *10/02/17 18:50* | *20* |
| *1,2-Dichloroethane-d4 (Surr)* | *104* | | *61 - 138* | | *10/03/17 15:45* | *20* |
| *4-Bromofluorobenzene (Surr)* | *108* | | *69 - 120* | | *10/02/17 18:50* | *20* |
| *4-Bromofluorobenzene (Surr)* | *99* | | *69 - 120* | | *10/03/17 15:45* | *20* |
| *Toluene-d8 (Surr)* | *102* | | *73 - 120* | | *10/02/17 18:50* | *20* |
| *Toluene-d8 (Surr)* | *90* | | *73 - 120* | | *10/03/17 15:45* | *20* |
| *Dibromofluoromethane (Surr)* | *133* | *X* | *69 - 124* | | *10/02/17 18:50* | *20* |
| *Dibromofluoromethane (Surr)* | *103* | | *69 - 124* | | *10/03/17 15:45* | *20* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Acenaphthylene | ND | | 0.19 | 0.046 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Acetophenone | ND | | 0.95 | 0.32 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Anthracene | ND | | 0.19 | 0.084 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Atrazine | ND | | 1.9 | 0.32 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Benzaldehyde | ND | | 1.9 | 0.37 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Benzo[a]anthracene | ND | | 0.19 | 0.028 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Benzo[b]fluoranthene | ND | | 0.19 | 0.038 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Benzo[k]fluoranthene | ND | | 0.19 | 0.043 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.19 | 0.044 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Benzo[a]pyrene | ND | | 0.19 | 0.049 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Butyl benzyl phthalate | ND | | 1.9 | 0.25 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 1,1'-Biphenyl | ND | | 0.95 | 0.12 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-25-(20170920)**
**Date Collected: 09/20/17 15:48**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-23**
**Matrix: Water**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bis(2-chloroethoxy)methane | ND | | 0.95 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.95 | 0.095 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 1.9 | 0.21 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Caprolactam | ND | | 4.8 | 0.19 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Carbazole | ND | | 0.95 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 4-Chloroaniline | ND | | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 4-Chloro-3-methylphenol | ND | | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 2-Chloronaphthalene | ND | | 0.95 | 0.095 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 2-Chlorophenol | ND | | 0.95 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 1.9 | 0.29 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Chrysene | ND | | 0.19 | 0.048 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 2-Methylnaphthalene | ND | | 0.19 | 0.086 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 3 & 4 Methylphenol | ND | | 1.9 | 0.76 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Dibenzofuran | ND | | 0.95 | 0.019 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 4.8 | 0.35 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 2,4-Dichlorophenol | ND | | 1.9 | 0.18 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| **Diethyl phthalate** | **0.85** | **J B** | 1.9 | 0.57 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 2,4-Dimethylphenol | ND | | 1.9 | 0.24 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Dimethyl phthalate | ND | | 1.9 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 4.8 | 2.3 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 2,4-Dinitrophenol | ND | | 4.8 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 2,4-Dinitrotoluene | ND | | 4.8 | 0.24 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Di-n-butyl phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Di-n-octyl phthalate | ND | | 1.9 | 0.22 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Fluoranthene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Fluorene | ND | | 0.19 | 0.039 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Hexachlorobenzene | ND | | 0.19 | 0.081 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Hexachlorobutadiene | ND | | 0.95 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Hexachlorocyclopentadiene | ND | | 9.5 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Hexachloroethane | ND | | 0.95 | 0.18 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.19 | 0.041 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Isophorone | ND | | 0.95 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 2-Methylphenol | ND | | 0.95 | 0.16 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Naphthalene | ND | | 0.19 | 0.060 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 2-Nitroaniline | ND | * | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 3-Nitroaniline | ND | | 1.9 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 4-Nitroaniline | ND | | 1.9 | 0.21 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Nitrobenzene | ND | | 0.95 | 0.038 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 2-Nitrophenol | ND | | 1.9 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 4-Nitrophenol | ND | | 4.8 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.95 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.95 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 2,2'-oxybis[1-chloropropane] | ND | | 0.95 | 0.38 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Pentachlorophenol | ND | | 4.8 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Phenanthrene | ND | | 0.19 | 0.059 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Phenol | ND | | 0.95 | 0.57 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| Pyrene | ND | | 0.19 | 0.040 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |

**Client Sample ID: AMW-25-(20170920)**
**Date Collected: 09/20/17 15:48**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-23**
**Matrix: Water**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-Trichlorophenol | ND | | 4.8 | 0.29 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 2,4,6-Trichlorophenol | ND | | 4.8 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |
| 2,6-Dinitrotoluene | ND | | 4.8 | 0.76 | ug/L | | 09/27/17 09:28 | 09/29/17 15:41 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorobiphenyl (Surr)* | *85* | | *38 - 120* | *09/27/17 09:28* | *09/29/17 15:41* | *1* |
| *2-Fluorophenol (Surr)* | *45* | | *10 - 120* | *09/27/17 09:28* | *09/29/17 15:41* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *80* | | *28 - 120* | *09/27/17 09:28* | *09/29/17 15:41* | *1* |
| *Nitrobenzene-d5 (Surr)* | *75* | | *32 - 120* | *09/27/17 09:28* | *09/29/17 15:41* | *1* |
| *Phenol-d5 (Surr)* | *28* | | *10 - 120* | *09/27/17 09:28* | *09/29/17 15:41* | *1* |
| *Terphenyl-d14 (Surr)* | *95* | | *23 - 127* | *09/27/17 09:28* | *09/29/17 15:41* | *1* |

## Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **WI Gasoline Range Organics (C6-C10)** | **5700** | | 1000 | 200 | ug/L | | | 10/03/17 05:45 | 10 |

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | ND | | 0.19 | 0.048 | ug/L | | 09/27/17 13:47 | 09/29/17 12:24 | 1 |
| Aroclor-1221 | ND | | 0.19 | 0.087 | ug/L | | 09/27/17 13:47 | 09/29/17 12:24 | 1 |
| Aroclor-1232 | ND | | 0.19 | 0.067 | ug/L | | 09/27/17 13:47 | 09/29/17 12:24 | 1 |
| Aroclor-1242 | ND | | 0.19 | 0.058 | ug/L | | 09/27/17 13:47 | 09/29/17 12:24 | 1 |
| Aroclor-1248 | ND | | 0.19 | 0.048 | ug/L | | 09/27/17 13:47 | 09/29/17 12:24 | 1 |
| Aroclor-1254 | ND | | 0.19 | 0.029 | ug/L | | 09/27/17 13:47 | 09/29/17 12:24 | 1 |
| Aroclor-1260 | ND | | 0.19 | 0.038 | ug/L | | 09/27/17 13:47 | 09/29/17 12:24 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *53* | | *10 - 120* | *09/27/17 13:47* | *09/29/17 12:24* | *1* |
| *Tetrachloro-m-xylene* | *72* | | *21 - 120* | *09/27/17 13:47* | *09/29/17 12:24* | *1* |

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **WI Diesel Range Organics (C10-C28)** | **7.0** | **B** | 0.95 | 0.19 | mg/L | | 09/27/17 17:14 | 09/29/17 16:35 | 10 |

## Method: 6010B - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Barium** | **130** | **J** | 200 | 2.4 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |
| Aluminum | ND | | 200 | 40 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |
| Cadmium | ND | | 5.0 | 0.29 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |
| **Chromium** | **1.4** | **J** | 10 | 0.55 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |
| Silver | ND | | 10 | 0.92 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |
| Arsenic | ND | | 10 | 3.3 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |
| Beryllium | ND | | 5.0 | 0.21 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |
| Lead | ND | | 3.0 | 1.9 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |
| **Calcium** | **170000** | | 5000 | 710 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |
| Cobalt | ND | | 7.0 | 0.84 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |
| Copper | ND | | 25 | 3.9 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |
| **Iron** | **1700** | | 100 | 25 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |
| **Potassium** | **3300** | **J** | 5000 | 70 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-25-(20170920)**
**Date Collected: 09/20/17 15:48**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-23**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Magnesium** | **54000** | | 5000 | 230 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |
| **Manganese** | **950** | | 15 | 5.1 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |
| **Sodium** | **48000** | | 5000 | 330 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |
| Nickel | ND | | 40 | 1.6 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |
| Antimony | ND | | 10 | 3.1 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |
| Vanadium | ND | | 10 | 4.4 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |
| Zinc | ND | | 50 | 16 | ug/L | | 09/25/17 14:00 | 09/26/17 21:01 | 1 |

### Method: 6020A - Metals (ICP/MS) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Thallium | ND | | 1.0 | 0.20 | ug/L | | 09/25/17 14:00 | 09/26/17 16:04 | 1 |
| Selenium | ND | | 5.0 | 0.89 | ug/L | | 09/25/17 14:00 | 09/26/17 16:04 | 1 |

### Method: 7470A - Mercury (CVAA) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.20 | 0.13 | ug/L | | 09/25/17 14:00 | 09/26/17 12:05 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | 0.010 | 0.0070 | mg/L | | 09/28/17 08:48 | 09/28/17 17:02 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK12**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-24**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 19:12 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/02/17 19:12 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 19:12 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 19:12 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/02/17 19:12 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 19:12 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/02/17 19:12 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 19:12 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 19:12 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/02/17 19:12 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 19:12 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 19:12 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/02/17 19:12 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 19:12 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 19:12 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 19:12 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 19:12 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 19:12 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 19:12 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 19:12 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 19:12 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/02/17 19:12 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/02/17 19:12 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 19:12 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 19:12 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 19:12 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/02/17 19:12 | 1 |
| Ethyl ether | ND | | 2.0 | 0.35 | ug/L | | | 10/02/17 19:12 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 19:12 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 19:12 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK12**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

**Lab Sample ID: 240-85395-24**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 19:12 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/02/17 19:12 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 19:12 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 19:12 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/02/17 19:12 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 19:12 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/02/17 19:12 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/02/17 19:12 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 19:12 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 19:12 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/02/17 19:12 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 19:12 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 19:12 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 19:12 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 19:12 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/02/17 19:12 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 19:12 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 19:12 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 19:12 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/02/17 19:12 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 19:12 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 19:12 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 19:12 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 19:12 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *126* | | *61 - 138* | | *10/02/17 19:12* | *1* |
| *4-Bromofluorobenzene (Surr)* | *108* | | *69 - 120* | | *10/02/17 19:12* | *1* |
| *Toluene-d8 (Surr)* | *104* | | *73 - 120* | | *10/02/17 19:12* | *1* |
| *Dibromofluoromethane (Surr)* | *127* | *X* | *69 - 124* | | *10/02/17 19:12* | *1* |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-26-(20170920)**
**Date Collected: 09/20/17 17:15**
**Date Received: 09/23/17 09:20**

**Lab Sample ID: 240-85395-25**
**Matrix: Water**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/03/17 16:09 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/03/17 16:09 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/03/17 16:09 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/03/17 16:09 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/03/17 16:09 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/03/17 16:09 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/03/17 16:09 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/03/17 16:09 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/03/17 16:09 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/03/17 16:09 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/03/17 16:09 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/03/17 16:09 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/03/17 16:09 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/03/17 16:09 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/03/17 16:09 | 1 |
| **Chlorobenzene** | **3.6** | | 1.0 | 0.32 | ug/L | | | 10/03/17 16:09 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/03/17 16:09 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/03/17 16:09 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/03/17 16:09 | 1 |
| **cis-1,2-Dichloroethene** | **1.2** | | 1.0 | 0.30 | ug/L | | | 10/03/17 16:09 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/03/17 16:09 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/03/17 16:09 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/03/17 16:09 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/03/17 16:09 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/03/17 16:09 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/03/17 16:09 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/03/17 16:09 | 1 |
| Ethyl ether | ND | | 2.0 | 0.35 | ug/L | | | 10/03/17 16:09 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/03/17 16:09 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/03/17 16:09 | 1 |

**Client Sample ID: AMW-26-(20170920)**
**Date Collected: 09/20/17 17:15**
**Date Received: 09/23/17 09:20**

**Lab Sample ID: 240-85395-25**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/03/17 16:09 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/03/17 16:09 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/03/17 16:09 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/03/17 16:09 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/03/17 16:09 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/03/17 16:09 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/03/17 16:09 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/03/17 16:09 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/03/17 16:09 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 19:34 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/03/17 16:09 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/03/17 16:09 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/03/17 16:09 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/03/17 16:09 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/03/17 16:09 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/03/17 16:09 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/03/17 16:09 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/03/17 16:09 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/03/17 16:09 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/03/17 16:09 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/03/17 16:09 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/03/17 16:09 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/03/17 16:09 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/03/17 16:09 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *122* | | *61 - 138* | | *10/02/17 19:34* | *1* |
| *1,2-Dichloroethane-d4 (Surr)* | *105* | | *61 - 138* | | *10/03/17 16:09* | *1* |
| *4-Bromofluorobenzene (Surr)* | *104* | | *69 - 120* | | *10/02/17 19:34* | *1* |
| *4-Bromofluorobenzene (Surr)* | *94* | | *69 - 120* | | *10/03/17 16:09* | *1* |
| *Toluene-d8 (Surr)* | *98* | | *73 - 120* | | *10/02/17 19:34* | *1* |
| *Toluene-d8 (Surr)* | *89* | | *73 - 120* | | *10/03/17 16:09* | *1* |
| *Dibromofluoromethane (Surr)* | *128* | *X* | *69 - 124* | | *10/02/17 19:34* | *1* |
| *Dibromofluoromethane (Surr)* | *99* | | *69 - 124* | | *10/03/17 16:09* | *1* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Acenaphthene** | **0.72** | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Acenaphthylene** | **0.19** | | 0.19 | 0.046 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| Acetophenone | ND | | 0.95 | 0.32 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Anthracene** | **0.60** | | 0.19 | 0.084 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| Atrazine | ND | | 1.9 | 0.32 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| Benzaldehyde | ND | | 1.9 | 0.37 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Benzo[a]anthracene** | **1.8** | | 0.19 | 0.028 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Benzo[b]fluoranthene** | **1.8** | | 0.19 | 0.038 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Benzo[k]fluoranthene** | **0.93** | | 0.19 | 0.043 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Benzo[g,h,i]perylene** | **0.98** | | 0.19 | 0.044 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Benzo[a]pyrene** | **1.8** | | 0.19 | 0.049 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| Butyl benzyl phthalate | ND | | 1.9 | 0.25 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 1,1'-Biphenyl | ND | | 0.95 | 0.12 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |

**Client Sample ID: AMW-26-(20170920)**
**Date Collected: 09/20/17 17:15**
**Date Received: 09/23/17 09:20**

**Lab Sample ID: 240-85395-25**
**Matrix: Water**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bis(2-chloroethoxy)methane | ND | | 0.95 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| Bis(2-chloroethyl)ether | ND | | 0.95 | 0.095 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Bis(2-ethylhexyl) phthalate** | **1.8** | **J** | 4.8 | 1.6 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 1.9 | 0.21 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Caprolactam** | **11** | | 4.8 | 0.19 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Carbazole** | **0.33** | **J** | 0.95 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 4-Chloroaniline | ND | | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 4-Chloro-3-methylphenol | ND | | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 2-Chloronaphthalene | ND | | 0.95 | 0.095 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 2-Chlorophenol | ND | | 0.95 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 1.9 | 0.29 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Chrysene** | **1.9** | | 0.19 | 0.048 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **2-Methylnaphthalene** | **0.24** | | 0.19 | 0.086 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 3 & 4 Methylphenol | ND | | 1.9 | 0.76 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Dibenzofuran** | **0.55** | **J** | 0.95 | 0.019 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 4.8 | 0.35 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 2,4-Dichlorophenol | ND | | 1.9 | 0.18 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Diethyl phthalate** | **1.9** | **B** | 1.9 | 0.57 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 2,4-Dimethylphenol | ND | | 1.9 | 0.24 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| Dimethyl phthalate | ND | | 1.9 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 4.8 | 2.3 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 2,4-Dinitrophenol | ND | | 4.8 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 2,4-Dinitrotoluene | ND | | 4.8 | 0.24 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| Di-n-butyl phthalate | ND | | 4.8 | 1.6 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| Di-n-octyl phthalate | ND | | 1.9 | 0.22 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Fluoranthene** | **3.8** | | 0.19 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Fluorene** | **1.3** | | 0.19 | 0.039 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| Hexachlorobenzene | ND | | 0.19 | 0.081 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| Hexachlorobutadiene | ND | | 0.95 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| Hexachlorocyclopentadiene | ND | | 9.5 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| Hexachloroethane | ND | | 0.95 | 0.18 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Indeno[1,2,3-cd]pyrene** | **0.79** | | 0.19 | 0.041 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| Isophorone | ND | | 0.95 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 2-Methylphenol | ND | | 0.95 | 0.16 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Naphthalene** | **0.19** | | 0.19 | 0.060 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 2-Nitroaniline | ND | * | 1.9 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 3-Nitroaniline | ND | | 1.9 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 4-Nitroaniline | ND | | 1.9 | 0.21 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| Nitrobenzene | ND | | 0.95 | 0.038 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 2-Nitrophenol | ND | | 1.9 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 4-Nitrophenol | ND | | 4.8 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| N-Nitrosodiphenylamine | ND | | 0.95 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 0.95 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 2,2'-oxybis[1-chloropropane] | ND | | 0.95 | 0.38 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| Pentachlorophenol | ND | | 4.8 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Phenanthrene** | **1.8** | | 0.19 | 0.059 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| Phenol | ND | | 0.95 | 0.57 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| **Pyrene** | **3.7** | | 0.19 | 0.040 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |

**Client Sample ID: AMW-26-(20170920)**
**Date Collected: 09/20/17 17:15**
**Date Received: 09/23/17 09:20**

**Lab Sample ID: 240-85395-25**
**Matrix: Water**

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2,4,5-Trichlorophenol | ND | | 4.8 | 0.29 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 2,4,6-Trichlorophenol | ND | | 4.8 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |
| 2,6-Dinitrotoluene | ND | | 4.8 | 0.76 | ug/L | | 09/27/17 09:28 | 09/29/17 18:55 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorobiphenyl (Surr)* | *91* | | *38 - 120* | *09/27/17 09:28* | *09/29/17 18:55* | *1* |
| *2-Fluorophenol (Surr)* | *40* | | *10 - 120* | *09/27/17 09:28* | *09/29/17 18:55* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *85* | | *28 - 120* | *09/27/17 09:28* | *09/29/17 18:55* | *1* |
| *Nitrobenzene-d5 (Surr)* | *68* | | *32 - 120* | *09/27/17 09:28* | *09/29/17 18:55* | *1* |
| *Phenol-d5 (Surr)* | *26* | | *10 - 120* | *09/27/17 09:28* | *09/29/17 18:55* | *1* |
| *Terphenyl-d14 (Surr)* | *57* | | *23 - 127* | *09/27/17 09:28* | *09/29/17 18:55* | *1* |

## Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| WI Gasoline Range Organics (C6-C10) | ND | | 100 | 20 | ug/L | | | 10/03/17 06:25 | 1 |

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | ND | | 0.19 | 0.048 | ug/L | | 09/27/17 13:47 | 09/29/17 12:44 | 1 |
| Aroclor-1221 | ND | | 0.19 | 0.087 | ug/L | | 09/27/17 13:47 | 09/29/17 12:44 | 1 |
| Aroclor-1232 | ND | | 0.19 | 0.067 | ug/L | | 09/27/17 13:47 | 09/29/17 12:44 | 1 |
| Aroclor-1242 | ND | | 0.19 | 0.058 | ug/L | | 09/27/17 13:47 | 09/29/17 12:44 | 1 |
| Aroclor-1248 | ND | | 0.19 | 0.048 | ug/L | | 09/27/17 13:47 | 09/29/17 12:44 | 1 |
| Aroclor-1254 | ND | | 0.19 | 0.029 | ug/L | | 09/27/17 13:47 | 09/29/17 12:44 | 1 |
| Aroclor-1260 | ND | | 0.19 | 0.038 | ug/L | | 09/27/17 13:47 | 09/29/17 12:44 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *24* | | *10 - 120* | *09/27/17 13:47* | *09/29/17 12:44* | *1* |
| *Tetrachloro-m-xylene* | *60* | | *21 - 120* | *09/27/17 13:47* | *09/29/17 12:44* | *1* |

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **WI Diesel Range Organics (C10-C28)** | **1.2** | **B** | 0.095 | 0.019 | mg/L | | 09/27/17 17:14 | 09/28/17 20:32 | 1 |

## Method: 6010B - Metals (ICP) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Barium** | **220** | | 200 | 2.4 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |
| **Aluminum** | **62** | **J** | 200 | 40 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |
| Cadmium | ND | | 5.0 | 0.29 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |
| **Chromium** | **1.4** | **J** | 10 | 0.55 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |
| Silver | ND | | 10 | 0.92 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |
| **Arsenic** | **9.0** | **J** | 10 | 3.3 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |
| Beryllium | ND | | 5.0 | 0.21 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |
| Lead | ND | | 3.0 | 1.9 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |
| **Calcium** | **150000** | | 5000 | 710 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |
| **Cobalt** | **0.90** | **J** | 7.0 | 0.84 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |
| Copper | ND | | 25 | 3.9 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |
| **Iron** | **12000** | | 100 | 25 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |
| **Potassium** | **5700** | | 5000 | 70 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: AMW-26-(20170920)**
**Date Collected: 09/20/17 17:15**
**Date Received: 09/23/17 09:20**

**Lab Sample ID: 240-85395-25**
**Matrix: Water**

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

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Magnesium** | **46000** | | 5000 | 230 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |
| **Manganese** | **2300** | | 15 | 5.1 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |
| **Sodium** | **56000** | | 5000 | 330 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |
| **Nickel** | **3.0** | **J** | 40 | 1.6 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |
| Antimony | ND | | 10 | 3.1 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |
| Vanadium | ND | | 10 | 4.4 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |
| Zinc | ND | | 50 | 16 | ug/L | | 09/25/17 14:00 | 09/26/17 21:05 | 1 |

### Method: 6020A - Metals (ICP/MS) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Thallium | ND | | 1.0 | 0.20 | ug/L | | 09/25/17 14:00 | 09/26/17 16:08 | 1 |
| Selenium | ND | | 5.0 | 0.89 | ug/L | | 09/25/17 14:00 | 09/26/17 16:08 | 1 |

### Method: 7470A - Mercury (CVAA) - Dissolved

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.20 | 0.13 | ug/L | | 09/25/17 14:00 | 09/26/17 12:07 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | 0.010 | 0.0070 | mg/L | | 09/28/17 08:48 | 09/28/17 17:04 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK13**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/23/17 09:20**

**Lab Sample ID: 240-85395-26**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 19:56 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/02/17 19:56 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 19:56 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 19:56 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/02/17 19:56 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 19:56 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/02/17 19:56 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 19:56 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 19:56 | 1 |
| **Acetone** | **2.3** | **J** | 10 | 1.8 | ug/L | | | 10/02/17 19:56 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 19:56 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 19:56 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/02/17 19:56 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 19:56 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 19:56 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 19:56 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 19:56 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 19:56 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 19:56 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 19:56 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 19:56 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/02/17 19:56 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/02/17 19:56 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 19:56 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 19:56 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 19:56 | 1 |
| Dichlorofluoromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 19:56 | 1 |
| Ethyl ether | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 19:56 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 19:56 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 19:56 | 1 |

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

**Client Sample ID: TRIP BLANK13**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/23/17 09:20**

**Lab Sample ID: 240-85395-26**
**Matrix: Water**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 19:56 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/02/17 19:56 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 19:56 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 19:56 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/02/17 19:56 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 19:56 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/02/17 19:56 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 5.0 | 0.71 | ug/L | | | 10/02/17 19:56 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 19:56 | 1 |
| Methyl tert butyl ether | ND | | 2.0 | 0.27 | ug/L | | | 10/02/17 19:56 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/02/17 19:56 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 19:56 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 19:56 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 19:56 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 19:56 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/02/17 19:56 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 19:56 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 19:56 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 19:56 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/02/17 19:56 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 19:56 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 19:56 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 19:56 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 19:56 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *124* | | *61 - 138* | | *10/02/17 19:56* | *1* |
| *4-Bromofluorobenzene (Surr)* | *111* | | *69 - 120* | | *10/02/17 19:56* | *1* |
| *Toluene-d8 (Surr)* | *106* | | *73 - 120* | | *10/02/17 19:56* | *1* |
| *Dibromofluoromethane (Surr)* | *130* | *X* | *69 - 124* | | *10/02/17 19:56* | *1* |

# Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | |
|---|---|---|---|---|---|
| | | 12DCE | BFB | TOL | DBFM |
| Lab Sample ID | Client Sample ID | (61-138) | (69-120) | (73-120) | (69-124) |
| 240-85327-B-1 MS | Matrix Spike | 107 | 122 X | 111 | 108 |
| 240-85327-B-1 MSD | Matrix Spike Duplicate | 132 | 120 | 107 | 128 X |
| 240-85395-1 | AMW-07-(20170919) | 117 | 118 | 100 | 120 |
| 240-85395-2 | TRIP BLANK1 | 117 | 113 | 103 | 121 |
| 240-85395-5 | AMW-19-(20170919) | 117 | 119 | 103 | 119 |
| 240-85395-6 | TRIP BLANK3 | 108 | 99 | 105 | 99 |
| 240-85395-7 | AMW-20-(20170920) | 112 | 114 | 103 | 115 |
| 240-85395-8 | TRIP BLANK4 | 118 | 121 X | 102 | 119 |
| 240-85395-9 | DUP-02-(20170920) | 114 | 120 | 103 | 116 |
| 240-85395-10 | TRIP BLANK5 | 116 | 112 | 103 | 116 |
| 240-85395-11 | AMW-21-(20170919) | 111 | 102 | 105 | 101 |
| 240-85395-12 | TRIP BLANK6 | 109 | 90 | 94 | 109 |
| 240-85395-13 | AMW-22-(20170919) | 109 | 91 | 94 | 107 |
| 240-85395-14 | TRIP BLANK7 | 107 | 90 | 90 | 107 |
| 240-85395-15 | AMW-22B-(20170919) | 107 | 87 | 93 | 102 |
| 240-85395-15 MS | AMW-22B-(20170919) | 97 | 107 | 99 | 91 |
| 240-85395-15 MSD | AMW-22B-(20170919) | 94 | 108 | 102 | 97 |
| 240-85395-16 | TRIP BLANK8 | 113 | 99 | 104 | 98 |
| 240-85395-17 | AMW-23-(20170920) | 121 | 102 | 104 | 125 X |
| 240-85395-18 | TRIP BLANK9 | 127 | 103 | 100 | 127 X |
| 240-85395-19 | AMW-23B-(20170920) | 126 | 106 | 104 | 125 X |
| 240-85395-20 | TRIP BLANK10 | 125 | 102 | 102 | 122 |
| 240-85395-21 | AMW-24-(20170920) | 128 | 104 | 105 | 123 |
| 240-85395-22 | TRIP BLANK11 | 127 | 112 | 102 | 127 X |
| 240-85395-23 | AMW-25-(20170920) | 131 | 108 | 102 | 133 X |
| 240-85395-23 | AMW-25-(20170920) | 104 | 99 | 90 | 103 |
| 240-85395-24 | TRIP BLANK12 | 126 | 108 | 104 | 127 X |
| 240-85395-25 | AMW-26-(20170920) | 122 | 104 | 98 | 128 X |
| 240-85395-25 | AMW-26-(20170920) | 105 | 94 | 89 | 99 |
| 240-85395-26 | TRIP BLANK13 | 124 | 111 | 106 | 130 X |
| 240-85397-E-25 MS | Matrix Spike | 116 | 106 | 111 | 105 |
| 240-85397-F-25 MSD | Matrix Spike Duplicate | 113 | 117 | 106 | 116 |
| LCS 240-297056/5 | Lab Control Sample | 91 | 103 | 99 | 89 |
| LCS 240-297061/4 | Lab Control Sample | 99 | 119 | 109 | 99 |
| LCS 240-297179/4 | Lab Control Sample | 127 | 112 | 111 | 113 |
| LCS 240-297346/4 | Lab Control Sample | 96 | 112 | 100 | 90 |
| MB 240-297056/7 | Method Blank | 99 | 90 | 92 | 101 |
| MB 240-297061/6 | Method Blank | 106 | 114 | 104 | 104 |
| MB 240-297179/6 | Method Blank | 129 | 109 | 101 | 125 X |
| MB 240-297346/6 | Method Blank | 103 | 94 | 95 | 99 |

**Surrogate Legend**

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

# Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | |
|---|---|---|---|---|---|---|---|
| | | FBP | 2FP | TBP | NBZ | PHL | TPH |
| Lab Sample ID | Client Sample ID | (38-120) | (10-120) | (28-120) | (32-120) | (10-120) | (23-127) |
| 240-85395-1 | AMW-07-(20170919) | 84 | 36 | 52 | 64 | 23 | 97 |
| 240-85395-5 | AMW-19-(20170919) | 70 | 34 | 40 | 61 | 21 | 98 |
| 240-85395-7 | AMW-20-(20170920) | 80 | 38 | 62 | 65 | 24 | 91 |
| 240-85395-9 | DUP-02-(20170920) | 77 | 35 | 60 | 61 | 21 | 88 |
| 240-85395-11 | AMW-21-(20170919) | 92 | 45 | 65 | 73 | 27 | 85 |
| 240-85395-13 | AMW-22-(20170919) | 80 | 37 | 41 | 65 | 25 | 98 |
| 240-85395-15 | AMW-22B-(20170919) | 82 | 40 | 68 | 67 | 22 | 88 |
| 240-85395-17 | AMW-23-(20170920) | 80 | 41 | 65 | 67 | 24 | 96 |
| 240-85395-19 | AMW-23B-(20170920) | 84 | 36 | 67 | 69 | 21 | 93 |
| 240-85395-21 | AMW-24-(20170920) | 87 | 43 | 73 | 72 | 26 | 96 |
| 240-85395-23 | AMW-25-(20170920) | 85 | 45 | 80 | 75 | 28 | 95 |
| 240-85395-25 | AMW-26-(20170920) | 91 | 40 | 85 | 68 | 26 | 57 |
| LCS 240-296281/22-A | Lab Control Sample | 93 | 53 | 87 | 82 | 34 | 98 |
| LCS 240-296485/19-A | Lab Control Sample | 90 | 50 | 84 | 80 | 32 | 100 |
| LCSD 240-296485/20-A | Lab Control Sample Dup | 96 | 53 | 90 | 84 | 36 | 106 |
| MB 240-296281/21-A | Method Blank | 76 | 48 | 54 | 65 | 30 | 88 |
| MB 240-296485/18-A | Method Blank | 89 | 51 | 69 | 76 | 32 | 110 |

**Surrogate Legend**

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| | | DCB2 | TCX2 |
| Lab Sample ID | Client Sample ID | (10-120) | (21-120) |
| 240-85395-1 | AMW-07-(20170919) | 28 | 43 |
| 240-85395-5 | AMW-19-(20170919) | 52 | 51 |
| 240-85395-7 | AMW-20-(20170920) | 48 | 54 |
| 240-85395-9 | DUP-02-(20170920) | 43 | 48 |
| 240-85395-11 | AMW-21-(20170919) | 11 | 46 |
| 240-85395-13 | AMW-22-(20170919) | 40 | 41 |
| 240-85395-15 | AMW-22B-(20170919) | 37 | 42 |
| 240-85395-17 | AMW-23-(20170920) | 51 | 65 |
| 240-85395-19 | AMW-23B-(20170920) | 56 | 56 |
| 240-85395-21 | AMW-24-(20170920) | 58 | 56 |
| 240-85395-23 | AMW-25-(20170920) | 53 | 72 |
| 240-85395-25 | AMW-26-(20170920) | 24 | 60 |
| LCS 240-296387/19-A | Lab Control Sample | 71 | 58 |
| LCS 240-296554/16-A | Lab Control Sample | 67 | 68 |
| MB 240-296387/18-A | Method Blank | 70 | 60 |
| MB 240-296554/15-A | Method Blank | 79 | 73 |

**Surrogate Legend**

# Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

DCB = DCB Decachlorobiphenyl
TCX = Tetrachloro-m-xylene

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 240-297056/7**
**Matrix: Water**
**Analysis Batch: 297056**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 15:00 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 15:00 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/01/17 15:00 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 15:00 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 15:00 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/01/17 15:00 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 15:00 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/01/17 15:00 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 15:00 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 15:00 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/01/17 15:00 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 15:00 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 15:00 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/01/17 15:00 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 15:00 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 15:00 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 15:00 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 15:00 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 15:00 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 15:00 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 15:00 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 15:00 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/01/17 15:00 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/01/17 15:00 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 15:00 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 15:00 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/01/17 15:00 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/01/17 15:00 | 1 |
| Ethyl ether | ND | | 2.0 | 0.35 | ug/L | | | 10/01/17 15:00 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 15:00 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 240-297056/7**
**Matrix: Water**
**Analysis Batch: 297056**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 15:00 | 1 |
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 15:00 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/01/17 15:00 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 15:00 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 15:00 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/01/17 15:00 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 15:00 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/01/17 15:00 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/01/17 15:00 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 15:00 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 15:00 | 1 |
| Methylene Chloride | 0.621 | J | 1.0 | 0.53 | ug/L | | | 10/01/17 15:00 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 15:00 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 15:00 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 15:00 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 15:00 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/01/17 15:00 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 15:00 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 15:00 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 15:00 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/01/17 15:00 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/01/17 15:00 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 15:00 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 15:00 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 15:00 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *61 - 138* | | *10/01/17 15:00* | *1* |
| *4-Bromofluorobenzene (Surr)* | *90* | | *69 - 120* | | *10/01/17 15:00* | *1* |
| *Toluene-d8 (Surr)* | *92* | | *73 - 120* | | *10/01/17 15:00* | *1* |
| *Dibromofluoromethane (Surr)* | *101* | | *69 - 124* | | *10/01/17 15:00* | *1* |

**Lab Sample ID: LCS 240-297056/5**
**Matrix: Water**
**Analysis Batch: 297056**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 10.0 | 11.0 | | ug/L | | 110 | 73 - 136 |
| 1,1,1-Trichloroethane | 10.0 | 11.2 | | ug/L | | 112 | 64 - 147 |
| 1,1,2,2-Tetrachloroethane | 10.0 | 11.6 | | ug/L | | 116 | 58 - 122 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 10.0 | 12.8 | | ug/L | | 128 | 65 - 144 |
| 1,1,2-Trichloroethane | 10.0 | 11.9 | | ug/L | | 119 | 76 - 121 |
| 1,1-Dichloroethane | 10.0 | 10.4 | | ug/L | | 104 | 74 - 120 |
| 1,1-Dichloroethene | 10.0 | 11.5 | | ug/L | | 115 | 65 - 127 |
| 1,1-Dichloropropene | 10.0 | 12.0 | | ug/L | | 120 | 80 - 122 |
| 1,2,3-Trichlorobenzene | 10.0 | 9.56 | | ug/L | | 96 | 31 - 144 |
| 1,2,3-Trichloropropane | 10.0 | 10.6 | | ug/L | | 106 | 53 - 134 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 240-297056/5**
**Matrix: Water**
**Analysis Batch: 297056**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 10.0 | 8.83 | | ug/L | | 88 | 34 - 141 |
| 1,2,4-Trimethylbenzene | 10.0 | 12.2 | * | ug/L | | 122 | 80 - 120 |
| 1,2-Dibromo-3-Chloropropane | 10.0 | 8.48 | | ug/L | | 85 | 50 - 130 |
| 1,2-Dichlorobenzene | 10.0 | 10.5 | | ug/L | | 105 | 80 - 120 |
| 1,2-Dichloroethane | 10.0 | 11.0 | | ug/L | | 110 | 68 - 133 |
| 1,2-Dichloropropane | 10.0 | 10.3 | | ug/L | | 103 | 78 - 127 |
| 1,3,5-Trimethylbenzene | 10.0 | 12.4 | * | ug/L | | 124 | 79 - 120 |
| 1,3-Dichlorobenzene | 10.0 | 9.97 | | ug/L | | 100 | 80 - 120 |
| 1,3-Dichloropropane | 10.0 | 12.0 | | ug/L | | 120 | 71 - 124 |
| 1,4-Dichlorobenzene | 10.0 | 10.1 | | ug/L | | 101 | 80 - 120 |
| Allyl chloride | 10.0 | 10.9 | | ug/L | | 109 | 57 - 143 |
| 2,2-Dichloropropane | 10.0 | 13.4 | | ug/L | | 134 | 32 - 178 |
| 2-Chlorotoluene | 10.0 | 10.8 | | ug/L | | 108 | 80 - 120 |
| 2-Hexanone | 20.0 | 17.7 | | ug/L | | 89 | 28 - 169 |
| Bromobenzene | 10.0 | 9.67 | | ug/L | | 97 | 73 - 120 |
| Bromochloromethane | 10.0 | 9.59 | | ug/L | | 96 | 78 - 120 |
| 4-Chlorotoluene | 10.0 | 10.8 | | ug/L | | 108 | 79 - 120 |
| p-Isopropyltoluene | 10.0 | 11.7 | | ug/L | | 117 | 78 - 125 |
| Acetone | 20.0 | 17.1 | | ug/L | | 86 | 35 - 131 |
| Benzene | 10.0 | 11.4 | | ug/L | | 114 | 79 - 120 |
| Bromoform | 10.0 | 9.89 | | ug/L | | 99 | 55 - 145 |
| Bromomethane | 10.0 | 11.6 | | ug/L | | 116 | 17 - 158 |
| Carbon disulfide | 10.0 | 13.9 | | ug/L | | 139 | 49 - 141 |
| Carbon tetrachloride | 10.0 | 13.2 | | ug/L | | 132 | 55 - 171 |
| Chlorobenzene | 10.0 | 11.3 | | ug/L | | 113 | 80 - 120 |
| Chloroethane | 10.0 | 7.05 | | ug/L | | 71 | 10 - 149 |
| Chloroform | 10.0 | 11.3 | | ug/L | | 113 | 80 - 120 |
| Chloromethane | 10.0 | 7.74 | | ug/L | | 77 | 59 - 124 |
| cis-1,2-Dichloroethene | 10.0 | 10.6 | | ug/L | | 106 | 77 - 120 |
| cis-1,3-Dichloropropene | 10.0 | 10.0 | | ug/L | | 100 | 75 - 120 |
| Cyclohexane | 10.0 | 12.2 | | ug/L | | 122 | 66 - 135 |
| Hexachlorobutadiene | 10.0 | 11.2 | | ug/L | | 112 | 36 - 146 |
| Dibromomethane | 10.0 | 10.0 | | ug/L | | 100 | 80 - 120 |
| Bromodichloromethane | 10.0 | 11.9 | | ug/L | | 119 | 79 - 125 |
| Dichlorodifluoromethane | 10.0 | 15.9 | * | ug/L | | 159 | 42 - 141 |
| Dichlorofluoromethane | 10.0 | 12.2 | | ug/L | | 122 | 28 - 138 |
| Ethyl ether | 10.0 | 11.1 | | ug/L | | 111 | 72 - 125 |
| Ethylbenzene | 10.0 | 11.0 | | ug/L | | 110 | 80 - 120 |
| 1,2-Dibromoethane | 10.0 | 10.5 | | ug/L | | 105 | 80 - 120 |
| Naphthalene | 10.0 | 7.97 | | ug/L | | 80 | 31 - 127 |
| m-Xylene & p-Xylene | 10.0 | 11.1 | | ug/L | | 111 | 80 - 120 |
| n-Butylbenzene | 10.0 | 12.3 | | ug/L | | 123 | 60 - 137 |
| Isopropylbenzene | 10.0 | 11.1 | | ug/L | | 111 | 80 - 128 |
| Methyl acetate | 20.0 | 17.9 | | ug/L | | 90 | 63 - 137 |
| N-Propylbenzene | 10.0 | 10.9 | | ug/L | | 109 | 76 - 120 |
| 2-Butanone (MEK) | 20.0 | 20.7 | | ug/L | | 103 | 43 - 149 |
| 4-Methyl-2-pentanone (MIBK) | 20.0 | 14.3 | | ug/L | | 72 | 53 - 144 |
| sec-Butylbenzene | 10.0 | 11.9 | | ug/L | | 119 | 76 - 124 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 240-297056/5**
**Matrix: Water**
**Analysis Batch: 297056**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Methyl tert butyl ether | 10.0 | 7.48 | | ug/L | | 75 | 73 - 120 |
| Methylene Chloride | 10.0 | 12.1 | | ug/L | | 121 | 64 - 140 |
| o-Xylene | 10.0 | 10.6 | | ug/L | | 106 | 80 - 120 |
| Styrene | 10.0 | 11.1 | | ug/L | | 111 | 80 - 121 |
| tert-Butylbenzene | 10.0 | 11.1 | | ug/L | | 111 | 79 - 120 |
| Tetrachloroethene | 10.0 | 9.91 | | ug/L | | 99 | 80 - 122 |
| Tetrahydrofuran | 20.0 | 14.8 | | ug/L | | 74 | 63 - 131 |
| Toluene | 10.0 | 12.2 | * | ug/L | | 122 | 78 - 120 |
| trans-1,2-Dichloroethene | 10.0 | 11.4 | | ug/L | | 114 | 74 - 124 |
| trans-1,3-Dichloropropene | 10.0 | 10.5 | | ug/L | | 105 | 67 - 120 |
| Trichloroethene | 10.0 | 9.65 | | ug/L | | 96 | 76 - 124 |
| Trichlorofluoromethane | 10.0 | 15.2 | | ug/L | | 152 | 27 - 176 |
| Vinyl chloride | 10.0 | 9.13 | | ug/L | | 91 | 65 - 124 |
| Methylcyclohexane | 10.0 | 12.0 | | ug/L | | 120 | 63 - 141 |
| Chlorodibromomethane | 10.0 | 12.0 | | ug/L | | 120 | 64 - 129 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *91* | | *61 - 138* |
| *4-Bromofluorobenzene (Surr)* | *103* | | *69 - 120* |
| *Toluene-d8 (Surr)* | *99* | | *73 - 120* |
| *Dibromofluoromethane (Surr)* | *89* | | *69 - 124* |

**Lab Sample ID: 240-85395-15 MS**
**Matrix: Water**
**Analysis Batch: 297056**

**Client Sample ID: AMW-22B-(20170919)**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 10.0 | 10.7 | | ug/L | | 107 | 67 - 142 |
| 1,1,1-Trichloroethane | ND | | 10.0 | 10.7 | | ug/L | | 107 | 57 - 156 |
| 1,1,2,2-Tetrachloroethane | ND | F1 | 10.0 | 13.6 | F1 | ug/L | | 136 | 51 - 123 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 10.0 | 10.9 | | ug/L | | 109 | 58 - 137 |
| 1,1,2-Trichloroethane | ND | | 10.0 | 12.7 | | ug/L | | 127 | 68 - 127 |
| 1,1-Dichloroethane | ND | | 10.0 | 9.97 | | ug/L | | 100 | 69 - 122 |
| 1,1-Dichloroethene | ND | | 10.0 | 10.9 | | ug/L | | 109 | 62 - 127 |
| 1,1-Dichloropropene | ND | | 10.0 | 11.7 | | ug/L | | 117 | 55 - 136 |
| 1,2,3-Trichlorobenzene | ND | | 10.0 | 8.41 | | ug/L | | 84 | 40 - 139 |
| 1,2,3-Trichloropropane | ND | | 10.0 | 13.0 | | ug/L | | 130 | 41 - 152 |
| 1,2,4-Trichlorobenzene | ND | | 10.0 | 7.53 | | ug/L | | 75 | 26 - 138 |
| 1,2,4-Trimethylbenzene | ND | * | 10.0 | 11.0 | | ug/L | | 110 | 64 - 120 |
| 1,2-Dibromo-3-Chloropropane | ND | | 10.0 | 9.92 | | ug/L | | 99 | 48 - 130 |
| 1,2-Dichlorobenzene | ND | | 10.0 | 10.3 | | ug/L | | 103 | 70 - 120 |
| 1,2-Dichloroethane | ND | | 10.0 | 11.7 | | ug/L | | 117 | 64 - 138 |
| 1,2-Dichloropropane | ND | | 10.0 | 10.3 | | ug/L | | 103 | 72 - 131 |
| 1,3,5-Trimethylbenzene | ND | * | 10.0 | 11.3 | | ug/L | | 113 | 67 - 120 |
| 1,3-Dichlorobenzene | ND | | 10.0 | 9.73 | | ug/L | | 97 | 71 - 120 |
| 1,3-Dichloropropane | ND | | 10.0 | 12.7 | | ug/L | | 127 | 58 - 137 |
| 1,4-Dichlorobenzene | ND | | 10.0 | 10.0 | | ug/L | | 100 | 72 - 120 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 240-85395-15 MS**
**Matrix: Water**
**Analysis Batch: 297056**

**Client Sample ID: AMW-22B-(20170919)**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Allyl chloride | ND | | 10.0 | 10.9 | | ug/L | | 109 | 55 - 137 |
| 2,2-Dichloropropane | ND | | 10.0 | 10.1 | | ug/L | | 101 | 34 - 153 |
| 2-Chlorotoluene | ND | | 10.0 | 10.1 | | ug/L | | 101 | 52 - 134 |
| 2-Hexanone | ND | F2 | 20.0 | 24.2 | | ug/L | | 121 | 21 - 184 |
| Bromobenzene | ND | | 10.0 | 9.63 | | ug/L | | 96 | 59 - 131 |
| Bromochloromethane | ND | | 10.0 | 9.72 | | ug/L | | 97 | 66 - 132 |
| 4-Chlorotoluene | ND | | 10.0 | 10.4 | | ug/L | | 104 | 52 - 133 |
| p-Isopropyltoluene | ND | | 10.0 | 10.4 | | ug/L | | 104 | 70 - 120 |
| Acetone | ND | | 20.0 | 23.9 | | ug/L | | 120 | 19 - 133 |
| Benzene | ND | | 10.0 | 11.1 | | ug/L | | 111 | 69 - 127 |
| Bromoform | ND | | 10.0 | 10.8 | | ug/L | | 108 | 61 - 135 |
| Bromomethane | ND | F2 | 10.0 | 1.80 | | ug/L | | 18 | 10 - 148 |
| Carbon disulfide | ND | F1 | 10.0 | 14.2 | | ug/L | | 142 | 46 - 143 |
| Carbon tetrachloride | ND | | 10.0 | 12.6 | | ug/L | | 126 | 53 - 175 |
| Chlorobenzene | ND | | 10.0 | 11.1 | | ug/L | | 111 | 76 - 120 |
| Chloroethane | ND | F2 | 10.0 | 2.15 | | ug/L | | 22 | 10 - 141 |
| Chloroform | ND | | 10.0 | 11.4 | | ug/L | | 114 | 74 - 125 |
| Chloromethane | ND | F1 | 10.0 | 3.01 | F1 | ug/L | | 30 | 34 - 127 |
| cis-1,2-Dichloroethene | 0.80 | J | 10.0 | 10.8 | | ug/L | | 100 | 69 - 127 |
| cis-1,3-Dichloropropene | ND | | 10.0 | 9.28 | | ug/L | | 93 | 68 - 120 |
| Cyclohexane | ND | | 10.0 | 10.3 | | ug/L | | 103 | 56 - 135 |
| Hexachlorobutadiene | ND | | 10.0 | 9.21 | | ug/L | | 92 | 30 - 134 |
| Dibromomethane | ND | | 10.0 | 11.0 | | ug/L | | 110 | 73 - 120 |
| Bromodichloromethane | ND | | 10.0 | 12.0 | | ug/L | | 120 | 75 - 128 |
| Dichlorodifluoromethane | ND | * F1 | 10.0 | 13.6 | F1 | ug/L | | 136 | 45 - 130 |
| Dichlorofluoromethane | ND | | 10.0 | 9.77 | | ug/L | | 98 | 36 - 161 |
| Ethyl ether | ND | | 10.0 | 11.2 | | ug/L | | 112 | 65 - 124 |
| Ethylbenzene | ND | | 10.0 | 10.7 | | ug/L | | 107 | 72 - 121 |
| 1,2-Dibromoethane | ND | | 10.0 | 11.7 | | ug/L | | 117 | 73 - 121 |
| Naphthalene | ND | | 10.0 | 7.86 | | ug/L | | 79 | 28 - 150 |
| m-Xylene & p-Xylene | ND | | 10.0 | 10.9 | | ug/L | | 109 | 70 - 121 |
| n-Butylbenzene | ND | | 10.0 | 10.4 | | ug/L | | 104 | 38 - 133 |
| Isopropylbenzene | ND | | 10.0 | 10.7 | | ug/L | | 107 | 70 - 132 |
| Methyl acetate | ND | | 20.0 | 20.8 | | ug/L | | 104 | 52 - 139 |
| N-Propylbenzene | ND | | 10.0 | 10.2 | | ug/L | | 102 | 50 - 134 |
| 2-Butanone (MEK) | ND | | 20.0 | 27.1 | | ug/L | | 136 | 34 - 153 |
| 4-Methyl-2-pentanone (MIBK) | ND | F2 | 20.0 | 18.6 | | ug/L | | 93 | 53 - 147 |
| sec-Butylbenzene | ND | | 10.0 | 10.5 | | ug/L | | 105 | 43 - 133 |
| Methyl tert butyl ether | ND | | 10.0 | 7.43 | | ug/L | | 74 | 67 - 125 |
| Methylene Chloride | ND | | 10.0 | 10.6 | | ug/L | | 106 | 52 - 137 |
| o-Xylene | ND | | 10.0 | 10.5 | | ug/L | | 105 | 71 - 125 |
| Styrene | ND | | 10.0 | 11.1 | | ug/L | | 111 | 74 - 125 |
| tert-Butylbenzene | ND | | 10.0 | 10.3 | | ug/L | | 103 | 48 - 131 |
| Tetrachloroethene | ND | | 10.0 | 9.82 | | ug/L | | 98 | 69 - 126 |
| Tetrahydrofuran | ND | | 20.0 | 19.3 | | ug/L | | 96 | 40 - 128 |
| Toluene | ND | * | 10.0 | 12.1 | | ug/L | | 121 | 69 - 125 |
| trans-1,2-Dichloroethene | ND | | 10.0 | 11.1 | | ug/L | | 111 | 66 - 131 |
| trans-1,3-Dichloropropene | ND | | 10.0 | 10.4 | | ug/L | | 104 | 59 - 120 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 240-85395-15 MS**
**Matrix: Water**
**Analysis Batch: 297056**

**Client Sample ID: AMW-22B-(20170919)**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Trichloroethene | ND | | 10.0 | 9.54 | | ug/L | | 95 | 68 - 129 |
| Trichlorofluoromethane | ND | | 10.0 | 11.4 | | ug/L | | 114 | 28 - 172 |
| Vinyl chloride | ND | F2 | 10.0 | 7.84 | | ug/L | | 78 | 55 - 123 |
| Methylcyclohexane | ND | | 10.0 | 10.1 | | ug/L | | 101 | 46 - 139 |
| Chlorodibromomethane | ND | | 10.0 | 12.5 | | ug/L | | 125 | 62 - 131 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *97* | | *61 - 138* |
| *4-Bromofluorobenzene (Surr)* | *107* | | *69 - 120* |
| *Toluene-d8 (Surr)* | *99* | | *73 - 120* |
| *Dibromofluoromethane (Surr)* | *91* | | *69 - 124* |

**Lab Sample ID: 240-85395-15 MSD**
**Matrix: Water**
**Analysis Batch: 297056**

**Client Sample ID: AMW-22B-(20170919)**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 10.0 | 11.6 | | ug/L | | 116 | 67 - 142 | 8 | 18 |
| 1,1,1-Trichloroethane | ND | | 10.0 | 11.8 | | ug/L | | 118 | 57 - 156 | 9 | 13 |
| 1,1,2,2-Tetrachloroethane | ND | F1 | 10.0 | 12.7 | F1 | ug/L | | 127 | 51 - 123 | 7 | 17 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 10.0 | 12.0 | | ug/L | | 120 | 58 - 137 | 9 | 35 |
| 1,1,2-Trichloroethane | ND | | 10.0 | 12.6 | | ug/L | | 126 | 68 - 127 | 1 | 11 |
| 1,1-Dichloroethane | ND | | 10.0 | 10.6 | | ug/L | | 106 | 69 - 122 | 7 | 11 |
| 1,1-Dichloroethene | ND | | 10.0 | 11.9 | | ug/L | | 119 | 62 - 127 | 8 | 14 |
| 1,1-Dichloropropene | ND | | 10.0 | 11.9 | | ug/L | | 119 | 55 - 136 | 1 | 35 |
| 1,2,3-Trichlorobenzene | ND | | 10.0 | 9.70 | | ug/L | | 97 | 40 - 139 | 14 | 35 |
| 1,2,3-Trichloropropane | ND | | 10.0 | 12.1 | | ug/L | | 121 | 41 - 152 | 7 | 12 |
| 1,2,4-Trichlorobenzene | ND | | 10.0 | 8.65 | | ug/L | | 86 | 26 - 138 | 14 | 35 |
| 1,2,4-Trimethylbenzene | ND | * | 10.0 | 11.6 | | ug/L | | 116 | 64 - 120 | 5 | 22 |
| 1,2-Dibromo-3-Chloropropane | ND | | 10.0 | 10.0 | | ug/L | | 100 | 48 - 130 | 1 | 31 |
| 1,2-Dichlorobenzene | ND | | 10.0 | 10.9 | | ug/L | | 109 | 70 - 120 | 6 | 19 |
| 1,2-Dichloroethane | ND | | 10.0 | 11.5 | | ug/L | | 115 | 64 - 138 | 2 | 11 |
| 1,2-Dichloropropane | ND | | 10.0 | 10.0 | | ug/L | | 100 | 72 - 131 | 3 | 12 |
| 1,3,5-Trimethylbenzene | ND | * | 10.0 | 12.0 | | ug/L | | 120 | 67 - 120 | 6 | 25 |
| 1,3-Dichlorobenzene | ND | | 10.0 | 10.3 | | ug/L | | 103 | 71 - 120 | 6 | 18 |
| 1,3-Dichloropropane | ND | | 10.0 | 12.3 | | ug/L | | 123 | 58 - 137 | 3 | 35 |
| 1,4-Dichlorobenzene | ND | | 10.0 | 10.3 | | ug/L | | 103 | 72 - 120 | 2 | 17 |
| Allyl chloride | ND | | 10.0 | 11.8 | | ug/L | | 118 | 55 - 137 | 8 | 20 |
| 2,2-Dichloropropane | ND | | 10.0 | 13.1 | | ug/L | | 131 | 34 - 153 | 26 | 35 |
| 2-Chlorotoluene | ND | | 10.0 | 11.0 | | ug/L | | 110 | 52 - 134 | 9 | 35 |
| 2-Hexanone | ND | F2 | 20.0 | 20.0 | F2 | ug/L | | 100 | 21 - 184 | 19 | 12 |
| Bromobenzene | ND | | 10.0 | 9.73 | | ug/L | | 97 | 59 - 131 | 1 | 35 |
| Bromochloromethane | ND | | 10.0 | 10.2 | | ug/L | | 102 | 66 - 132 | 4 | 15 |
| 4-Chlorotoluene | ND | | 10.0 | 10.7 | | ug/L | | 107 | 52 - 133 | 3 | 35 |
| p-Isopropyltoluene | ND | | 10.0 | 11.1 | | ug/L | | 111 | 70 - 120 | 6 | 22 |
| Acetone | ND | | 20.0 | 19.4 | | ug/L | | 97 | 19 - 133 | 21 | 35 |
| Benzene | ND | | 10.0 | 11.4 | | ug/L | | 114 | 69 - 127 | 3 | 10 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 240-85395-15 MSD**
**Matrix: Water**
**Analysis Batch: 297056**

**Client Sample ID: AMW-22B-(20170919)**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bromoform | ND | | 10.0 | 10.9 | | ug/L | | 109 | 61 - 135 | 1 | 13 |
| Bromomethane | ND | F2 | 10.0 | 4.68 | F2 | ug/L | | 47 | 10 - 148 | 89 | 35 |
| Carbon disulfide | ND | F1 | 10.0 | 15.8 | F1 | ug/L | | 158 | 46 - 143 | 10 | 18 |
| Carbon tetrachloride | ND | | 10.0 | 13.7 | | ug/L | | 137 | 53 - 175 | 9 | 17 |
| Chlorobenzene | ND | | 10.0 | 11.2 | | ug/L | | 112 | 76 - 120 | 1 | 12 |
| Chloroethane | ND | F2 | 10.0 | 5.10 | F2 | ug/L | | 51 | 10 - 141 | 81 | 35 |
| Chloroform | ND | | 10.0 | 12.1 | | ug/L | | 121 | 74 - 125 | 6 | 11 |
| Chloromethane | ND | F1 | 10.0 | 3.61 | | ug/L | | 36 | 34 - 127 | 18 | 25 |
| cis-1,2-Dichloroethene | 0.80 | J | 10.0 | 12.0 | | ug/L | | 112 | 69 - 127 | 10 | 11 |
| cis-1,3-Dichloropropene | ND | | 10.0 | 8.87 | | ug/L | | 89 | 68 - 120 | 5 | 13 |
| Cyclohexane | ND | | 10.0 | 11.3 | | ug/L | | 113 | 56 - 135 | 10 | 35 |
| Hexachlorobutadiene | ND | | 10.0 | 10.1 | | ug/L | | 101 | 30 - 134 | 10 | 35 |
| Dibromomethane | ND | | 10.0 | 10.8 | | ug/L | | 108 | 73 - 120 | 1 | 16 |
| Bromodichloromethane | ND | | 10.0 | 12.3 | | ug/L | | 123 | 75 - 128 | 2 | 13 |
| Dichlorodifluoromethane | ND | * F1 | 10.0 | 14.2 | F1 | ug/L | | 142 | 45 - 130 | 4 | 34 |
| Dichlorofluoromethane | ND | | 10.0 | 12.6 | | ug/L | | 126 | 36 - 161 | 25 | 35 |
| Ethyl ether | ND | | 10.0 | 11.7 | | ug/L | | 117 | 65 - 124 | 4 | 11 |
| Ethylbenzene | ND | | 10.0 | 11.2 | | ug/L | | 112 | 72 - 121 | 5 | 15 |
| 1,2-Dibromoethane | ND | | 10.0 | 11.3 | | ug/L | | 113 | 73 - 121 | 3 | 12 |
| Naphthalene | ND | | 10.0 | 8.58 | | ug/L | | 86 | 28 - 150 | 9 | 35 |
| m-Xylene & p-Xylene | ND | | 10.0 | 11.4 | | ug/L | | 114 | 70 - 121 | 4 | 15 |
| n-Butylbenzene | ND | | 10.0 | 11.4 | | ug/L | | 114 | 38 - 133 | 9 | 35 |
| Isopropylbenzene | ND | | 10.0 | 11.3 | | ug/L | | 113 | 70 - 132 | 5 | 16 |
| Methyl acetate | ND | | 20.0 | 19.5 | | ug/L | | 98 | 52 - 139 | 7 | 14 |
| N-Propylbenzene | ND | | 10.0 | 10.7 | | ug/L | | 107 | 50 - 134 | 5 | 35 |
| 2-Butanone (MEK) | ND | | 20.0 | 22.1 | | ug/L | | 111 | 34 - 153 | 20 | 23 |
| 4-Methyl-2-pentanone (MIBK) | ND | F2 | 20.0 | 15.4 | F2 | ug/L | | 77 | 53 - 147 | 19 | 16 |
| sec-Butylbenzene | ND | | 10.0 | 11.3 | | ug/L | | 113 | 43 - 133 | 7 | 35 |
| Methyl tert butyl ether | ND | | 10.0 | 7.82 | | ug/L | | 78 | 67 - 125 | 5 | 12 |
| Methylene Chloride | ND | | 10.0 | 11.8 | | ug/L | | 118 | 52 - 137 | 11 | 12 |
| o-Xylene | ND | | 10.0 | 10.9 | | ug/L | | 109 | 71 - 125 | 4 | 15 |
| Styrene | ND | | 10.0 | 11.5 | | ug/L | | 115 | 74 - 125 | 3 | 14 |
| tert-Butylbenzene | ND | | 10.0 | 10.7 | | ug/L | | 107 | 48 - 131 | 4 | 35 |
| Tetrachloroethene | ND | | 10.0 | 10.6 | | ug/L | | 106 | 69 - 126 | 7 | 18 |
| Tetrahydrofuran | ND | | 20.0 | 16.6 | | ug/L | | 83 | 40 - 128 | 15 | 15 |
| Toluene | ND | * | 10.0 | 12.3 | | ug/L | | 123 | 69 - 125 | 2 | 14 |
| trans-1,2-Dichloroethene | ND | | 10.0 | 11.8 | | ug/L | | 118 | 66 - 131 | 6 | 11 |
| trans-1,3-Dichloropropene | ND | | 10.0 | 9.74 | | ug/L | | 97 | 59 - 120 | 7 | 14 |
| Trichloroethene | ND | | 10.0 | 9.38 | | ug/L | | 94 | 68 - 129 | 2 | 12 |
| Trichlorofluoromethane | ND | | 10.0 | 14.6 | | ug/L | | 146 | 28 - 172 | 25 | 26 |
| Vinyl chloride | ND | F2 | 10.0 | 9.13 | F2 | ug/L | | 91 | 55 - 123 | 15 | 12 |
| Methylcyclohexane | ND | | 10.0 | 10.5 | | ug/L | | 105 | 46 - 139 | 4 | 35 |
| Chlorodibromomethane | ND | | 10.0 | 12.6 | | ug/L | | 126 | 62 - 131 | 1 | 15 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *94* | | *61 - 138* |
| *4-Bromofluorobenzene (Surr)* | *108* | | *69 - 120* |
| *Toluene-d8 (Surr)* | *102* | | *73 - 120* |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 240-85395-15 MSD**
**Matrix: Water**
**Analysis Batch: 297056**

**Client Sample ID: AMW-22B-(20170919)**
**Prep Type: Total/NA**

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| *Dibromofluoromethane (Surr)* | *97* | | *69 - 124* |

**Lab Sample ID: MB 240-297061/6**
**Matrix: Water**
**Analysis Batch: 297061**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 17:10 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/01/17 17:10 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 17:10 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 17:10 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/01/17 17:10 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 17:10 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/01/17 17:10 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 17:10 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 17:10 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/01/17 17:10 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 17:10 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 17:10 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/01/17 17:10 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/01/17 17:10 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/01/17 17:10 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/01/17 17:10 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/01/17 17:10 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 17:10 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/01/17 17:10 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 17:10 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 17:10 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/01/17 17:10 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 240-297061/6**
**Matrix: Water**
**Analysis Batch: 297061**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/01/17 17:10 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/01/17 17:10 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 17:10 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/01/17 17:10 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/01/17 17:10 | 1 |
| Ethyl ether | ND | | 2.0 | 0.35 | ug/L | | | 10/01/17 17:10 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 17:10 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 17:10 | 1 |
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 17:10 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/01/17 17:10 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 17:10 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/01/17 17:10 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/01/17 17:10 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 17:10 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/01/17 17:10 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/01/17 17:10 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 17:10 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/01/17 17:10 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/01/17 17:10 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/01/17 17:10 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 17:10 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/01/17 17:10 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/01/17 17:10 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/01/17 17:10 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/01/17 17:10 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/01/17 17:10 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/01/17 17:10 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/01/17 17:10 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/01/17 17:10 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 17:10 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/01/17 17:10 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/01/17 17:10 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *106* | | *61 - 138* | | *10/01/17 17:10* | *1* |
| *4-Bromofluorobenzene (Surr)* | *114* | | *69 - 120* | | *10/01/17 17:10* | *1* |
| *Toluene-d8 (Surr)* | *104* | | *73 - 120* | | *10/01/17 17:10* | *1* |
| *Dibromofluoromethane (Surr)* | *104* | | *69 - 124* | | *10/01/17 17:10* | *1* |

**Lab Sample ID: LCS 240-297061/4**
**Matrix: Water**
**Analysis Batch: 297061**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 10.0 | 9.76 | | ug/L | | 98 | 73 - 136 |
| 1,1,1-Trichloroethane | 10.0 | 9.21 | | ug/L | | 92 | 64 - 147 |
| 1,1,2,2-Tetrachloroethane | 10.0 | 9.71 | | ug/L | | 97 | 58 - 122 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 240-297061/4**
**Matrix: Water**
**Analysis Batch: 297061**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 10.0 | 9.38 | | ug/L | | 94 | 65 - 144 |
| 1,1,2-Trichloroethane | 10.0 | 9.88 | | ug/L | | 99 | 76 - 121 |
| 1,1-Dichloroethane | 10.0 | 11.1 | | ug/L | | 111 | 74 - 120 |
| 1,1-Dichloroethene | 10.0 | 9.95 | | ug/L | | 100 | 65 - 127 |
| 1,1-Dichloropropene | 10.0 | 10.5 | | ug/L | | 105 | 80 - 122 |
| 1,2,3-Trichlorobenzene | 10.0 | 12.9 | | ug/L | | 129 | 31 - 144 |
| 1,2,3-Trichloropropane | 10.0 | 8.89 | | ug/L | | 89 | 53 - 134 |
| 1,2,4-Trichlorobenzene | 10.0 | 11.8 | | ug/L | | 118 | 34 - 141 |
| 1,2,4-Trimethylbenzene | 10.0 | 10.4 | | ug/L | | 104 | 80 - 120 |
| 1,2-Dibromo-3-Chloropropane | 10.0 | 8.84 | | ug/L | | 88 | 50 - 130 |
| 1,2-Dichlorobenzene | 10.0 | 9.61 | | ug/L | | 96 | 80 - 120 |
| 1,2-Dichloroethane | 10.0 | 10.4 | | ug/L | | 104 | 68 - 133 |
| 1,2-Dichloropropane | 10.0 | 11.3 | | ug/L | | 113 | 78 - 127 |
| 1,3,5-Trimethylbenzene | 10.0 | 10.4 | | ug/L | | 104 | 79 - 120 |
| 1,3-Dichlorobenzene | 10.0 | 9.32 | | ug/L | | 93 | 80 - 120 |
| 1,3-Dichloropropane | 10.0 | 10.4 | | ug/L | | 104 | 71 - 124 |
| 1,4-Dichlorobenzene | 10.0 | 9.45 | | ug/L | | 95 | 80 - 120 |
| Allyl chloride | 10.0 | 11.2 | | ug/L | | 112 | 57 - 143 |
| 2,2-Dichloropropane | 10.0 | 14.1 | | ug/L | | 141 | 32 - 178 |
| 2-Chlorotoluene | 10.0 | 9.10 | | ug/L | | 91 | 80 - 120 |
| 2-Hexanone | 20.0 | 18.9 | | ug/L | | 94 | 28 - 169 |
| Bromobenzene | 10.0 | 8.95 | | ug/L | | 90 | 73 - 120 |
| Bromochloromethane | 10.0 | 9.31 | | ug/L | | 93 | 78 - 120 |
| 4-Chlorotoluene | 10.0 | 9.29 | | ug/L | | 93 | 79 - 120 |
| p-Isopropyltoluene | 10.0 | 10.3 | | ug/L | | 103 | 78 - 125 |
| Acetone | 20.0 | 12.6 | | ug/L | | 63 | 35 - 131 |
| Benzene | 10.0 | 10.7 | | ug/L | | 107 | 79 - 120 |
| Bromoform | 10.0 | 9.08 | | ug/L | | 91 | 55 - 145 |
| Bromomethane | 10.0 | 7.95 | | ug/L | | 79 | 17 - 158 |
| Carbon disulfide | 10.0 | 10.7 | | ug/L | | 107 | 49 - 141 |
| Carbon tetrachloride | 10.0 | 8.91 | | ug/L | | 89 | 55 - 171 |
| Chlorobenzene | 10.0 | 9.97 | | ug/L | | 100 | 80 - 120 |
| Chloroethane | 10.0 | 8.72 | | ug/L | | 87 | 10 - 149 |
| Chloroform | 10.0 | 10.3 | | ug/L | | 103 | 80 - 120 |
| Chloromethane | 10.0 | 9.37 | | ug/L | | 94 | 59 - 124 |
| cis-1,2-Dichloroethene | 10.0 | 10.2 | | ug/L | | 102 | 77 - 120 |
| cis-1,3-Dichloropropene | 10.0 | 10.2 | | ug/L | | 102 | 75 - 120 |
| Cyclohexane | 10.0 | 11.1 | | ug/L | | 111 | 66 - 135 |
| Hexachlorobutadiene | 10.0 | 13.6 | | ug/L | | 136 | 36 - 146 |
| Dibromomethane | 10.0 | 9.76 | | ug/L | | 98 | 80 - 120 |
| Bromodichloromethane | 10.0 | 10.5 | | ug/L | | 105 | 79 - 125 |
| Dichlorodifluoromethane | 10.0 | 7.40 | | ug/L | | 74 | 42 - 141 |
| Dichlorofluoromethane | 10.0 | 5.94 | | ug/L | | 59 | 28 - 138 |
| Ethyl ether | 10.0 | 12.7 | * | ug/L | | 127 | 72 - 125 |
| Ethylbenzene | 10.0 | 9.94 | | ug/L | | 99 | 80 - 120 |
| 1,2-Dibromoethane | 10.0 | 9.39 | | ug/L | | 94 | 80 - 120 |
| Naphthalene | 10.0 | 10.9 | | ug/L | | 109 | 31 - 127 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 240-297061/4**
**Matrix: Water**
**Analysis Batch: 297061**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| m-Xylene & p-Xylene | 10.0 | 9.82 | | ug/L | | 98 | 80 - 120 |
| n-Butylbenzene | 10.0 | 10.8 | | ug/L | | 108 | 60 - 137 |
| Isopropylbenzene | 10.0 | 10.4 | | ug/L | | 104 | 80 - 128 |
| Methyl acetate | 20.0 | 22.6 | | ug/L | | 113 | 63 - 137 |
| N-Propylbenzene | 10.0 | 9.13 | | ug/L | | 91 | 76 - 120 |
| 2-Butanone (MEK) | 20.0 | 18.7 | | ug/L | | 93 | 43 - 149 |
| 4-Methyl-2-pentanone (MIBK) | 20.0 | 21.7 | | ug/L | | 108 | 53 - 144 |
| sec-Butylbenzene | 10.0 | 9.95 | | ug/L | | 99 | 76 - 124 |
| Methyl tert butyl ether | 10.0 | 10.8 | | ug/L | | 108 | 73 - 120 |
| Methylene Chloride | 10.0 | 11.0 | | ug/L | | 110 | 64 - 140 |
| o-Xylene | 10.0 | 10.2 | | ug/L | | 102 | 80 - 120 |
| Styrene | 10.0 | 10.5 | | ug/L | | 105 | 80 - 121 |
| tert-Butylbenzene | 10.0 | 9.81 | | ug/L | | 98 | 79 - 120 |
| Tetrachloroethene | 10.0 | 8.67 | | ug/L | | 87 | 80 - 122 |
| Tetrahydrofuran | 20.0 | 21.8 | | ug/L | | 109 | 63 - 131 |
| Toluene | 10.0 | 10.4 | | ug/L | | 104 | 78 - 120 |
| trans-1,2-Dichloroethene | 10.0 | 10.1 | | ug/L | | 101 | 74 - 124 |
| trans-1,3-Dichloropropene | 10.0 | 10.3 | | ug/L | | 103 | 67 - 120 |
| Trichloroethene | 10.0 | 8.92 | | ug/L | | 89 | 76 - 124 |
| Trichlorofluoromethane | 10.0 | 7.25 | | ug/L | | 73 | 27 - 176 |
| Vinyl chloride | 10.0 | 10.1 | | ug/L | | 101 | 65 - 124 |
| Methylcyclohexane | 10.0 | 8.83 | | ug/L | | 88 | 63 - 141 |
| Chlorodibromomethane | 10.0 | 9.40 | | ug/L | | 94 | 64 - 129 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *61 - 138* |
| *4-Bromofluorobenzene (Surr)* | *119* | | *69 - 120* |
| *Toluene-d8 (Surr)* | *109* | | *73 - 120* |
| *Dibromofluoromethane (Surr)* | *99* | | *69 - 124* |

**Lab Sample ID: 240-85327-B-1 MS**
**Matrix: Water**
**Analysis Batch: 297061**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | ND | F2 F1 | 3330 | 4170 | | ug/L | | 125 | 69 - 127 |
| Tetrachloroethene | 8800 | F1 | 3330 | 10300 | F1 | ug/L | | 44 | 69 - 126 |
| trans-1,2-Dichloroethene | ND | F2 F1 | 3330 | 4050 | | ug/L | | 122 | 66 - 131 |
| Trichloroethene | ND | | 3330 | 3090 | | ug/L | | 93 | 68 - 129 |
| Vinyl chloride | ND | F2 | 3330 | 3280 | | ug/L | | 98 | 55 - 123 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *107* | | *61 - 138* |
| *4-Bromofluorobenzene (Surr)* | *122* | *X* | *69 - 120* |
| *Toluene-d8 (Surr)* | *111* | | *73 - 120* |
| *Dibromofluoromethane (Surr)* | *108* | | *69 - 124* |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 240-85327-B-1 MSD**
**Matrix: Water**
**Analysis Batch: 297061**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| cis-1,2-Dichloroethene | ND | F2 F1 | 3330 | 4790 | F1 F2 | ug/L | | 144 | 69 - 127 | 14 | 11 |
| Tetrachloroethene | 8800 | F1 | 3330 | 10200 | F1 | ug/L | | 41 | 69 - 126 | 1 | 18 |
| trans-1,2-Dichloroethene | ND | F2 F1 | 3330 | 4720 | F1 F2 | ug/L | | 142 | 66 - 131 | 15 | 11 |
| Trichloroethene | ND | | 3330 | 3390 | | ug/L | | 102 | 68 - 129 | 9 | 12 |
| Vinyl chloride | ND | F2 | 3330 | 3820 | F2 | ug/L | | 115 | 55 - 123 | 15 | 12 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *132* | | *61 - 138* |
| *4-Bromofluorobenzene (Surr)* | *120* | | *69 - 120* |
| *Toluene-d8 (Surr)* | *107* | | *73 - 120* |
| *Dibromofluoromethane (Surr)* | *128* | *X* | *69 - 124* |

**Lab Sample ID: MB 240-297179/6**
**Matrix: Water**
**Analysis Batch: 297179**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 15:20 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/02/17 15:20 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 15:20 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 15:20 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/02/17 15:20 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 15:20 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/02/17 15:20 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 15:20 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 15:20 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/02/17 15:20 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 15:20 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 15:20 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 240-297179/6**
**Matrix: Water**
**Analysis Batch: 297179**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/02/17 15:20 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/02/17 15:20 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/02/17 15:20 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/02/17 15:20 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/02/17 15:20 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 15:20 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/02/17 15:20 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 15:20 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 15:20 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/02/17 15:20 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/02/17 15:20 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/02/17 15:20 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 15:20 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 15:20 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/02/17 15:20 | 1 |
| Ethyl ether | ND | | 2.0 | 0.35 | ug/L | | | 10/02/17 15:20 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 15:20 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 15:20 | 1 |
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 15:20 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/02/17 15:20 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 15:20 | 1 |
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/02/17 15:20 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/02/17 15:20 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 15:20 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/02/17 15:20 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/02/17 15:20 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 15:20 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/02/17 15:20 | 1 |
| Methylene Chloride | 0.914 | J | 1.0 | 0.53 | ug/L | | | 10/02/17 15:20 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/02/17 15:20 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 15:20 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/02/17 15:20 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/02/17 15:20 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/02/17 15:20 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/02/17 15:20 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/02/17 15:20 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/02/17 15:20 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/02/17 15:20 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/02/17 15:20 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 15:20 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/02/17 15:20 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/02/17 15:20 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *129* | | *61 - 138* | | *10/02/17 15:20* | *1* |
| *4-Bromofluorobenzene (Surr)* | *109* | | *69 - 120* | | *10/02/17 15:20* | *1* |
| *Toluene-d8 (Surr)* | *101* | | *73 - 120* | | *10/02/17 15:20* | *1* |
| *Dibromofluoromethane (Surr)* | *125* | *X* | *69 - 124* | | *10/02/17 15:20* | *1* |

**Lab Sample ID: LCS 240-297179/4**
**Matrix: Water**
**Analysis Batch: 297179**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 10.0 | 10.3 | | ug/L | | 103 | 73 - 136 |
| 1,1,1-Trichloroethane | 10.0 | 10.7 | | ug/L | | 107 | 64 - 147 |
| 1,1,2,2-Tetrachloroethane | 10.0 | 9.76 | | ug/L | | 98 | 58 - 122 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 10.0 | 10.0 | | ug/L | | 100 | 65 - 144 |
| 1,1,2-Trichloroethane | 10.0 | 9.81 | | ug/L | | 98 | 76 - 121 |
| 1,1-Dichloroethane | 10.0 | 11.4 | | ug/L | | 114 | 74 - 120 |
| 1,1-Dichloroethene | 10.0 | 10.5 | | ug/L | | 105 | 65 - 127 |
| 1,1-Dichloropropene | 10.0 | 10.5 | | ug/L | | 105 | 80 - 122 |
| 1,2,3-Trichlorobenzene | 10.0 | 7.26 | | ug/L | | 73 | 31 - 144 |
| 1,2,3-Trichloropropane | 10.0 | 9.84 | | ug/L | | 98 | 53 - 134 |
| 1,2,4-Trichlorobenzene | 10.0 | 7.32 | | ug/L | | 73 | 34 - 141 |
| 1,2,4-Trimethylbenzene | 10.0 | 9.47 | | ug/L | | 95 | 80 - 120 |
| 1,2-Dibromo-3-Chloropropane | 10.0 | 7.52 | | ug/L | | 75 | 50 - 130 |
| 1,2-Dichlorobenzene | 10.0 | 9.11 | | ug/L | | 91 | 80 - 120 |
| 1,2-Dichloroethane | 10.0 | 11.8 | | ug/L | | 118 | 68 - 133 |
| 1,2-Dichloropropane | 10.0 | 10.0 | | ug/L | | 100 | 78 - 127 |
| 1,3,5-Trimethylbenzene | 10.0 | 9.78 | | ug/L | | 98 | 79 - 120 |
| 1,3-Dichlorobenzene | 10.0 | 9.04 | | ug/L | | 90 | 80 - 120 |
| 1,3-Dichloropropane | 10.0 | 9.90 | | ug/L | | 99 | 71 - 124 |
| 1,4-Dichlorobenzene | 10.0 | 9.26 | | ug/L | | 93 | 80 - 120 |
| Allyl chloride | 10.0 | 10.5 | | ug/L | | 105 | 57 - 143 |
| 2,2-Dichloropropane | 10.0 | 14.3 | | ug/L | | 143 | 32 - 178 |
| 2-Chlorotoluene | 10.0 | 9.17 | | ug/L | | 92 | 80 - 120 |
| 2-Hexanone | 20.0 | 18.7 | | ug/L | | 93 | 28 - 169 |
| Bromobenzene | 10.0 | 9.56 | | ug/L | | 96 | 73 - 120 |
| Bromochloromethane | 10.0 | 10.4 | | ug/L | | 104 | 78 - 120 |
| 4-Chlorotoluene | 10.0 | 9.62 | | ug/L | | 96 | 79 - 120 |
| p-Isopropyltoluene | 10.0 | 9.46 | | ug/L | | 95 | 78 - 125 |
| Acetone | 20.0 | 12.9 | | ug/L | | 65 | 35 - 131 |
| Benzene | 10.0 | 10.2 | | ug/L | | 102 | 79 - 120 |
| Bromoform | 10.0 | 9.30 | | ug/L | | 93 | 55 - 145 |
| Bromomethane | 10.0 | 8.45 | | ug/L | | 84 | 17 - 158 |
| Carbon disulfide | 10.0 | 10.5 | | ug/L | | 105 | 49 - 141 |
| Carbon tetrachloride | 10.0 | 10.4 | | ug/L | | 104 | 55 - 171 |
| Chlorobenzene | 10.0 | 9.98 | | ug/L | | 100 | 80 - 120 |
| Chloroethane | 10.0 | 8.43 | | ug/L | | 84 | 10 - 149 |
| Chloroform | 10.0 | 11.0 | | ug/L | | 110 | 80 - 120 |
| Chloromethane | 10.0 | 9.69 | | ug/L | | 97 | 59 - 124 |
| cis-1,2-Dichloroethene | 10.0 | 10.6 | | ug/L | | 106 | 77 - 120 |
| cis-1,3-Dichloropropene | 10.0 | 8.96 | | ug/L | | 90 | 75 - 120 |
| Cyclohexane | 10.0 | 10.1 | | ug/L | | 101 | 66 - 135 |
| Hexachlorobutadiene | 10.0 | 8.22 | | ug/L | | 82 | 36 - 146 |
| Dibromomethane | 10.0 | 9.95 | | ug/L | | 99 | 80 - 120 |
| Bromodichloromethane | 10.0 | 10.5 | | ug/L | | 105 | 79 - 125 |
| Dichlorodifluoromethane | 10.0 | 7.51 | | ug/L | | 75 | 42 - 141 |
| Dichlorofluoromethane | 10.0 | 7.59 | | ug/L | | 76 | 28 - 138 |
| Ethyl ether | 10.0 | 11.9 | | ug/L | | 119 | 72 - 125 |
| Ethylbenzene | 10.0 | 9.40 | | ug/L | | 94 | 80 - 120 |
| 1,2-Dibromoethane | 10.0 | 9.21 | | ug/L | | 92 | 80 - 120 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 240-297179/4**
**Matrix: Water**
**Analysis Batch: 297179**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Naphthalene | 10.0 | 6.19 | | ug/L | | 62 | 31 - 127 |
| m-Xylene & p-Xylene | 10.0 | 9.76 | | ug/L | | 98 | 80 - 120 |
| n-Butylbenzene | 10.0 | 9.01 | | ug/L | | 90 | 60 - 137 |
| Isopropylbenzene | 10.0 | 9.95 | | ug/L | | 99 | 80 - 128 |
| Methyl acetate | 20.0 | 22.5 | | ug/L | | 112 | 63 - 137 |
| N-Propylbenzene | 10.0 | 9.61 | | ug/L | | 96 | 76 - 120 |
| 2-Butanone (MEK) | 20.0 | 17.5 | | ug/L | | 88 | 43 - 149 |
| 4-Methyl-2-pentanone (MIBK) | 20.0 | 18.7 | | ug/L | | 94 | 53 - 144 |
| sec-Butylbenzene | 10.0 | 9.03 | | ug/L | | 90 | 76 - 124 |
| Methyl tert butyl ether | 10.0 | 11.0 | | ug/L | | 110 | 73 - 120 |
| Methylene Chloride | 10.0 | 11.9 | | ug/L | | 119 | 64 - 140 |
| o-Xylene | 10.0 | 10.1 | | ug/L | | 101 | 80 - 120 |
| Styrene | 10.0 | 9.69 | | ug/L | | 97 | 80 - 121 |
| tert-Butylbenzene | 10.0 | 9.01 | | ug/L | | 90 | 79 - 120 |
| Tetrachloroethene | 10.0 | 9.41 | | ug/L | | 94 | 80 - 122 |
| Tetrahydrofuran | 20.0 | 19.2 | | ug/L | | 96 | 63 - 131 |
| Toluene | 10.0 | 10.2 | | ug/L | | 102 | 78 - 120 |
| trans-1,2-Dichloroethene | 10.0 | 10.8 | | ug/L | | 108 | 74 - 124 |
| trans-1,3-Dichloropropene | 10.0 | 9.56 | | ug/L | | 96 | 67 - 120 |
| Trichloroethene | 10.0 | 9.19 | | ug/L | | 92 | 76 - 124 |
| Trichlorofluoromethane | 10.0 | 7.94 | | ug/L | | 79 | 27 - 176 |
| Vinyl chloride | 10.0 | 9.06 | | ug/L | | 91 | 65 - 124 |
| Methylcyclohexane | 10.0 | 8.35 | | ug/L | | 84 | 63 - 141 |
| Chlorodibromomethane | 10.0 | 9.95 | | ug/L | | 99 | 64 - 129 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *127* | | *61 - 138* |
| *4-Bromofluorobenzene (Surr)* | *112* | | *69 - 120* |
| *Toluene-d8 (Surr)* | *111* | | *73 - 120* |
| *Dibromofluoromethane (Surr)* | *113* | | *69 - 124* |

**Lab Sample ID: 240-85397-E-25 MS**
**Matrix: Water**
**Analysis Batch: 297179**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | F2 | 10.0 | 9.89 | | ug/L | | 99 | 57 - 156 |
| 1,1,2,2-Tetrachloroethane | ND | | 10.0 | 11.3 | | ug/L | | 113 | 51 - 123 |
| 1,1,2-Trichloroethane | ND | | 10.0 | 11.3 | | ug/L | | 113 | 68 - 127 |
| 1,1-Dichloroethane | ND | F2 F1 | 10.0 | 11.0 | | ug/L | | 110 | 69 - 122 |
| 1,1-Dichloroethene | ND | | 10.0 | 10.3 | | ug/L | | 103 | 62 - 127 |
| 1,2,4-Trichlorobenzene | ND | F2 | 10.0 | 8.39 | | ug/L | | 84 | 26 - 138 |
| 1,2,4-Trimethylbenzene | ND | | 10.0 | 9.83 | | ug/L | | 98 | 64 - 120 |
| 1,2-Dichlorobenzene | ND | | 10.0 | 9.53 | | ug/L | | 95 | 70 - 120 |
| 1,2-Dichloroethane | ND | | 10.0 | 11.7 | | ug/L | | 117 | 64 - 138 |
| 1,2-Dichloropropane | ND | | 10.0 | 11.2 | | ug/L | | 112 | 72 - 131 |
| 1,3-Dichlorobenzene | ND | | 10.0 | 9.30 | | ug/L | | 93 | 71 - 120 |
| 1,4-Dichlorobenzene | ND | | 10.0 | 9.49 | | ug/L | | 95 | 72 - 120 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 240-85397-E-25 MS**
**Matrix: Water**
**Analysis Batch: 297179**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 2-Hexanone | ND | | 20.0 | 22.0 | | ug/L | | 110 | 21 - 184 |
| Acetone | ND | | 20.0 | 11.3 | | ug/L | | 56 | 19 - 133 |
| Benzene | ND | | 10.0 | 10.7 | | ug/L | | 107 | 69 - 127 |
| Bromoform | ND | | 10.0 | 9.93 | | ug/L | | 99 | 61 - 135 |
| Bromomethane | ND | F2 | 10.0 | 1.98 | | ug/L | | 20 | 10 - 148 |
| Carbon disulfide | ND | F2 | 10.0 | 7.41 | | ug/L | | 74 | 46 - 143 |
| Carbon tetrachloride | ND | | 10.0 | 9.57 | | ug/L | | 96 | 53 - 175 |
| Chlorobenzene | ND | | 10.0 | 10.3 | | ug/L | | 103 | 76 - 120 |
| Chloroethane | ND | F2 | 10.0 | 3.22 | | ug/L | | 32 | 10 - 141 |
| Chloroform | ND | F2 F1 | 10.0 | 10.8 | | ug/L | | 108 | 74 - 125 |
| Chloromethane | ND | F2 | 10.0 | 7.37 | | ug/L | | 74 | 34 - 127 |
| cis-1,2-Dichloroethene | ND | F2 | 10.0 | 10.3 | | ug/L | | 103 | 69 - 127 |
| cis-1,3-Dichloropropene | ND | | 10.0 | 9.84 | | ug/L | | 98 | 68 - 120 |
| Bromodichloromethane | ND | | 10.0 | 11.2 | | ug/L | | 112 | 75 - 128 |
| Ethylbenzene | ND | | 10.0 | 9.80 | | ug/L | | 98 | 72 - 121 |
| m-Xylene & p-Xylene | ND | | 10.0 | 10.0 | | ug/L | | 100 | 70 - 121 |
| 2-Butanone (MEK) | ND | | 20.0 | 18.7 | | ug/L | | 93 | 34 - 153 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 20.0 | 24.4 | | ug/L | | 122 | 53 - 147 |
| Methylene Chloride | ND | F2 | 10.0 | 8.95 | | ug/L | | 89 | 52 - 137 |
| o-Xylene | ND | | 10.0 | 9.84 | | ug/L | | 98 | 71 - 125 |
| Styrene | ND | F2 | 10.0 | 8.85 | | ug/L | | 89 | 74 - 125 |
| Tetrachloroethene | ND | | 10.0 | 9.34 | | ug/L | | 93 | 69 - 126 |
| Toluene | ND | | 10.0 | 10.8 | | ug/L | | 108 | 69 - 125 |
| trans-1,2-Dichloroethene | ND | F2 | 10.0 | 10.3 | | ug/L | | 103 | 66 - 131 |
| trans-1,3-Dichloropropene | ND | | 10.0 | 10.8 | | ug/L | | 108 | 59 - 120 |
| Trichloroethene | ND | | 10.0 | 9.80 | | ug/L | | 98 | 68 - 129 |
| Vinyl chloride | ND | F2 | 10.0 | 9.18 | | ug/L | | 92 | 55 - 123 |
| Chlorodibromomethane | ND | | 10.0 | 10.5 | | ug/L | | 105 | 62 - 131 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *116* | | *61 - 138* |
| *4-Bromofluorobenzene (Surr)* | *106* | | *69 - 120* |
| *Toluene-d8 (Surr)* | *111* | | *73 - 120* |
| *Dibromofluoromethane (Surr)* | *105* | | *69 - 124* |

**Lab Sample ID: 240-85397-F-25 MSD**
**Matrix: Water**
**Analysis Batch: 297179**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | F2 | 10.0 | 11.7 | F2 | ug/L | | 117 | 57 - 156 | 17 | 13 |
| 1,1,2,2-Tetrachloroethane | ND | | 10.0 | 10.8 | | ug/L | | 108 | 51 - 123 | 4 | 17 |
| 1,1,2-Trichloroethane | ND | | 10.0 | 10.2 | | ug/L | | 102 | 68 - 127 | 10 | 11 |
| 1,1-Dichloroethane | ND | F2 F1 | 10.0 | 12.8 | F1 F2 | ug/L | | 128 | 69 - 122 | 15 | 11 |
| 1,1-Dichloroethene | ND | | 10.0 | 11.8 | | ug/L | | 118 | 62 - 127 | 14 | 14 |
| 1,2,4-Trichlorobenzene | ND | F2 | 10.0 | 12.1 | F2 | ug/L | | 121 | 26 - 138 | 36 | 35 |
| 1,2,4-Trimethylbenzene | ND | | 10.0 | 9.95 | | ug/L | | 100 | 64 - 120 | 1 | 22 |
| 1,2-Dichlorobenzene | ND | | 10.0 | 10.4 | | ug/L | | 104 | 70 - 120 | 8 | 19 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 240-85397-F-25 MSD**
**Matrix: Water**
**Analysis Batch: 297179**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane | ND | | 10.0 | 12.8 | | ug/L | | 128 | 64 - 138 | 9 | 11 |
| 1,2-Dichloropropane | ND | | 10.0 | 11.2 | | ug/L | | 112 | 72 - 131 | 1 | 12 |
| 1,3-Dichlorobenzene | ND | | 10.0 | 9.81 | | ug/L | | 98 | 71 - 120 | 5 | 18 |
| 1,4-Dichlorobenzene | ND | | 10.0 | 10.1 | | ug/L | | 101 | 72 - 120 | 6 | 17 |
| 2-Hexanone | ND | | 20.0 | 22.4 | | ug/L | | 112 | 21 - 184 | 2 | 12 |
| Acetone | ND | | 20.0 | 12.5 | | ug/L | | 62 | 19 - 133 | 10 | 35 |
| Benzene | ND | | 10.0 | 11.1 | | ug/L | | 111 | 69 - 127 | 4 | 10 |
| Bromoform | ND | | 10.0 | 10.4 | | ug/L | | 104 | 61 - 135 | 4 | 13 |
| Bromomethane | ND | F2 | 10.0 | 7.91 | F2 | ug/L | | 79 | 10 - 148 | 120 | 35 |
| Carbon disulfide | ND | F2 | 10.0 | 12.1 | F2 | ug/L | | 121 | 46 - 143 | 48 | 18 |
| Carbon tetrachloride | ND | | 10.0 | 10.9 | | ug/L | | 109 | 53 - 175 | 13 | 17 |
| Chlorobenzene | ND | | 10.0 | 10.6 | | ug/L | | 106 | 76 - 120 | 3 | 12 |
| Chloroethane | ND | F2 | 10.0 | 8.31 | F2 | ug/L | | 83 | 10 - 141 | 88 | 35 |
| Chloroform | ND | F2 F1 | 10.0 | 12.6 | F1 F2 | ug/L | | 126 | 74 - 125 | 15 | 11 |
| Chloromethane | ND | F2 | 10.0 | 10.9 | F2 | ug/L | | 109 | 34 - 127 | 39 | 25 |
| cis-1,2-Dichloroethene | ND | F2 | 10.0 | 12.1 | F2 | ug/L | | 121 | 69 - 127 | 15 | 11 |
| cis-1,3-Dichloropropene | ND | | 10.0 | 8.60 | | ug/L | | 86 | 68 - 120 | 13 | 13 |
| Bromodichloromethane | ND | | 10.0 | 11.0 | | ug/L | | 110 | 75 - 128 | 2 | 13 |
| Ethylbenzene | ND | | 10.0 | 10.7 | | ug/L | | 107 | 72 - 121 | 9 | 15 |
| m-Xylene & p-Xylene | ND | | 10.0 | 10.7 | | ug/L | | 107 | 70 - 121 | 7 | 15 |
| 2-Butanone (MEK) | ND | | 20.0 | 16.7 | | ug/L | | 84 | 34 - 153 | 11 | 23 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 20.0 | 22.3 | | ug/L | | 112 | 53 - 147 | 9 | 16 |
| Methylene Chloride | ND | F2 | 10.0 | 11.7 | F2 | ug/L | | 117 | 52 - 137 | 27 | 12 |
| o-Xylene | ND | | 10.0 | 11.3 | | ug/L | | 113 | 71 - 125 | 14 | 15 |
| Styrene | ND | F2 | 10.0 | 10.3 | F2 | ug/L | | 103 | 74 - 125 | 15 | 14 |
| Tetrachloroethene | ND | | 10.0 | 9.53 | | ug/L | | 95 | 69 - 126 | 2 | 18 |
| Toluene | ND | | 10.0 | 10.7 | | ug/L | | 107 | 69 - 125 | 1 | 14 |
| trans-1,2-Dichloroethene | ND | F2 | 10.0 | 12.3 | F2 | ug/L | | 123 | 66 - 131 | 18 | 11 |
| trans-1,3-Dichloropropene | ND | | 10.0 | 9.42 | | ug/L | | 94 | 59 - 120 | 13 | 14 |
| Trichloroethene | ND | | 10.0 | 9.99 | | ug/L | | 100 | 68 - 129 | 2 | 12 |
| Vinyl chloride | ND | F2 | 10.0 | 10.4 | F2 | ug/L | | 104 | 55 - 123 | 13 | 12 |
| Chlorodibromomethane | ND | | 10.0 | 10.4 | | ug/L | | 104 | 62 - 131 | 1 | 15 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *113* | | *61 - 138* |
| *4-Bromofluorobenzene (Surr)* | *117* | | *69 - 120* |
| *Toluene-d8 (Surr)* | *106* | | *73 - 120* |
| *Dibromofluoromethane (Surr)* | *116* | | *69 - 124* |

**Lab Sample ID: MB 240-297346/6**
**Matrix: Water**
**Analysis Batch: 297346**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | | 1.0 | 0.46 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,1,1-Trichloroethane | ND | | 1.0 | 0.23 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 1.0 | 0.32 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/03/17 15:07 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 240-297346/6**
**Matrix: Water**
**Analysis Batch: 297346**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,2-Trichloroethane | ND | | 1.0 | 0.34 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,1-Dichloroethane | ND | | 1.0 | 0.25 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,1-Dichloroethene | ND | | 1.0 | 0.27 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,1-Dichloropropene | ND | | 1.0 | 0.28 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,2,3-Trichlorobenzene | ND | | 1.0 | 0.35 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,2,3-Trichloropropane | ND | | 1.0 | 0.54 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,2,4-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2.0 | 0.47 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,2-Dichlorobenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,2-Dichloroethane | ND | | 1.0 | 0.30 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,2-Dichloropropane | ND | | 1.0 | 0.30 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,3,5-Trimethylbenzene | ND | | 1.0 | 0.24 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,3-Dichlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,3-Dichloropropane | ND | | 1.0 | 0.29 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,4-Dichlorobenzene | ND | | 1.0 | 0.23 | ug/L | | | 10/03/17 15:07 | 1 |
| Allyl chloride | ND | | 2.0 | 0.38 | ug/L | | | 10/03/17 15:07 | 1 |
| 2,2-Dichloropropane | ND | | 1.0 | 0.34 | ug/L | | | 10/03/17 15:07 | 1 |
| 2-Chlorotoluene | ND | | 1.0 | 0.28 | ug/L | | | 10/03/17 15:07 | 1 |
| 2-Hexanone | ND | | 10 | 1.2 | ug/L | | | 10/03/17 15:07 | 1 |
| Bromobenzene | ND | | 1.0 | 0.31 | ug/L | | | 10/03/17 15:07 | 1 |
| Bromochloromethane | ND | | 1.0 | 0.47 | ug/L | | | 10/03/17 15:07 | 1 |
| 4-Chlorotoluene | ND | | 1.0 | 0.23 | ug/L | | | 10/03/17 15:07 | 1 |
| p-Isopropyltoluene | ND | | 1.0 | 0.29 | ug/L | | | 10/03/17 15:07 | 1 |
| Acetone | ND | | 10 | 1.8 | ug/L | | | 10/03/17 15:07 | 1 |
| Benzene | ND | | 1.0 | 0.28 | ug/L | | | 10/03/17 15:07 | 1 |
| Bromoform | ND | | 1.0 | 0.43 | ug/L | | | 10/03/17 15:07 | 1 |
| Bromomethane | ND | | 1.0 | 0.42 | ug/L | | | 10/03/17 15:07 | 1 |
| Carbon disulfide | ND | | 1.0 | 0.34 | ug/L | | | 10/03/17 15:07 | 1 |
| Carbon tetrachloride | ND | | 1.0 | 0.35 | ug/L | | | 10/03/17 15:07 | 1 |
| Chlorobenzene | ND | | 1.0 | 0.32 | ug/L | | | 10/03/17 15:07 | 1 |
| Chloroethane | ND | | 1.0 | 0.41 | ug/L | | | 10/03/17 15:07 | 1 |
| Chloroform | ND | | 1.0 | 0.31 | ug/L | | | 10/03/17 15:07 | 1 |
| Chloromethane | ND | | 1.0 | 0.43 | ug/L | | | 10/03/17 15:07 | 1 |
| cis-1,2-Dichloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/03/17 15:07 | 1 |
| cis-1,3-Dichloropropene | ND | | 1.0 | 0.26 | ug/L | | | 10/03/17 15:07 | 1 |
| Cyclohexane | ND | | 1.0 | 0.44 | ug/L | | | 10/03/17 15:07 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.36 | ug/L | | | 10/03/17 15:07 | 1 |
| Dibromomethane | ND | | 1.0 | 0.46 | ug/L | | | 10/03/17 15:07 | 1 |
| Bromodichloromethane | ND | | 1.0 | 0.30 | ug/L | | | 10/03/17 15:07 | 1 |
| Dichlorodifluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/03/17 15:07 | 1 |
| Dichlorofluoromethane | ND | | 2.0 | 0.43 | ug/L | | | 10/03/17 15:07 | 1 |
| Ethyl ether | ND | | 2.0 | 0.35 | ug/L | | | 10/03/17 15:07 | 1 |
| Ethylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/03/17 15:07 | 1 |
| 1,2-Dibromoethane | ND | | 1.0 | 0.23 | ug/L | | | 10/03/17 15:07 | 1 |
| Naphthalene | ND | | 1.0 | 0.25 | ug/L | | | 10/03/17 15:07 | 1 |
| m-Xylene & p-Xylene | ND | | 2.0 | 0.24 | ug/L | | | 10/03/17 15:07 | 1 |
| n-Butylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/03/17 15:07 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 240-297346/6**
**Matrix: Water**
**Analysis Batch: 297346**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Isopropylbenzene | ND | | 1.0 | 0.21 | ug/L | | | 10/03/17 15:07 | 1 |
| Methyl acetate | ND | | 10 | 1.4 | ug/L | | | 10/03/17 15:07 | 1 |
| N-Propylbenzene | ND | | 1.0 | 0.45 | ug/L | | | 10/03/17 15:07 | 1 |
| 2-Butanone (MEK) | ND | | 10 | 1.0 | ug/L | | | 10/03/17 15:07 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 10 | 0.71 | ug/L | | | 10/03/17 15:07 | 1 |
| sec-Butylbenzene | ND | | 1.0 | 0.27 | ug/L | | | 10/03/17 15:07 | 1 |
| Methyl tert butyl ether | ND | | 1.0 | 0.27 | ug/L | | | 10/03/17 15:07 | 1 |
| Methylene Chloride | ND | | 1.0 | 0.53 | ug/L | | | 10/03/17 15:07 | 1 |
| o-Xylene | ND | | 1.0 | 0.28 | ug/L | | | 10/03/17 15:07 | 1 |
| Styrene | ND | | 1.0 | 0.23 | ug/L | | | 10/03/17 15:07 | 1 |
| tert-Butylbenzene | ND | | 1.0 | 0.26 | ug/L | | | 10/03/17 15:07 | 1 |
| Tetrachloroethene | ND | | 1.0 | 0.30 | ug/L | | | 10/03/17 15:07 | 1 |
| Tetrahydrofuran | ND | | 5.0 | 0.84 | ug/L | | | 10/03/17 15:07 | 1 |
| Toluene | ND | | 1.0 | 0.23 | ug/L | | | 10/03/17 15:07 | 1 |
| trans-1,2-Dichloroethene | ND | | 1.0 | 0.29 | ug/L | | | 10/03/17 15:07 | 1 |
| trans-1,3-Dichloropropene | ND | | 1.0 | 0.31 | ug/L | | | 10/03/17 15:07 | 1 |
| Trichloroethene | ND | | 1.0 | 0.33 | ug/L | | | 10/03/17 15:07 | 1 |
| Trichlorofluoromethane | ND | | 1.0 | 0.50 | ug/L | | | 10/03/17 15:07 | 1 |
| Vinyl chloride | ND | | 1.0 | 0.45 | ug/L | | | 10/03/17 15:07 | 1 |
| Methylcyclohexane | ND | | 1.0 | 0.45 | ug/L | | | 10/03/17 15:07 | 1 |
| Chlorodibromomethane | ND | | 1.0 | 0.25 | ug/L | | | 10/03/17 15:07 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *103* | | *61 - 138* | | *10/03/17 15:07* | *1* |
| *4-Bromofluorobenzene (Surr)* | *94* | | *69 - 120* | | *10/03/17 15:07* | *1* |
| *Toluene-d8 (Surr)* | *95* | | *73 - 120* | | *10/03/17 15:07* | *1* |
| *Dibromofluoromethane (Surr)* | *99* | | *69 - 124* | | *10/03/17 15:07* | *1* |

**Lab Sample ID: LCS 240-297346/4**
**Matrix: Water**
**Analysis Batch: 297346**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 10.0 | 10.9 | | ug/L | | 109 | 73 - 136 |
| 1,1,1-Trichloroethane | 10.0 | 11.2 | | ug/L | | 112 | 64 - 147 |
| 1,1,2,2-Tetrachloroethane | 10.0 | 11.1 | | ug/L | | 111 | 58 - 122 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 10.0 | 12.4 | | ug/L | | 124 | 65 - 144 |
| 1,1,2-Trichloroethane | 10.0 | 11.7 | | ug/L | | 117 | 76 - 121 |
| 1,1-Dichloroethane | 10.0 | 9.85 | | ug/L | | 98 | 74 - 120 |
| 1,1-Dichloroethene | 10.0 | 11.0 | | ug/L | | 110 | 65 - 127 |
| 1,1-Dichloropropene | 10.0 | 11.6 | | ug/L | | 116 | 80 - 122 |
| 1,2,3-Trichlorobenzene | 10.0 | 8.57 | | ug/L | | 86 | 31 - 144 |
| 1,2,3-Trichloropropane | 10.0 | 10.6 | | ug/L | | 106 | 53 - 134 |
| 1,2,4-Trichlorobenzene | 10.0 | 7.91 | | ug/L | | 79 | 34 - 141 |
| 1,2,4-Trimethylbenzene | 10.0 | 11.1 | | ug/L | | 111 | 80 - 120 |
| 1,2-Dibromo-3-Chloropropane | 10.0 | 8.24 | | ug/L | | 82 | 50 - 130 |
| 1,2-Dichlorobenzene | 10.0 | 9.96 | | ug/L | | 100 | 80 - 120 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 240-297346/4**
**Matrix: Water**
**Analysis Batch: 297346**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,2-Dichloroethane | 10.0 | 11.1 | | ug/L | | 111 | 68 - 133 |
| 1,2-Dichloropropane | 10.0 | 9.96 | | ug/L | | 100 | 78 - 127 |
| 1,3,5-Trimethylbenzene | 10.0 | 11.5 | | ug/L | | 115 | 79 - 120 |
| 1,3-Dichlorobenzene | 10.0 | 9.57 | | ug/L | | 96 | 80 - 120 |
| 1,3-Dichloropropane | 10.0 | 11.8 | | ug/L | | 118 | 71 - 124 |
| 1,4-Dichlorobenzene | 10.0 | 9.61 | | ug/L | | 96 | 80 - 120 |
| Allyl chloride | 10.0 | 10.3 | | ug/L | | 103 | 57 - 143 |
| 2,2-Dichloropropane | 10.0 | 13.0 | | ug/L | | 130 | 32 - 178 |
| 2-Chlorotoluene | 10.0 | 9.92 | | ug/L | | 99 | 80 - 120 |
| 2-Hexanone | 20.0 | 17.4 | | ug/L | | 87 | 28 - 169 |
| Bromobenzene | 10.0 | 9.17 | | ug/L | | 92 | 73 - 120 |
| Bromochloromethane | 10.0 | 9.56 | | ug/L | | 96 | 78 - 120 |
| 4-Chlorotoluene | 10.0 | 9.86 | | ug/L | | 99 | 79 - 120 |
| p-Isopropyltoluene | 10.0 | 10.7 | | ug/L | | 107 | 78 - 125 |
| Acetone | 20.0 | 17.9 | | ug/L | | 89 | 35 - 131 |
| Benzene | 10.0 | 11.0 | | ug/L | | 110 | 79 - 120 |
| Bromoform | 10.0 | 10.1 | | ug/L | | 101 | 55 - 145 |
| Bromomethane | 10.0 | 10.3 | | ug/L | | 103 | 17 - 158 |
| Carbon disulfide | 10.0 | 12.7 | | ug/L | | 127 | 49 - 141 |
| Carbon tetrachloride | 10.0 | 13.4 | | ug/L | | 134 | 55 - 171 |
| Chlorobenzene | 10.0 | 11.0 | | ug/L | | 110 | 80 - 120 |
| Chloroethane | 10.0 | 6.05 | | ug/L | | 61 | 10 - 149 |
| Chloroform | 10.0 | 11.2 | | ug/L | | 112 | 80 - 120 |
| Chloromethane | 10.0 | 6.61 | | ug/L | | 66 | 59 - 124 |
| cis-1,2-Dichloroethene | 10.0 | 10.0 | | ug/L | | 100 | 77 - 120 |
| cis-1,3-Dichloropropene | 10.0 | 9.81 | | ug/L | | 98 | 75 - 120 |
| Cyclohexane | 10.0 | 10.7 | | ug/L | | 107 | 66 - 135 |
| Hexachlorobutadiene | 10.0 | 10.7 | | ug/L | | 107 | 36 - 146 |
| Dibromomethane | 10.0 | 10.1 | | ug/L | | 101 | 80 - 120 |
| Bromodichloromethane | 10.0 | 11.9 | | ug/L | | 119 | 79 - 125 |
| Dichlorodifluoromethane | 10.0 | 13.1 | | ug/L | | 131 | 42 - 141 |
| Dichlorofluoromethane | 10.0 | 11.5 | | ug/L | | 115 | 28 - 138 |
| Ethyl ether | 10.0 | 10.7 | | ug/L | | 107 | 72 - 125 |
| Ethylbenzene | 10.0 | 10.7 | | ug/L | | 107 | 80 - 120 |
| 1,2-Dibromoethane | 10.0 | 10.5 | | ug/L | | 105 | 80 - 120 |
| Naphthalene | 10.0 | 6.89 | | ug/L | | 69 | 31 - 127 |
| m-Xylene & p-Xylene | 10.0 | 11.1 | | ug/L | | 111 | 80 - 120 |
| n-Butylbenzene | 10.0 | 11.0 | | ug/L | | 110 | 60 - 137 |
| Isopropylbenzene | 10.0 | 11.0 | | ug/L | | 110 | 80 - 128 |
| Methyl acetate | 20.0 | 16.8 | | ug/L | | 84 | 63 - 137 |
| N-Propylbenzene | 10.0 | 9.98 | | ug/L | | 100 | 76 - 120 |
| 2-Butanone (MEK) | 20.0 | 22.3 | | ug/L | | 112 | 43 - 149 |
| 4-Methyl-2-pentanone (MIBK) | 20.0 | 14.3 | | ug/L | | 72 | 53 - 144 |
| sec-Butylbenzene | 10.0 | 10.9 | | ug/L | | 109 | 76 - 124 |
| Methylene Chloride | 10.0 | 12.1 | | ug/L | | 121 | 64 - 140 |
| o-Xylene | 10.0 | 10.4 | | ug/L | | 104 | 80 - 120 |
| Styrene | 10.0 | 10.9 | | ug/L | | 109 | 80 - 121 |
| tert-Butylbenzene | 10.0 | 10.4 | | ug/L | | 104 | 79 - 120 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 240-297346/4**
**Matrix: Water**
**Analysis Batch: 297346**

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

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Tetrachloroethene | 10.0 | 9.97 | | ug/L | | 100 | 80 - 122 |
| Tetrahydrofuran | 20.0 | 14.1 | | ug/L | | 71 | 63 - 131 |
| Toluene | 10.0 | 11.9 | | ug/L | | 119 | 78 - 120 |
| trans-1,2-Dichloroethene | 10.0 | 10.9 | | ug/L | | 109 | 74 - 124 |
| trans-1,3-Dichloropropene | 10.0 | 10.5 | | ug/L | | 105 | 67 - 120 |
| Trichloroethene | 10.0 | 9.50 | | ug/L | | 95 | 76 - 124 |
| Trichlorofluoromethane | 10.0 | 14.2 | | ug/L | | 142 | 27 - 176 |
| Vinyl chloride | 10.0 | 8.23 | | ug/L | | 82 | 65 - 124 |
| Methylcyclohexane | 10.0 | 10.8 | | ug/L | | 108 | 63 - 141 |
| Chlorodibromomethane | 10.0 | 12.3 | | ug/L | | 123 | 64 - 129 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *96* | | *61 - 138* |
| *4-Bromofluorobenzene (Surr)* | *112* | | *69 - 120* |
| *Toluene-d8 (Surr)* | *100* | | *73 - 120* |
| *Dibromofluoromethane (Surr)* | *90* | | *69 - 124* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 240-296281/21-A**
**Matrix: Water**
**Analysis Batch: 296632**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 296281**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.20 | 0.044 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Acenaphthylene | ND | | 0.20 | 0.048 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Acetophenone | ND | | 1.0 | 0.34 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Anthracene | ND | | 0.20 | 0.088 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Atrazine | ND | | 2.0 | 0.34 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Benzaldehyde | ND | | 2.0 | 0.39 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Benzo[a]anthracene | ND | | 0.20 | 0.030 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Benzo[b]fluoranthene | ND | | 0.20 | 0.039 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Benzo[k]fluoranthene | ND | | 0.20 | 0.045 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.20 | 0.046 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Benzo[a]pyrene | ND | | 0.20 | 0.051 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Butyl benzyl phthalate | ND | | 2.0 | 0.26 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 1,1'-Biphenyl | ND | | 1.0 | 0.13 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 1.0 | 0.32 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Bis(2-chloroethyl)ether | ND | | 1.0 | 0.10 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 5.0 | 1.7 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 2.0 | 0.22 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Caprolactam | ND | | 5.0 | 0.20 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Carbazole | ND | | 1.0 | 0.28 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 4-Chloroaniline | ND | | 2.0 | 0.21 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 4-Chloro-3-methylphenol | ND | | 2.0 | 0.21 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 2-Chloronaphthalene | ND | | 1.0 | 0.10 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 2-Chlorophenol | ND | | 1.0 | 0.29 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 2.0 | 0.30 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 240-296281/21-A**
**Matrix: Water**
**Analysis Batch: 296632**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 296281**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chrysene | ND | | 0.20 | 0.050 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 2-Methylnaphthalene | ND | | 0.20 | 0.090 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 3 & 4 Methylphenol | ND | | 2.0 | 0.80 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.20 | 0.045 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Dibenzofuran | ND | | 1.0 | 0.020 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 5.0 | 0.37 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 2,4-Dichlorophenol | ND | | 2.0 | 0.19 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Diethyl phthalate | ND | | 2.0 | 0.60 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 2,4-Dimethylphenol | ND | | 2.0 | 0.25 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Dimethyl phthalate | ND | | 2.0 | 0.29 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 5.0 | 2.4 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 2,4-Dinitrophenol | ND | | 5.0 | 0.32 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 2,4-Dinitrotoluene | ND | | 5.0 | 0.25 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Di-n-butyl phthalate | ND | | 5.0 | 1.7 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Di-n-octyl phthalate | ND | | 2.0 | 0.23 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Fluoranthene | ND | | 0.20 | 0.045 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Fluorene | ND | | 0.20 | 0.041 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Hexachlorobenzene | ND | | 0.20 | 0.085 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.27 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Hexachlorocyclopentadiene | ND | | 10 | 0.24 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Hexachloroethane | ND | | 1.0 | 0.19 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.20 | 0.043 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Isophorone | ND | | 1.0 | 0.27 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 2-Methylphenol | ND | | 1.0 | 0.17 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Naphthalene | ND | | 0.20 | 0.063 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 2-Nitroaniline | ND | | 2.0 | 0.21 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 3-Nitroaniline | ND | | 2.0 | 0.28 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 4-Nitroaniline | ND | | 2.0 | 0.22 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Nitrobenzene | ND | | 1.0 | 0.040 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 2-Nitrophenol | ND | | 2.0 | 0.28 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 4-Nitrophenol | ND | | 5.0 | 0.29 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| N-Nitrosodiphenylamine | ND | | 1.0 | 0.31 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 1.0 | 0.24 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 2,2'-oxybis[1-chloropropane] | ND | | 1.0 | 0.40 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Pentachlorophenol | ND | | 5.0 | 0.27 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Phenanthrene | ND | | 0.20 | 0.062 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Phenol | ND | | 1.0 | 0.60 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| Pyrene | ND | | 0.20 | 0.042 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 2,4,5-Trichlorophenol | ND | | 5.0 | 0.30 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 2,4,6-Trichlorophenol | ND | | 5.0 | 0.24 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |
| 2,6-Dinitrotoluene | ND | | 5.0 | 0.80 | ug/L | | 09/26/17 08:36 | 09/28/17 09:56 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorobiphenyl (Surr)* | *76* | | *38 - 120* | *09/26/17 08:36* | *09/28/17 09:56* | *1* |
| *2-Fluorophenol (Surr)* | *48* | | *10 - 120* | *09/26/17 08:36* | *09/28/17 09:56* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *54* | | *28 - 120* | *09/26/17 08:36* | *09/28/17 09:56* | *1* |
| *Nitrobenzene-d5 (Surr)* | *65* | | *32 - 120* | *09/26/17 08:36* | *09/28/17 09:56* | *1* |
| *Phenol-d5 (Surr)* | *30* | | *10 - 120* | *09/26/17 08:36* | *09/28/17 09:56* | *1* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 240-296281/21-A**
**Matrix: Water**
**Analysis Batch: 296632**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 296281**

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Terphenyl-d14 (Surr) | 88 | | 23 - 127 | 09/26/17 08:36 | 09/28/17 09:56 | 1 |

**Lab Sample ID: LCS 240-296281/22-A**
**Matrix: Water**
**Analysis Batch: 296632**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 296281**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Acenaphthene | 20.0 | 18.4 | | ug/L | | 92 | 54 - 120 |
| Acenaphthylene | 20.0 | 17.4 | | ug/L | | 87 | 53 - 120 |
| Acetophenone | 20.0 | 16.7 | | ug/L | | 84 | 56 - 120 |
| Anthracene | 20.0 | 17.7 | | ug/L | | 89 | 56 - 120 |
| Atrazine | 40.0 | 37.5 | | ug/L | | 94 | 61 - 127 |
| Benzaldehyde | 40.0 | 34.4 | | ug/L | | 86 | 47 - 134 |
| Benzo[a]anthracene | 20.0 | 17.5 | | ug/L | | 88 | 54 - 120 |
| Benzo[b]fluoranthene | 20.0 | 17.5 | | ug/L | | 87 | 53 - 120 |
| Benzo[k]fluoranthene | 20.0 | 16.4 | | ug/L | | 82 | 55 - 120 |
| Benzo[g,h,i]perylene | 20.0 | 15.3 | | ug/L | | 76 | 55 - 120 |
| Benzo[a]pyrene | 20.0 | 17.0 | | ug/L | | 85 | 54 - 120 |
| Butyl benzyl phthalate | 20.0 | 18.7 | | ug/L | | 94 | 51 - 120 |
| 1,1'-Biphenyl | 20.0 | 17.7 | | ug/L | | 89 | 53 - 120 |
| Bis(2-chloroethoxy)methane | 20.0 | 16.7 | | ug/L | | 83 | 56 - 120 |
| Bis(2-chloroethyl)ether | 20.0 | 15.9 | | ug/L | | 80 | 51 - 120 |
| Bis(2-ethylhexyl) phthalate | 20.0 | 17.3 | | ug/L | | 86 | 50 - 120 |
| 4-Bromophenyl phenyl ether | 20.0 | 16.9 | | ug/L | | 85 | 54 - 120 |
| Caprolactam | 40.0 | 5.93 | | ug/L | | 15 | 10 - 120 |
| Carbazole | 20.0 | 17.6 | | ug/L | | 88 | 62 - 120 |
| 4-Chloroaniline | 20.0 | 1.95 | J | ug/L | | 10 | 10 - 120 |
| 4-Chloro-3-methylphenol | 20.0 | 15.5 | | ug/L | | 78 | 54 - 120 |
| 2-Chloronaphthalene | 20.0 | 17.8 | | ug/L | | 89 | 53 - 120 |
| 2-Chlorophenol | 20.0 | 14.8 | | ug/L | | 74 | 53 - 120 |
| 4-Chlorophenyl phenyl ether | 20.0 | 18.4 | | ug/L | | 92 | 56 - 120 |
| Chrysene | 20.0 | 17.7 | | ug/L | | 88 | 56 - 120 |
| 2-Methylnaphthalene | 20.0 | 15.3 | | ug/L | | 76 | 54 - 120 |
| 3 & 4 Methylphenol | 20.0 | 12.8 | | ug/L | | 64 | 40 - 120 |
| Dibenz(a,h)anthracene | 20.0 | 14.6 | | ug/L | | 73 | 52 - 120 |
| Dibenzofuran | 20.0 | 18.3 | | ug/L | | 92 | 55 - 120 |
| 3,3'-Dichlorobenzidine | 40.0 | 37.7 | | ug/L | | 94 | 57 - 120 |
| 2,4-Dichlorophenol | 20.0 | 14.7 | | ug/L | | 74 | 55 - 120 |
| Diethyl phthalate | 20.0 | 20.2 | | ug/L | | 101 | 42 - 132 |
| 2,4-Dimethylphenol | 20.0 | 15.6 | | ug/L | | 78 | 52 - 120 |
| Dimethyl phthalate | 20.0 | 19.4 | | ug/L | | 97 | 56 - 120 |
| 4,6-Dinitro-2-methylphenol | 40.0 | 27.1 | | ug/L | | 68 | 36 - 120 |
| 2,4-Dinitrophenol | 40.0 | 19.0 | | ug/L | | 47 | 12 - 120 |
| 2,4-Dinitrotoluene | 20.0 | 20.4 | | ug/L | | 102 | 60 - 120 |
| Di-n-butyl phthalate | 20.0 | 18.1 | | ug/L | | 90 | 61 - 120 |
| Di-n-octyl phthalate | 20.0 | 15.1 | | ug/L | | 75 | 58 - 120 |
| Fluoranthene | 20.0 | 17.4 | | ug/L | | 87 | 58 - 120 |
| Fluorene | 20.0 | 18.7 | | ug/L | | 94 | 56 - 120 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 240-296281/22-A**
**Matrix: Water**
**Analysis Batch: 296632**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 296281**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Hexachlorobenzene | 20.0 | 16.0 | | ug/L | | 80 | 51 - 120 |
| Hexachlorobutadiene | 20.0 | 12.7 | | ug/L | | 63 | 44 - 120 |
| Hexachlorocyclopentadiene | 20.0 | 10.8 | | ug/L | | 54 | 19 - 120 |
| Hexachloroethane | 20.0 | 12.7 | | ug/L | | 64 | 44 - 120 |
| Indeno[1,2,3-cd]pyrene | 20.0 | 15.4 | | ug/L | | 77 | 54 - 120 |
| Isophorone | 20.0 | 16.3 | | ug/L | | 81 | 55 - 120 |
| 2-Methylphenol | 20.0 | 14.4 | | ug/L | | 72 | 46 - 120 |
| Naphthalene | 20.0 | 14.7 | | ug/L | | 74 | 53 - 120 |
| 2-Nitroaniline | 20.0 | 20.0 | | ug/L | | 100 | 51 - 120 |
| 3-Nitroaniline | 20.0 | 14.6 | | ug/L | | 73 | 53 - 120 |
| 4-Nitroaniline | 20.0 | 18.5 | | ug/L | | 92 | 55 - 120 |
| Nitrobenzene | 20.0 | 15.9 | | ug/L | | 79 | 55 - 120 |
| 2-Nitrophenol | 20.0 | 15.8 | | ug/L | | 79 | 54 - 120 |
| 4-Nitrophenol | 40.0 | 14.0 | | ug/L | | 35 | 10 - 120 |
| N-Nitrosodiphenylamine | 20.0 | 17.7 | | ug/L | | 89 | 55 - 120 |
| N-Nitrosodi-n-propylamine | 20.0 | 16.8 | | ug/L | | 84 | 53 - 120 |
| 2,2'-oxybis[1-chloropropane] | 20.0 | 15.4 | | ug/L | | 77 | 45 - 120 |
| Pentachlorophenol | 40.0 | 20.2 | | ug/L | | 51 | 30 - 120 |
| Phenanthrene | 20.0 | 17.0 | | ug/L | | 85 | 55 - 120 |
| Phenol | 20.0 | 6.56 | | ug/L | | 33 | 10 - 120 |
| Pyrene | 20.0 | 18.3 | | ug/L | | 92 | 57 - 120 |
| 2,4,5-Trichlorophenol | 20.0 | 17.8 | | ug/L | | 89 | 54 - 120 |
| 2,4,6-Trichlorophenol | 20.0 | 17.5 | | ug/L | | 88 | 54 - 120 |
| 2,6-Dinitrotoluene | 20.0 | 19.8 | | ug/L | | 99 | 60 - 120 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorobiphenyl (Surr)* | *93* | | *38 - 120* |
| *2-Fluorophenol (Surr)* | *53* | | *10 - 120* |
| *2,4,6-Tribromophenol (Surr)* | *87* | | *28 - 120* |
| *Nitrobenzene-d5 (Surr)* | *82* | | *32 - 120* |
| *Phenol-d5 (Surr)* | *34* | | *10 - 120* |
| *Terphenyl-d14 (Surr)* | *98* | | *23 - 127* |

**Lab Sample ID: MB 240-296485/18-A**
**Matrix: Water**
**Analysis Batch: 296829**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 296485**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 0.20 | 0.044 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Acenaphthylene | ND | | 0.20 | 0.048 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Acetophenone | ND | | 1.0 | 0.34 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Anthracene | ND | | 0.20 | 0.088 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Atrazine | ND | | 2.0 | 0.34 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Benzaldehyde | ND | | 2.0 | 0.39 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Benzo[a]anthracene | ND | | 0.20 | 0.030 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Benzo[b]fluoranthene | ND | | 0.20 | 0.039 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Benzo[k]fluoranthene | ND | | 0.20 | 0.045 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Benzo[g,h,i]perylene | ND | | 0.20 | 0.046 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 240-296485/18-A**
**Matrix: Water**
**Analysis Batch: 296829**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 296485**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzo[a]pyrene | ND | | 0.20 | 0.051 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Butyl benzyl phthalate | ND | | 2.0 | 0.26 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 1,1'-Biphenyl | ND | | 1.0 | 0.13 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Bis(2-chloroethoxy)methane | ND | | 1.0 | 0.32 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Bis(2-chloroethyl)ether | ND | | 1.0 | 0.10 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Bis(2-ethylhexyl) phthalate | ND | | 5.0 | 1.7 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 4-Bromophenyl phenyl ether | ND | | 2.0 | 0.22 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Caprolactam | ND | | 5.0 | 0.20 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Carbazole | ND | | 1.0 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 4-Chloroaniline | ND | | 2.0 | 0.21 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 4-Chloro-3-methylphenol | ND | | 2.0 | 0.21 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 2-Chloronaphthalene | ND | | 1.0 | 0.10 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 2-Chlorophenol | ND | | 1.0 | 0.29 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 4-Chlorophenyl phenyl ether | ND | | 2.0 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Chrysene | ND | | 0.20 | 0.050 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 2-Methylnaphthalene | ND | | 0.20 | 0.090 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 3 & 4 Methylphenol | ND | | 2.0 | 0.80 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Dibenz(a,h)anthracene | ND | | 0.20 | 0.045 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Dibenzofuran | ND | | 1.0 | 0.020 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 3,3'-Dichlorobenzidine | ND | | 5.0 | 0.37 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 2,4-Dichlorophenol | ND | | 2.0 | 0.19 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Diethyl phthalate | 0.799 | J | 2.0 | 0.60 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 2,4-Dimethylphenol | ND | | 2.0 | 0.25 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Dimethyl phthalate | ND | | 2.0 | 0.29 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 4,6-Dinitro-2-methylphenol | ND | | 5.0 | 2.4 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 2,4-Dinitrophenol | ND | | 5.0 | 0.32 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 2,4-Dinitrotoluene | ND | | 5.0 | 0.25 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Di-n-butyl phthalate | ND | | 5.0 | 1.7 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Di-n-octyl phthalate | ND | | 2.0 | 0.23 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Fluoranthene | ND | | 0.20 | 0.045 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Fluorene | ND | | 0.20 | 0.041 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Hexachlorobenzene | ND | | 0.20 | 0.085 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Hexachlorobutadiene | ND | | 1.0 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Hexachlorocyclopentadiene | ND | | 10 | 0.24 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Hexachloroethane | ND | | 1.0 | 0.19 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Indeno[1,2,3-cd]pyrene | ND | | 0.20 | 0.043 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Isophorone | ND | | 1.0 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 2-Methylphenol | ND | | 1.0 | 0.17 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Naphthalene | ND | | 0.20 | 0.063 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 2-Nitroaniline | ND | | 2.0 | 0.21 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 3-Nitroaniline | ND | | 2.0 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 4-Nitroaniline | ND | | 2.0 | 0.22 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Nitrobenzene | ND | | 1.0 | 0.040 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 2-Nitrophenol | ND | | 2.0 | 0.28 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 4-Nitrophenol | ND | | 5.0 | 0.29 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| N-Nitrosodiphenylamine | ND | | 1.0 | 0.31 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| N-Nitrosodi-n-propylamine | ND | | 1.0 | 0.24 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 2,2'-oxybis[1-chloropropane] | ND | | 1.0 | 0.40 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 240-296485/18-A**
**Matrix: Water**
**Analysis Batch: 296829**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 296485**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Pentachlorophenol | ND | | 5.0 | 0.27 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Phenanthrene | ND | | 0.20 | 0.062 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Phenol | ND | | 1.0 | 0.60 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| Pyrene | ND | | 0.20 | 0.042 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 2,4,5-Trichlorophenol | ND | | 5.0 | 0.30 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 2,4,6-Trichlorophenol | ND | | 5.0 | 0.24 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |
| 2,6-Dinitrotoluene | ND | | 5.0 | 0.80 | ug/L | | 09/27/17 09:28 | 09/29/17 09:37 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorobiphenyl (Surr)* | *89* | | *38 - 120* | *09/27/17 09:28* | *09/29/17 09:37* | *1* |
| *2-Fluorophenol (Surr)* | *51* | | *10 - 120* | *09/27/17 09:28* | *09/29/17 09:37* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *69* | | *28 - 120* | *09/27/17 09:28* | *09/29/17 09:37* | *1* |
| *Nitrobenzene-d5 (Surr)* | *76* | | *32 - 120* | *09/27/17 09:28* | *09/29/17 09:37* | *1* |
| *Phenol-d5 (Surr)* | *32* | | *10 - 120* | *09/27/17 09:28* | *09/29/17 09:37* | *1* |
| *Terphenyl-d14 (Surr)* | *110* | | *23 - 127* | *09/27/17 09:28* | *09/29/17 09:37* | *1* |

**Lab Sample ID: LCS 240-296485/19-A**
**Matrix: Water**
**Analysis Batch: 296829**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 296485**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Acenaphthene | 20.0 | 17.2 | | ug/L | | 86 | 54 - 120 |
| Acenaphthylene | 20.0 | 16.1 | | ug/L | | 81 | 53 - 120 |
| Acetophenone | 20.0 | 16.6 | | ug/L | | 83 | 56 - 120 |
| Anthracene | 20.0 | 18.0 | | ug/L | | 90 | 56 - 120 |
| Atrazine | 40.0 | 39.2 | | ug/L | | 98 | 61 - 127 |
| Benzaldehyde | 40.0 | 34.8 | | ug/L | | 87 | 47 - 134 |
| Benzo[a]anthracene | 20.0 | 18.0 | | ug/L | | 90 | 54 - 120 |
| Benzo[b]fluoranthene | 20.0 | 16.9 | | ug/L | | 84 | 53 - 120 |
| Benzo[k]fluoranthene | 20.0 | 17.2 | | ug/L | | 86 | 55 - 120 |
| Benzo[g,h,i]perylene | 20.0 | 15.5 | | ug/L | | 77 | 55 - 120 |
| Benzo[a]pyrene | 20.0 | 17.1 | | ug/L | | 85 | 54 - 120 |
| Butyl benzyl phthalate | 20.0 | 19.1 | | ug/L | | 95 | 51 - 120 |
| 1,1'-Biphenyl | 20.0 | 16.2 | | ug/L | | 81 | 53 - 120 |
| Bis(2-chloroethoxy)methane | 20.0 | 16.6 | | ug/L | | 83 | 56 - 120 |
| Bis(2-chloroethyl)ether | 20.0 | 15.5 | | ug/L | | 77 | 51 - 120 |
| Bis(2-ethylhexyl) phthalate | 20.0 | 18.2 | | ug/L | | 91 | 50 - 120 |
| 4-Bromophenyl phenyl ether | 20.0 | 17.3 | | ug/L | | 86 | 54 - 120 |
| Caprolactam | 40.0 | 5.49 | | ug/L | | 14 | 10 - 120 |
| Carbazole | 20.0 | 18.0 | | ug/L | | 90 | 62 - 120 |
| 4-Chloroaniline | 20.0 | 2.00 | | ug/L | | 10 | 10 - 120 |
| 4-Chloro-3-methylphenol | 20.0 | 15.0 | | ug/L | | 75 | 54 - 120 |
| 2-Chloronaphthalene | 20.0 | 16.2 | | ug/L | | 81 | 53 - 120 |
| 2-Chlorophenol | 20.0 | 15.0 | | ug/L | | 75 | 53 - 120 |
| 4-Chlorophenyl phenyl ether | 20.0 | 17.6 | | ug/L | | 88 | 56 - 120 |
| Chrysene | 20.0 | 18.2 | | ug/L | | 91 | 56 - 120 |
| 2-Methylnaphthalene | 20.0 | 14.0 | | ug/L | | 70 | 54 - 120 |
| 3 & 4 Methylphenol | 20.0 | 12.3 | | ug/L | | 62 | 40 - 120 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 240-296485/19-A**
**Matrix: Water**
**Analysis Batch: 296829**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 296485**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Dibenz(a,h)anthracene | 20.0 | 14.4 | | ug/L | | 72 | 52 - 120 |
| Dibenzofuran | 20.0 | 17.2 | | ug/L | | 86 | 55 - 120 |
| 3,3'-Dichlorobenzidine | 40.0 | 39.0 | | ug/L | | 97 | 57 - 120 |
| 2,4-Dichlorophenol | 20.0 | 14.4 | | ug/L | | 72 | 55 - 120 |
| Diethyl phthalate | 20.0 | 20.5 | | ug/L | | 103 | 42 - 132 |
| 2,4-Dimethylphenol | 20.0 | 15.4 | | ug/L | | 77 | 52 - 120 |
| Dimethyl phthalate | 20.0 | 18.3 | | ug/L | | 92 | 56 - 120 |
| 4,6-Dinitro-2-methylphenol | 40.0 | 29.3 | | ug/L | | 73 | 36 - 120 |
| 2,4-Dinitrophenol | 40.0 | 20.8 | | ug/L | | 52 | 12 - 120 |
| 2,4-Dinitrotoluene | 20.0 | 20.0 | | ug/L | | 100 | 60 - 120 |
| Di-n-butyl phthalate | 20.0 | 18.8 | | ug/L | | 94 | 61 - 120 |
| Di-n-octyl phthalate | 20.0 | 14.7 | | ug/L | | 74 | 58 - 120 |
| Fluoranthene | 20.0 | 18.1 | | ug/L | | 91 | 58 - 120 |
| Fluorene | 20.0 | 17.4 | | ug/L | | 87 | 56 - 120 |
| Hexachlorobenzene | 20.0 | 16.9 | | ug/L | | 85 | 51 - 120 |
| Hexachlorobutadiene | 20.0 | 12.5 | | ug/L | | 62 | 44 - 120 |
| Hexachlorocyclopentadiene | 20.0 | 10.5 | | ug/L | | 52 | 19 - 120 |
| Hexachloroethane | 20.0 | 12.4 | | ug/L | | 62 | 44 - 120 |
| Indeno[1,2,3-cd]pyrene | 20.0 | 15.6 | | ug/L | | 78 | 54 - 120 |
| Isophorone | 20.0 | 16.2 | | ug/L | | 81 | 55 - 120 |
| 2-Methylphenol | 20.0 | 13.7 | | ug/L | | 68 | 46 - 120 |
| Naphthalene | 20.0 | 14.2 | | ug/L | | 71 | 53 - 120 |
| 2-Nitroaniline | 20.0 | 23.3 | | ug/L | | 117 | 51 - 120 |
| 3-Nitroaniline | 20.0 | 13.8 | | ug/L | | 69 | 53 - 120 |
| 4-Nitroaniline | 20.0 | 18.9 | | ug/L | | 94 | 55 - 120 |
| Nitrobenzene | 20.0 | 15.6 | | ug/L | | 78 | 55 - 120 |
| 2-Nitrophenol | 20.0 | 15.4 | | ug/L | | 77 | 54 - 120 |
| 4-Nitrophenol | 40.0 | 12.7 | | ug/L | | 32 | 10 - 120 |
| N-Nitrosodiphenylamine | 20.0 | 17.7 | | ug/L | | 89 | 55 - 120 |
| N-Nitrosodi-n-propylamine | 20.0 | 16.4 | | ug/L | | 82 | 53 - 120 |
| 2,2'-oxybis[1-chloropropane] | 20.0 | 14.9 | | ug/L | | 75 | 45 - 120 |
| Pentachlorophenol | 40.0 | 23.6 | | ug/L | | 59 | 30 - 120 |
| Phenanthrene | 20.0 | 17.4 | | ug/L | | 87 | 55 - 120 |
| Phenol | 20.0 | 6.12 | | ug/L | | 31 | 10 - 120 |
| Pyrene | 20.0 | 19.2 | | ug/L | | 96 | 57 - 120 |
| 2,4,5-Trichlorophenol | 20.0 | 16.9 | | ug/L | | 85 | 54 - 120 |
| 2,4,6-Trichlorophenol | 20.0 | 16.5 | | ug/L | | 82 | 54 - 120 |
| 2,6-Dinitrotoluene | 20.0 | 19.4 | | ug/L | | 97 | 60 - 120 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorobiphenyl (Surr)* | *90* | | *38 - 120* |
| *2-Fluorophenol (Surr)* | *50* | | *10 - 120* |
| *2,4,6-Tribromophenol (Surr)* | *84* | | *28 - 120* |
| *Nitrobenzene-d5 (Surr)* | *80* | | *32 - 120* |
| *Phenol-d5 (Surr)* | *32* | | *10 - 120* |
| *Terphenyl-d14 (Surr)* | *100* | | *23 - 127* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 240-296485/20-A**
**Matrix: Water**
**Analysis Batch: 296829**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 296485**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 20.0 | 18.3 | | ug/L | | 92 | 54 - 120 | 6 | 35 |
| Acenaphthylene | 20.0 | 16.9 | | ug/L | | 85 | 53 - 120 | 5 | 35 |
| Acetophenone | 20.0 | 16.9 | | ug/L | | 85 | 56 - 120 | 2 | 35 |
| Anthracene | 20.0 | 19.0 | | ug/L | | 95 | 56 - 120 | 6 | 35 |
| Atrazine | 40.0 | 40.9 | | ug/L | | 102 | 61 - 127 | 4 | 35 |
| Benzaldehyde | 40.0 | 35.8 | | ug/L | | 90 | 47 - 134 | 3 | 35 |
| Benzo[a]anthracene | 20.0 | 19.4 | | ug/L | | 97 | 54 - 120 | 8 | 35 |
| Benzo[b]fluoranthene | 20.0 | 18.4 | | ug/L | | 92 | 53 - 120 | 9 | 35 |
| Benzo[k]fluoranthene | 20.0 | 18.6 | | ug/L | | 93 | 55 - 120 | 7 | 35 |
| Benzo[g,h,i]perylene | 20.0 | 16.6 | | ug/L | | 83 | 55 - 120 | 7 | 35 |
| Benzo[a]pyrene | 20.0 | 19.1 | | ug/L | | 96 | 54 - 120 | 11 | 35 |
| Butyl benzyl phthalate | 20.0 | 20.7 | | ug/L | | 104 | 51 - 120 | 8 | 35 |
| 1,1'-Biphenyl | 20.0 | 17.1 | | ug/L | | 86 | 53 - 120 | 6 | 35 |
| Bis(2-chloroethoxy)methane | 20.0 | 17.3 | | ug/L | | 86 | 56 - 120 | 4 | 35 |
| Bis(2-chloroethyl)ether | 20.0 | 16.0 | | ug/L | | 80 | 51 - 120 | 4 | 35 |
| Bis(2-ethylhexyl) phthalate | 20.0 | 20.4 | | ug/L | | 102 | 50 - 120 | 11 | 35 |
| 4-Bromophenyl phenyl ether | 20.0 | 18.2 | | ug/L | | 91 | 54 - 120 | 5 | 35 |
| Caprolactam | 40.0 | 6.69 | | ug/L | | 17 | 10 - 120 | 20 | 35 |
| Carbazole | 20.0 | 18.9 | | ug/L | | 95 | 62 - 120 | 5 | 35 |
| 4-Chloroaniline | 20.0 | 2.35 | | ug/L | | 12 | 10 - 120 | 16 | 35 |
| 4-Chloro-3-methylphenol | 20.0 | 16.3 | | ug/L | | 82 | 54 - 120 | 9 | 35 |
| 2-Chloronaphthalene | 20.0 | 17.5 | | ug/L | | 88 | 53 - 120 | 8 | 35 |
| 2-Chlorophenol | 20.0 | 15.4 | | ug/L | | 77 | 53 - 120 | 2 | 35 |
| 4-Chlorophenyl phenyl ether | 20.0 | 18.6 | | ug/L | | 93 | 56 - 120 | 5 | 35 |
| Chrysene | 20.0 | 20.0 | | ug/L | | 100 | 56 - 120 | 10 | 35 |
| 2-Methylnaphthalene | 20.0 | 14.9 | | ug/L | | 74 | 54 - 120 | 6 | 35 |
| 3 & 4 Methylphenol | 20.0 | 13.4 | | ug/L | | 67 | 40 - 120 | 8 | 35 |
| Dibenz(a,h)anthracene | 20.0 | 16.2 | | ug/L | | 81 | 52 - 120 | 12 | 35 |
| Dibenzofuran | 20.0 | 18.2 | | ug/L | | 91 | 55 - 120 | 6 | 35 |
| 3,3'-Dichlorobenzidine | 40.0 | 41.3 | | ug/L | | 103 | 57 - 120 | 6 | 35 |
| 2,4-Dichlorophenol | 20.0 | 15.6 | | ug/L | | 78 | 55 - 120 | 8 | 35 |
| Diethyl phthalate | 20.0 | 22.1 | | ug/L | | 111 | 42 - 132 | 8 | 35 |
| 2,4-Dimethylphenol | 20.0 | 16.9 | | ug/L | | 85 | 52 - 120 | 9 | 35 |
| Dimethyl phthalate | 20.0 | 19.8 | | ug/L | | 99 | 56 - 120 | 8 | 35 |
| 4,6-Dinitro-2-methylphenol | 40.0 | 31.1 | | ug/L | | 78 | 36 - 120 | 6 | 35 |
| 2,4-Dinitrophenol | 40.0 | 23.9 | | ug/L | | 60 | 12 - 120 | 14 | 35 |
| 2,4-Dinitrotoluene | 20.0 | 20.6 | | ug/L | | 103 | 60 - 120 | 3 | 35 |
| Di-n-butyl phthalate | 20.0 | 20.1 | | ug/L | | 100 | 61 - 120 | 6 | 35 |
| Di-n-octyl phthalate | 20.0 | 15.8 | | ug/L | | 79 | 58 - 120 | 7 | 35 |
| Fluoranthene | 20.0 | 19.1 | | ug/L | | 96 | 58 - 120 | 5 | 35 |
| Fluorene | 20.0 | 18.8 | | ug/L | | 94 | 56 - 120 | 7 | 35 |
| Hexachlorobenzene | 20.0 | 18.1 | | ug/L | | 91 | 51 - 120 | 7 | 35 |
| Hexachlorobutadiene | 20.0 | 13.2 | | ug/L | | 66 | 44 - 120 | 6 | 35 |
| Hexachlorocyclopentadiene | 20.0 | 11.2 | | ug/L | | 56 | 19 - 120 | 7 | 35 |
| Hexachloroethane | 20.0 | 12.3 | | ug/L | | 62 | 44 - 120 | 0 | 35 |
| Indeno[1,2,3-cd]pyrene | 20.0 | 16.9 | | ug/L | | 84 | 54 - 120 | 8 | 35 |
| Isophorone | 20.0 | 17.1 | | ug/L | | 85 | 55 - 120 | 5 | 35 |
| 2-Methylphenol | 20.0 | 15.0 | | ug/L | | 75 | 46 - 120 | 9 | 35 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCSD 240-296485/20-A**
**Matrix: Water**
**Analysis Batch: 296829**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 296485**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | | | 20.0 | 14.6 | | ug/L | | 73 | 53 - 120 | 3 | 35 |
| 2-Nitroaniline | | | 20.0 | 25.5 | * | ug/L | | 128 | 51 - 120 | 9 | 35 |
| 3-Nitroaniline | | | 20.0 | 16.1 | | ug/L | | 81 | 53 - 120 | 16 | 35 |
| 4-Nitroaniline | | | 20.0 | 19.5 | | ug/L | | 97 | 55 - 120 | 3 | 35 |
| Nitrobenzene | | | 20.0 | 16.4 | | ug/L | | 82 | 55 - 120 | 5 | 35 |
| 2-Nitrophenol | | | 20.0 | 16.7 | | ug/L | | 83 | 54 - 120 | 8 | 35 |
| 4-Nitrophenol | | | 40.0 | 15.7 | | ug/L | | 39 | 10 - 120 | 21 | 35 |
| N-Nitrosodiphenylamine | | | 20.0 | 18.7 | | ug/L | | 93 | 55 - 120 | 5 | 35 |
| N-Nitrosodi-n-propylamine | | | 20.0 | 16.6 | | ug/L | | 83 | 53 - 120 | 1 | 35 |
| 2,2'-oxybis[1-chloropropane] | | | 20.0 | 15.1 | | ug/L | | 76 | 45 - 120 | 1 | 35 |
| Pentachlorophenol | | | 40.0 | 25.6 | | ug/L | | 64 | 30 - 120 | 8 | 35 |
| Phenanthrene | | | 20.0 | 18.3 | | ug/L | | 92 | 55 - 120 | 5 | 35 |
| Phenol | | | 20.0 | 7.20 | | ug/L | | 36 | 10 - 120 | 16 | 35 |
| Pyrene | | | 20.0 | 20.5 | | ug/L | | 102 | 57 - 120 | 7 | 35 |
| 2,4,5-Trichlorophenol | | | 20.0 | 18.9 | | ug/L | | 95 | 54 - 120 | 11 | 35 |
| 2,4,6-Trichlorophenol | | | 20.0 | 17.3 | | ug/L | | 87 | 54 - 120 | 5 | 35 |
| 2,6-Dinitrotoluene | | | 20.0 | 21.6 | | ug/L | | 108 | 60 - 120 | 11 | 35 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorobiphenyl (Surr)* | *96* | | *38 - 120* |
| *2-Fluorophenol (Surr)* | *53* | | *10 - 120* |
| *2,4,6-Tribromophenol (Surr)* | *90* | | *28 - 120* |
| *Nitrobenzene-d5 (Surr)* | *84* | | *32 - 120* |
| *Phenol-d5 (Surr)* | *36* | | *10 - 120* |
| *Terphenyl-d14 (Surr)* | *106* | | *23 - 127* |

## Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC)

**Lab Sample ID: MB 240-297098/21**
**Matrix: Water**
**Analysis Batch: 297098**

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

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| WI Gasoline Range Organics (C6-C10) | ND | | 100 | 20 | ug/L | | | 10/02/17 21:10 | 1 |

**Lab Sample ID: LCS 240-297098/22**
**Matrix: Water**
**Analysis Batch: 297098**

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

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WI Gasoline Range Organics (C6-C10) | | | 800 | 700 | | ug/L | | 88 | 80 - 120 | | |

## Method: WI-GRO - Wisconsin - Gasoline Range Organics (GC) (Continued)

**Lab Sample ID: LCSD 240-297098/36**
**Matrix: Water**
**Analysis Batch: 297098**

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

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| WI Gasoline Range Organics (C6-C10) | | | 800 | 797 | | ug/L | | 100 | 80 - 120 | 13 | 20 |

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 240-296387/18-A**
**Matrix: Water**
**Analysis Batch: 296589**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 296387**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | ND | | 0.20 | 0.050 | ug/L | | 09/26/17 14:40 | 09/28/17 18:46 | 1 |
| Aroclor-1221 | ND | | 0.20 | 0.090 | ug/L | | 09/26/17 14:40 | 09/28/17 18:46 | 1 |
| Aroclor-1232 | ND | | 0.20 | 0.070 | ug/L | | 09/26/17 14:40 | 09/28/17 18:46 | 1 |
| Aroclor-1242 | ND | | 0.20 | 0.060 | ug/L | | 09/26/17 14:40 | 09/28/17 18:46 | 1 |
| Aroclor-1248 | ND | | 0.20 | 0.050 | ug/L | | 09/26/17 14:40 | 09/28/17 18:46 | 1 |
| Aroclor-1254 | ND | | 0.20 | 0.030 | ug/L | | 09/26/17 14:40 | 09/28/17 18:46 | 1 |
| Aroclor-1260 | ND | | 0.20 | 0.040 | ug/L | | 09/26/17 14:40 | 09/28/17 18:46 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *DCB Decachlorobiphenyl* | *70* | | *10 - 120* | *09/26/17 14:40* | *09/28/17 18:46* | *1* |
| *Tetrachloro-m-xylene* | *60* | | *21 - 120* | *09/26/17 14:40* | *09/28/17 18:46* | *1* |

**Lab Sample ID: LCS 240-296387/19-A**
**Matrix: Water**
**Analysis Batch: 296589**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 296387**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | | | 2.50 | 1.43 | | ug/L | | 57 | 32 - 120 |
| Aroclor-1260 | | | 2.50 | 1.65 | | ug/L | | 66 | 36 - 120 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *DCB Decachlorobiphenyl* | *71* | | *10 - 120* |
| *Tetrachloro-m-xylene* | *58* | | *21 - 120* |

**Lab Sample ID: MB 240-296554/15-A**
**Matrix: Water**
**Analysis Batch: 296783**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 296554**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | ND | | 0.20 | 0.050 | ug/L | | 09/27/17 13:47 | 09/29/17 15:19 | 1 |
| Aroclor-1221 | ND | | 0.20 | 0.090 | ug/L | | 09/27/17 13:47 | 09/29/17 15:19 | 1 |
| Aroclor-1232 | ND | | 0.20 | 0.070 | ug/L | | 09/27/17 13:47 | 09/29/17 15:19 | 1 |
| Aroclor-1242 | ND | | 0.20 | 0.060 | ug/L | | 09/27/17 13:47 | 09/29/17 15:19 | 1 |
| Aroclor-1248 | ND | | 0.20 | 0.050 | ug/L | | 09/27/17 13:47 | 09/29/17 15:19 | 1 |
| Aroclor-1254 | ND | | 0.20 | 0.030 | ug/L | | 09/27/17 13:47 | 09/29/17 15:19 | 1 |
| Aroclor-1260 | ND | | 0.20 | 0.040 | ug/L | | 09/27/17 13:47 | 09/29/17 15:19 | 1 |

## Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

**Lab Sample ID: MB 240-296554/15-A**
**Matrix: Water**
**Analysis Batch: 296783**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 296554**

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| DCB Decachlorobiphenyl | 79 | | 10 - 120 | 09/27/17 13:47 | 09/29/17 15:19 | 1 |
| Tetrachloro-m-xylene | 73 | | 21 - 120 | 09/27/17 13:47 | 09/29/17 15:19 | 1 |

**Lab Sample ID: LCS 240-296554/16-A**
**Matrix: Water**
**Analysis Batch: 296783**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 296554**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Aroclor-1016 | 2.50 | 1.49 | | ug/L | | 60 | 32 - 120 |
| Aroclor-1260 | 2.50 | 1.46 | | ug/L | | 58 | 36 - 120 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| DCB Decachlorobiphenyl | 67 | | 10 - 120 |
| Tetrachloro-m-xylene | 68 | | 21 - 120 |

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC)

**Lab Sample ID: MB 240-296388/8-A**
**Matrix: Water**
**Analysis Batch: 296547**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 296388**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| WI Diesel Range Organics (C10-C28) | 0.0426 | J | 0.10 | 0.020 | mg/L | | 09/26/17 14:46 | 09/27/17 17:24 | 1 |

**Lab Sample ID: LCS 240-296388/9-A**
**Matrix: Water**
**Analysis Batch: 296547**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 296388**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| WI Diesel Range Organics (C10-C28) | 0.500 | 0.559 | | mg/L | | 112 | 75 - 115 |

**Lab Sample ID: LCSD 240-296388/10-A**
**Matrix: Water**
**Analysis Batch: 296547**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 296388**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| WI Diesel Range Organics (C10-C28) | 0.500 | 0.515 | | mg/L | | 103 | 75 - 115 | 8 | 20 |

**Lab Sample ID: MB 240-296579/6-A**
**Matrix: Water**
**Analysis Batch: 296717**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 296579**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| WI Diesel Range Organics (C10-C28) | 0.0289 | J | 0.10 | 0.020 | mg/L | | 09/27/17 17:14 | 09/28/17 17:49 | 1 |

## Method: WI-DRO - Wisconsin - Diesel Range Organics (GC) (Continued)

**Lab Sample ID: LCS 240-296579/7-A**
**Matrix: Water**
**Analysis Batch: 296717**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 296579**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| WI Diesel Range Organics (C10-C28) | 0.500 | 0.506 | | mg/L | | 101 | 75 - 115 |

**Lab Sample ID: LCSD 240-296579/8-A**
**Matrix: Water**
**Analysis Batch: 296717**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 296579**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| WI Diesel Range Organics (C10-C28) | 0.500 | 0.484 | | mg/L | | 97 | 75 - 115 | 4 | 20 |

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 240-296107/1-A**
**Matrix: Water**
**Analysis Batch: 296444**

**Client Sample ID: Method Blank**
**Prep Type: Total Recoverable**
**Prep Batch: 296107**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Barium | ND | | 200 | 2.4 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Aluminum | ND | | 200 | 40 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Cadmium | ND | | 5.0 | 0.29 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Chromium | ND | | 10 | 0.55 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Silver | ND | | 10 | 0.92 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Arsenic | ND | | 10 | 3.3 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Beryllium | ND | | 5.0 | 0.21 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Lead | ND | | 3.0 | 1.9 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Calcium | ND | | 5000 | 710 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Cobalt | ND | | 7.0 | 0.84 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Copper | ND | | 25 | 3.9 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Iron | ND | | 100 | 25 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Potassium | ND | | 5000 | 70 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Magnesium | ND | | 5000 | 230 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Manganese | ND | | 15 | 5.1 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Sodium | ND | | 5000 | 330 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Nickel | ND | | 40 | 1.6 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Antimony | ND | | 10 | 3.1 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Vanadium | ND | | 10 | 4.4 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |
| Zinc | ND | | 50 | 16 | ug/L | | 09/25/17 14:00 | 09/26/17 13:02 | 1 |

**Lab Sample ID: LCS 240-296107/2-A**
**Matrix: Water**
**Analysis Batch: 296444**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total Recoverable**
**Prep Batch: 296107**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Barium | 2000 | 2010 | | ug/L | | 101 | 80 - 120 |
| Aluminum | 2000 | 2030 | | ug/L | | 101 | 80 - 120 |
| Cadmium | 50.0 | 53.4 | | ug/L | | 107 | 80 - 120 |
| Chromium | 200 | 198 | | ug/L | | 99 | 80 - 120 |
| Silver | 50.0 | 52.5 | | ug/L | | 105 | 80 - 120 |

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

**Lab Sample ID: LCS 240-296107/2-A**
**Matrix: Water**
**Analysis Batch: 296444**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total Recoverable**
**Prep Batch: 296107**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | | | 2000 | 2190 | | ug/L | | 110 | 80 - 120 | | |
| Beryllium | | | 50.0 | 50.9 | | ug/L | | 102 | 80 - 120 | | |
| Lead | | | 500 | 513 | | ug/L | | 103 | 80 - 120 | | |
| Calcium | | | 50000 | 51300 | | ug/L | | 103 | 80 - 120 | | |
| Cobalt | | | 500 | 515 | | ug/L | | 103 | 80 - 120 | | |
| Copper | | | 250 | 258 | | ug/L | | 103 | 80 - 120 | | |
| Iron | | | 1000 | 1040 | | ug/L | | 104 | 80 - 120 | | |
| Potassium | | | 50000 | 50500 | | ug/L | | 101 | 80 - 120 | | |
| Magnesium | | | 50000 | 51500 | | ug/L | | 103 | 80 - 120 | | |
| Manganese | | | 500 | 518 | | ug/L | | 104 | 80 - 120 | | |
| Sodium | | | 50000 | 50800 | | ug/L | | 102 | 80 - 120 | | |
| Nickel | | | 500 | 527 | | ug/L | | 105 | 80 - 120 | | |
| Antimony | | | 500 | 533 | | ug/L | | 107 | 80 - 120 | | |
| Vanadium | | | 500 | 497 | | ug/L | | 99 | 80 - 120 | | |
| Zinc | | | 500 | 532 | | ug/L | | 106 | 80 - 120 | | |

**Lab Sample ID: 240-85395-15 MS**
**Matrix: Water**
**Analysis Batch: 296444**

**Client Sample ID: AMW-22B-(20170919)**
**Prep Type: Dissolved**
**Prep Batch: 296107**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Barium | 180 | J | 2000 | 2230 | | ug/L | | 102 | 75 - 125 | | |
| Aluminum | ND | | 2000 | 2040 | | ug/L | | 102 | 75 - 125 | | |
| Cadmium | ND | | 50.0 | 54.5 | | ug/L | | 109 | 75 - 125 | | |
| Chromium | 1.1 | J | 200 | 197 | | ug/L | | 98 | 75 - 125 | | |
| Silver | ND | | 50.0 | 52.8 | | ug/L | | 106 | 75 - 125 | | |
| Arsenic | ND | | 2000 | 2240 | | ug/L | | 112 | 75 - 125 | | |
| Beryllium | ND | | 50.0 | 51.5 | | ug/L | | 103 | 75 - 125 | | |
| Lead | ND | | 500 | 511 | | ug/L | | 102 | 75 - 125 | | |
| Calcium | 79000 | | 50000 | 131000 | | ug/L | | 102 | 75 - 125 | | |
| Cobalt | ND | | 500 | 522 | | ug/L | | 104 | 75 - 125 | | |
| Copper | ND | | 250 | 262 | | ug/L | | 105 | 75 - 125 | | |
| Iron | 3100 | | 1000 | 4030 | | ug/L | | 96 | 75 - 125 | | |
| Potassium | 2200 | J | 50000 | 53800 | | ug/L | | 103 | 75 - 125 | | |
| Magnesium | 30000 | | 50000 | 80000 | | ug/L | | 101 | 75 - 125 | | |
| Manganese | 170 | | 500 | 685 | | ug/L | | 104 | 75 - 125 | | |
| Sodium | 5900 | | 50000 | 57800 | | ug/L | | 104 | 75 - 125 | | |
| Nickel | ND | | 500 | 532 | | ug/L | | 106 | 75 - 125 | | |
| Antimony | ND | | 500 | 549 | | ug/L | | 110 | 75 - 125 | | |
| Vanadium | ND | | 500 | 500 | | ug/L | | 100 | 75 - 125 | | |
| Zinc | ND | | 500 | 533 | | ug/L | | 107 | 75 - 125 | | |

**Lab Sample ID: 240-85395-15 MSD**
**Matrix: Water**
**Analysis Batch: 296444**

**Client Sample ID: AMW-22B-(20170919)**
**Prep Type: Dissolved**
**Prep Batch: 296107**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Barium | 180 | J | 2000 | 2200 | | ug/L | | 101 | 75 - 125 | 1 | 20 |
| Aluminum | ND | | 2000 | 2020 | | ug/L | | 101 | 75 - 125 | 1 | 20 |

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

**Lab Sample ID: 240-85395-15 MSD**
**Matrix: Water**
**Analysis Batch: 296444**

**Client Sample ID: AMW-22B-(20170919)**
**Prep Type: Dissolved**
**Prep Batch: 296107**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 50.0 | 53.8 | | ug/L | | 108 | 75 - 125 | 1 | 20 |
| Chromium | 1.1 | J | 200 | 195 | | ug/L | | 97 | 75 - 125 | 1 | 20 |
| Silver | ND | | 50.0 | 52.7 | | ug/L | | 105 | 75 - 125 | 0 | 20 |
| Arsenic | ND | | 2000 | 2210 | | ug/L | | 110 | 75 - 125 | 1 | 20 |
| Beryllium | ND | | 50.0 | 51.4 | | ug/L | | 103 | 75 - 125 | 0 | 20 |
| Lead | ND | | 500 | 505 | | ug/L | | 101 | 75 - 125 | 1 | 20 |
| Calcium | 79000 | | 50000 | 130000 | | ug/L | | 101 | 75 - 125 | 1 | 20 |
| Cobalt | ND | | 500 | 513 | | ug/L | | 103 | 75 - 125 | 2 | 20 |
| Copper | ND | | 250 | 259 | | ug/L | | 103 | 75 - 125 | 1 | 20 |
| Iron | 3100 | | 1000 | 3970 | | ug/L | | 91 | 75 - 125 | 1 | 20 |
| Potassium | 2200 | J | 50000 | 53400 | | ug/L | | 102 | 75 - 125 | 1 | 20 |
| Magnesium | 30000 | | 50000 | 79800 | | ug/L | | 101 | 75 - 125 | 0 | 20 |
| Manganese | 170 | | 500 | 683 | | ug/L | | 103 | 75 - 125 | 0 | 20 |
| Sodium | 5900 | | 50000 | 57500 | | ug/L | | 103 | 75 - 125 | 1 | 20 |
| Nickel | ND | | 500 | 524 | | ug/L | | 105 | 75 - 125 | 2 | 20 |
| Antimony | ND | | 500 | 537 | | ug/L | | 107 | 75 - 125 | 2 | 20 |
| Vanadium | ND | | 500 | 491 | | ug/L | | 98 | 75 - 125 | 2 | 20 |
| Zinc | ND | | 500 | 527 | | ug/L | | 105 | 75 - 125 | 1 | 20 |

## Method: 6020A - Metals (ICP/MS)

**Lab Sample ID: MB 240-296107/1-A**
**Matrix: Water**
**Analysis Batch: 296549**

**Client Sample ID: Method Blank**
**Prep Type: Total Recoverable**
**Prep Batch: 296107**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Thallium | ND | | 1.0 | 0.20 | ug/L | | 09/25/17 14:00 | 09/27/17 11:23 | 1 |
| Selenium | ND | | 5.0 | 0.89 | ug/L | | 09/25/17 14:00 | 09/27/17 11:23 | 1 |

**Lab Sample ID: LCS 240-296107/3-A**
**Matrix: Water**
**Analysis Batch: 296446**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total Recoverable**
**Prep Batch: 296107**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thallium | | | 250 | 218 | | ug/L | | 87 | 80 - 120 | | |
| Selenium | | | 1000 | 932 | | ug/L | | 93 | 80 - 120 | | |

**Lab Sample ID: 240-85395-15 MS**
**Matrix: Water**
**Analysis Batch: 296446**

**Client Sample ID: AMW-22B-(20170919)**
**Prep Type: Dissolved**
**Prep Batch: 296107**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thallium | 0.21 | J | 250 | 237 | | ug/L | | 95 | 75 - 125 | | |
| Selenium | ND | | 1000 | 962 | | ug/L | | 96 | 75 - 125 | | |

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

**Lab Sample ID: 240-85395-15 MSD** — **Client Sample ID: AMW-22B-(20170919)**
**Matrix: Water** — **Prep Type: Dissolved**
**Analysis Batch: 296446** — **Prep Batch: 296107**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Thallium | 0.21 | J | 250 | 218 | | ug/L | | 87 | 75 - 125 | 8 | 20 |
| Selenium | ND | | 1000 | 932 | | ug/L | | 93 | 75 - 125 | 3 | 20 |

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 240-296116/1-A** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 296383** — **Prep Batch: 296116**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.20 | 0.13 | ug/L | | 09/25/17 14:00 | 09/26/17 11:16 | 1 |

**Lab Sample ID: LCS 240-296116/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 296383** — **Prep Batch: 296116**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 5.00 | 4.67 | | ug/L | | 93 | 80 - 120 |

**Lab Sample ID: 240-85395-15 MS** — **Client Sample ID: AMW-22B-(20170919)**
**Matrix: Water** — **Prep Type: Dissolved**
**Analysis Batch: 296383** — **Prep Batch: 296116**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 1.00 | 0.935 | | ug/L | | 93 | 80 - 120 |

**Lab Sample ID: 240-85395-15 MSD** — **Client Sample ID: AMW-22B-(20170919)**
**Matrix: Water** — **Prep Type: Dissolved**
**Analysis Batch: 296383** — **Prep Batch: 296116**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 1.00 | 0.821 | | ug/L | | 82 | 80 - 120 | 13 | 20 |

## Method: 9012B - Cyanide, Total andor Amenable

**Lab Sample ID: MB 490-463472/1-A** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 463960** — **Prep Batch: 463472**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | 0.010 | 0.0070 | mg/L | | 09/27/17 13:01 | 09/28/17 16:19 | 1 |

**Lab Sample ID: LCS 490-463472/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 463960** — **Prep Batch: 463472**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Cyanide, Total | 0.100 | 0.0992 | | mg/L | | 99 | 85 - 115 |

## Method: 9012B - Cyanide, Total andor Amenable (Continued)

**Lab Sample ID: 240-85395-15 MS**
**Matrix: Water**
**Analysis Batch: 463960**

**Client Sample ID: AMW-22B-(20170919)**
**Prep Type: Total/NA**
**Prep Batch: 463472**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | 0.100 | 0.0882 | | mg/L | | 88 | 70 - 130 |

**Lab Sample ID: 240-85395-15 MSD**
**Matrix: Water**
**Analysis Batch: 463960**

**Client Sample ID: AMW-22B-(20170919)**
**Prep Type: Total/NA**
**Prep Batch: 463472**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | 0.100 | 0.101 | | mg/L | | 101 | 70 - 130 | 14 | 46 |

**Lab Sample ID: 240-85395-13 DU**
**Matrix: Water**
**Analysis Batch: 463960**

**Client Sample ID: AMW-22-(20170919)**
**Prep Type: Total/NA**
**Prep Batch: 463472**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | ND | | mg/L | | NC | 20 |

**Lab Sample ID: MB 490-463663/1-A**
**Matrix: Water**
**Analysis Batch: 463960**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 463663**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | 0.010 | 0.0070 | mg/L | | 09/28/17 08:48 | 09/28/17 16:47 | 1 |

**Lab Sample ID: LCS 490-463663/2-A**
**Matrix: Water**
**Analysis Batch: 463960**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 463663**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Cyanide, Total | 0.100 | 0.0973 | | mg/L | | 97 | 85 - 115 |

**Lab Sample ID: 240-85395-21 MS**
**Matrix: Water**
**Analysis Batch: 463960**

**Client Sample ID: AMW-24-(20170920)**
**Prep Type: Total/NA**
**Prep Batch: 463663**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | 0.100 | 0.0951 | | mg/L | | 95 | 70 - 130 |

**Lab Sample ID: 240-85395-21 MSD**
**Matrix: Water**
**Analysis Batch: 463960**

**Client Sample ID: AMW-24-(20170920)**
**Prep Type: Total/NA**
**Prep Batch: 463663**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | 0.100 | 0.117 | | mg/L | | 117 | 70 - 130 | 21 | 46 |

**Lab Sample ID: 240-85431-F-6-B DU**
**Matrix: Water**
**Analysis Batch: 463960**

**Client Sample ID: Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 463663**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | ND | | ND | | mg/L | | NC | 20 |

## GC/MS VOA

### Analysis Batch: 297056

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-12 | TRIP BLANK6 | Total/NA | Water | 8260B | |
| 240-85395-13 | AMW-22-(20170919) | Total/NA | Water | 8260B | |
| 240-85395-14 | TRIP BLANK7 | Total/NA | Water | 8260B | |
| 240-85395-15 | AMW-22B-(20170919) | Total/NA | Water | 8260B | |
| MB 240-297056/7 | Method Blank | Total/NA | Water | 8260B | |
| LCS 240-297056/5 | Lab Control Sample | Total/NA | Water | 8260B | |
| 240-85395-15 MS | AMW-22B-(20170919) | Total/NA | Water | 8260B | |
| 240-85395-15 MSD | AMW-22B-(20170919) | Total/NA | Water | 8260B | |

### Analysis Batch: 297061

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-1 | AMW-07-(20170919) | Total/NA | Water | 8260B | |
| 240-85395-2 | TRIP BLANK1 | Total/NA | Water | 8260B | |
| 240-85395-5 | AMW-19-(20170919) | Total/NA | Water | 8260B | |
| 240-85395-6 | TRIP BLANK3 | Total/NA | Water | 8260B | |
| 240-85395-7 | AMW-20-(20170920) | Total/NA | Water | 8260B | |
| 240-85395-8 | TRIP BLANK4 | Total/NA | Water | 8260B | |
| 240-85395-9 | DUP-02-(20170920) | Total/NA | Water | 8260B | |
| 240-85395-10 | TRIP BLANK5 | Total/NA | Water | 8260B | |
| 240-85395-11 | AMW-21-(20170919) | Total/NA | Water | 8260B | |
| 240-85395-16 | TRIP BLANK8 | Total/NA | Water | 8260B | |
| MB 240-297061/6 | Method Blank | Total/NA | Water | 8260B | |
| LCS 240-297061/4 | Lab Control Sample | Total/NA | Water | 8260B | |
| 240-85327-B-1 MS | Matrix Spike | Total/NA | Water | 8260B | |
| 240-85327-B-1 MSD | Matrix Spike Duplicate | Total/NA | Water | 8260B | |

### Analysis Batch: 297179

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-17 | AMW-23-(20170920) | Total/NA | Water | 8260B | |
| 240-85395-18 | TRIP BLANK9 | Total/NA | Water | 8260B | |
| 240-85395-19 | AMW-23B-(20170920) | Total/NA | Water | 8260B | |
| 240-85395-20 | TRIP BLANK10 | Total/NA | Water | 8260B | |
| 240-85395-21 | AMW-24-(20170920) | Total/NA | Water | 8260B | |
| 240-85395-22 | TRIP BLANK11 | Total/NA | Water | 8260B | |
| 240-85395-23 | AMW-25-(20170920) | Total/NA | Water | 8260B | |
| 240-85395-24 | TRIP BLANK12 | Total/NA | Water | 8260B | |
| 240-85395-25 | AMW-26-(20170920) | Total/NA | Water | 8260B | |
| 240-85395-26 | TRIP BLANK13 | Total/NA | Water | 8260B | |
| MB 240-297179/6 | Method Blank | Total/NA | Water | 8260B | |
| LCS 240-297179/4 | Lab Control Sample | Total/NA | Water | 8260B | |
| 240-85397-E-25 MS | Matrix Spike | Total/NA | Water | 8260B | |
| 240-85397-F-25 MSD | Matrix Spike Duplicate | Total/NA | Water | 8260B | |

### Analysis Batch: 297346

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-23 | AMW-25-(20170920) | Total/NA | Water | 8260B | |
| 240-85395-25 | AMW-26-(20170920) | Total/NA | Water | 8260B | |
| MB 240-297346/6 | Method Blank | Total/NA | Water | 8260B | |
| LCS 240-297346/4 | Lab Control Sample | Total/NA | Water | 8260B | |

## GC/MS Semi VOA

### Prep Batch: 296281

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-1 | AMW-07-(20170919) | Total/NA | Water | 3510C | |
| 240-85395-5 | AMW-19-(20170919) | Total/NA | Water | 3510C | |
| 240-85395-11 | AMW-21-(20170919) | Total/NA | Water | 3510C | |
| 240-85395-13 | AMW-22-(20170919) | Total/NA | Water | 3510C | |
| 240-85395-15 | AMW-22B-(20170919) | Total/NA | Water | 3510C | |
| MB 240-296281/21-A | Method Blank | Total/NA | Water | 3510C | |
| LCS 240-296281/22-A | Lab Control Sample | Total/NA | Water | 3510C | |

### Prep Batch: 296485

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-7 | AMW-20-(20170920) | Total/NA | Water | 3510C | |
| 240-85395-9 | DUP-02-(20170920) | Total/NA | Water | 3510C | |
| 240-85395-17 | AMW-23-(20170920) | Total/NA | Water | 3510C | |
| 240-85395-19 | AMW-23B-(20170920) | Total/NA | Water | 3510C | |
| 240-85395-21 | AMW-24-(20170920) | Total/NA | Water | 3510C | |
| 240-85395-23 | AMW-25-(20170920) | Total/NA | Water | 3510C | |
| 240-85395-25 | AMW-26-(20170920) | Total/NA | Water | 3510C | |
| MB 240-296485/18-A | Method Blank | Total/NA | Water | 3510C | |
| LCS 240-296485/19-A | Lab Control Sample | Total/NA | Water | 3510C | |
| LCSD 240-296485/20-A | Lab Control Sample Dup | Total/NA | Water | 3510C | |

### Analysis Batch: 296632

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-15 | AMW-22B-(20170919) | Total/NA | Water | 8270C | 296281 |
| MB 240-296281/21-A | Method Blank | Total/NA | Water | 8270C | 296281 |
| LCS 240-296281/22-A | Lab Control Sample | Total/NA | Water | 8270C | 296281 |

### Analysis Batch: 296829

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-1 | AMW-07-(20170919) | Total/NA | Water | 8270C | 296281 |
| 240-85395-5 | AMW-19-(20170919) | Total/NA | Water | 8270C | 296281 |
| 240-85395-7 | AMW-20-(20170920) | Total/NA | Water | 8270C | 296485 |
| 240-85395-9 | DUP-02-(20170920) | Total/NA | Water | 8270C | 296485 |
| 240-85395-11 | AMW-21-(20170919) | Total/NA | Water | 8270C | 296281 |
| 240-85395-13 | AMW-22-(20170919) | Total/NA | Water | 8270C | 296281 |
| 240-85395-17 | AMW-23-(20170920) | Total/NA | Water | 8270C | 296485 |
| 240-85395-19 | AMW-23B-(20170920) | Total/NA | Water | 8270C | 296485 |
| 240-85395-21 | AMW-24-(20170920) | Total/NA | Water | 8270C | 296485 |
| 240-85395-23 | AMW-25-(20170920) | Total/NA | Water | 8270C | 296485 |
| 240-85395-25 | AMW-26-(20170920) | Total/NA | Water | 8270C | 296485 |
| MB 240-296485/18-A | Method Blank | Total/NA | Water | 8270C | 296485 |
| LCS 240-296485/19-A | Lab Control Sample | Total/NA | Water | 8270C | 296485 |
| LCSD 240-296485/20-A | Lab Control Sample Dup | Total/NA | Water | 8270C | 296485 |

## GC VOA

### Analysis Batch: 297098

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-1 | AMW-07-(20170919) | Total/NA | Water | WI-GRO | |
| 240-85395-5 | AMW-19-(20170919) | Total/NA | Water | WI-GRO | |

## GC VOA (Continued)

### Analysis Batch: 297098 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-7 | AMW-20-(20170920) | Total/NA | Water | WI-GRO | |
| 240-85395-9 | DUP-02-(20170920) | Total/NA | Water | WI-GRO | |
| 240-85395-11 | AMW-21-(20170919) | Total/NA | Water | WI-GRO | |
| 240-85395-13 | AMW-22-(20170919) | Total/NA | Water | WI-GRO | |
| 240-85395-15 | AMW-22B-(20170919) | Total/NA | Water | WI-GRO | |
| 240-85395-17 | AMW-23-(20170920) | Total/NA | Water | WI-GRO | |
| 240-85395-19 | AMW-23B-(20170920) | Total/NA | Water | WI-GRO | |
| 240-85395-21 | AMW-24-(20170920) | Total/NA | Water | WI-GRO | |
| 240-85395-23 | AMW-25-(20170920) | Total/NA | Water | WI-GRO | |
| 240-85395-25 | AMW-26-(20170920) | Total/NA | Water | WI-GRO | |
| MB 240-297098/21 | Method Blank | Total/NA | Water | WI-GRO | |
| LCS 240-297098/22 | Lab Control Sample | Total/NA | Water | WI-GRO | |
| LCSD 240-297098/36 | Lab Control Sample Dup | Total/NA | Water | WI-GRO | |

## GC Semi VOA

### Prep Batch: 296387

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-1 | AMW-07-(20170919) | Total/NA | Water | 3520C | |
| 240-85395-5 | AMW-19-(20170919) | Total/NA | Water | 3520C | |
| 240-85395-11 | AMW-21-(20170919) | Total/NA | Water | 3520C | |
| 240-85395-13 | AMW-22-(20170919) | Total/NA | Water | 3520C | |
| 240-85395-15 | AMW-22B-(20170919) | Total/NA | Water | 3520C | |
| MB 240-296387/18-A | Method Blank | Total/NA | Water | 3520C | |
| LCS 240-296387/19-A | Lab Control Sample | Total/NA | Water | 3520C | |

### Prep Batch: 296388

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-1 | AMW-07-(20170919) | Total/NA | Water | 3510C | |
| 240-85395-5 | AMW-19-(20170919) | Total/NA | Water | 3510C | |
| 240-85395-7 | AMW-20-(20170920) | Total/NA | Water | 3510C | |
| 240-85395-9 | DUP-02-(20170920) | Total/NA | Water | 3510C | |
| 240-85395-11 | AMW-21-(20170919) | Total/NA | Water | 3510C | |
| 240-85395-13 | AMW-22-(20170919) | Total/NA | Water | 3510C | |
| 240-85395-15 | AMW-22B-(20170919) | Total/NA | Water | 3510C | |
| MB 240-296388/8-A | Method Blank | Total/NA | Water | 3510C | |
| LCS 240-296388/9-A | Lab Control Sample | Total/NA | Water | 3510C | |
| LCSD 240-296388/10-A | Lab Control Sample Dup | Total/NA | Water | 3510C | |

### Analysis Batch: 296547

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-1 | AMW-07-(20170919) | Total/NA | Water | WI-DRO | 296388 |
| 240-85395-5 | AMW-19-(20170919) | Total/NA | Water | WI-DRO | 296388 |
| 240-85395-7 | AMW-20-(20170920) | Total/NA | Water | WI-DRO | 296388 |
| 240-85395-9 | DUP-02-(20170920) | Total/NA | Water | WI-DRO | 296388 |
| 240-85395-11 | AMW-21-(20170919) | Total/NA | Water | WI-DRO | 296388 |
| 240-85395-13 | AMW-22-(20170919) | Total/NA | Water | WI-DRO | 296388 |
| 240-85395-15 | AMW-22B-(20170919) | Total/NA | Water | WI-DRO | 296388 |
| MB 240-296388/8-A | Method Blank | Total/NA | Water | WI-DRO | 296388 |
| LCS 240-296388/9-A | Lab Control Sample | Total/NA | Water | WI-DRO | 296388 |

## GC Semi VOA (Continued)

### Analysis Batch: 296547 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCSD 240-296388/10-A | Lab Control Sample Dup | Total/NA | Water | WI-DRO | 296388 |

### Prep Batch: 296554

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-7 | AMW-20-(20170920) | Total/NA | Water | 3520C | |
| 240-85395-9 | DUP-02-(20170920) | Total/NA | Water | 3520C | |
| 240-85395-17 | AMW-23-(20170920) | Total/NA | Water | 3520C | |
| 240-85395-19 | AMW-23B-(20170920) | Total/NA | Water | 3520C | |
| 240-85395-21 | AMW-24-(20170920) | Total/NA | Water | 3520C | |
| 240-85395-23 | AMW-25-(20170920) | Total/NA | Water | 3520C | |
| 240-85395-25 | AMW-26-(20170920) | Total/NA | Water | 3520C | |
| MB 240-296554/15-A | Method Blank | Total/NA | Water | 3520C | |
| LCS 240-296554/16-A | Lab Control Sample | Total/NA | Water | 3520C | |

### Prep Batch: 296579

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-17 | AMW-23-(20170920) | Total/NA | Water | 3510C | |
| 240-85395-19 | AMW-23B-(20170920) | Total/NA | Water | 3510C | |
| 240-85395-21 | AMW-24-(20170920) | Total/NA | Water | 3510C | |
| 240-85395-23 | AMW-25-(20170920) | Total/NA | Water | 3510C | |
| 240-85395-25 | AMW-26-(20170920) | Total/NA | Water | 3510C | |
| MB 240-296579/6-A | Method Blank | Total/NA | Water | 3510C | |
| LCS 240-296579/7-A | Lab Control Sample | Total/NA | Water | 3510C | |
| LCSD 240-296579/8-A | Lab Control Sample Dup | Total/NA | Water | 3510C | |

### Analysis Batch: 296589

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-1 | AMW-07-(20170919) | Total/NA | Water | 8082 | 296387 |
| 240-85395-5 | AMW-19-(20170919) | Total/NA | Water | 8082 | 296387 |
| 240-85395-13 | AMW-22-(20170919) | Total/NA | Water | 8082 | 296387 |
| 240-85395-15 | AMW-22B-(20170919) | Total/NA | Water | 8082 | 296387 |
| MB 240-296387/18-A | Method Blank | Total/NA | Water | 8082 | 296387 |
| LCS 240-296387/19-A | Lab Control Sample | Total/NA | Water | 8082 | 296387 |

### Analysis Batch: 296717

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-17 | AMW-23-(20170920) | Total/NA | Water | WI-DRO | 296579 |
| 240-85395-19 | AMW-23B-(20170920) | Total/NA | Water | WI-DRO | 296579 |
| 240-85395-21 | AMW-24-(20170920) | Total/NA | Water | WI-DRO | 296579 |
| 240-85395-25 | AMW-26-(20170920) | Total/NA | Water | WI-DRO | 296579 |
| MB 240-296579/6-A | Method Blank | Total/NA | Water | WI-DRO | 296579 |
| LCS 240-296579/7-A | Lab Control Sample | Total/NA | Water | WI-DRO | 296579 |
| LCSD 240-296579/8-A | Lab Control Sample Dup | Total/NA | Water | WI-DRO | 296579 |

### Analysis Batch: 296783

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-7 | AMW-20-(20170920) | Total/NA | Water | 8082 | 296554 |
| 240-85395-9 | DUP-02-(20170920) | Total/NA | Water | 8082 | 296554 |
| 240-85395-17 | AMW-23-(20170920) | Total/NA | Water | 8082 | 296554 |
| 240-85395-19 | AMW-23B-(20170920) | Total/NA | Water | 8082 | 296554 |
| 240-85395-21 | AMW-24-(20170920) | Total/NA | Water | 8082 | 296554 |

## GC Semi VOA (Continued)

### Analysis Batch: 296783 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-23 | AMW-25-(20170920) | Total/NA | Water | 8082 | 296554 |
| 240-85395-25 | AMW-26-(20170920) | Total/NA | Water | 8082 | 296554 |
| MB 240-296554/15-A | Method Blank | Total/NA | Water | 8082 | 296554 |
| LCS 240-296554/16-A | Lab Control Sample | Total/NA | Water | 8082 | 296554 |

### Analysis Batch: 296923

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-23 | AMW-25-(20170920) | Total/NA | Water | WI-DRO | 296579 |

### Analysis Batch: 296982

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-11 | AMW-21-(20170919) | Total/NA | Water | 8082 | 296387 |

## Metals

### Prep Batch: 296107

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-1 | AMW-07-(20170919) | Dissolved | Water | 3005A | |
| 240-85395-5 | AMW-19-(20170919) | Dissolved | Water | 3005A | |
| 240-85395-7 | AMW-20-(20170920) | Dissolved | Water | 3005A | |
| 240-85395-9 | DUP-02-(20170920) | Dissolved | Water | 3005A | |
| 240-85395-11 | AMW-21-(20170919) | Dissolved | Water | 3005A | |
| 240-85395-13 | AMW-22-(20170919) | Dissolved | Water | 3005A | |
| 240-85395-15 | AMW-22B-(20170919) | Dissolved | Water | 3005A | |
| 240-85395-17 | AMW-23-(20170920) | Dissolved | Water | 3005A | |
| 240-85395-19 | AMW-23B-(20170920) | Dissolved | Water | 3005A | |
| 240-85395-21 | AMW-24-(20170920) | Dissolved | Water | 3005A | |
| 240-85395-23 | AMW-25-(20170920) | Dissolved | Water | 3005A | |
| 240-85395-25 | AMW-26-(20170920) | Dissolved | Water | 3005A | |
| MB 240-296107/1-A | Method Blank | Total Recoverable | Water | 3005A | |
| LCS 240-296107/2-A | Lab Control Sample | Total Recoverable | Water | 3005A | |
| LCS 240-296107/3-A | Lab Control Sample | Total Recoverable | Water | 3005A | |
| 240-85395-15 MS | AMW-22B-(20170919) | Dissolved | Water | 3005A | |
| 240-85395-15 MS | AMW-22B-(20170919) | Dissolved | Water | 3005A | |
| 240-85395-15 MSD | AMW-22B-(20170919) | Dissolved | Water | 3005A | |
| 240-85395-15 MSD | AMW-22B-(20170919) | Dissolved | Water | 3005A | |

### Prep Batch: 296116

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-1 | AMW-07-(20170919) | Dissolved | Water | 7470A | |
| 240-85395-5 | AMW-19-(20170919) | Dissolved | Water | 7470A | |
| 240-85395-7 | AMW-20-(20170920) | Dissolved | Water | 7470A | |
| 240-85395-9 | DUP-02-(20170920) | Dissolved | Water | 7470A | |
| 240-85395-11 | AMW-21-(20170919) | Dissolved | Water | 7470A | |
| 240-85395-13 | AMW-22-(20170919) | Dissolved | Water | 7470A | |
| 240-85395-15 | AMW-22B-(20170919) | Dissolved | Water | 7470A | |
| 240-85395-17 | AMW-23-(20170920) | Dissolved | Water | 7470A | |
| 240-85395-19 | AMW-23B-(20170920) | Dissolved | Water | 7470A | |
| 240-85395-21 | AMW-24-(20170920) | Dissolved | Water | 7470A | |
| 240-85395-23 | AMW-25-(20170920) | Dissolved | Water | 7470A | |

## Metals (Continued)

### Prep Batch: 296116 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-25 | AMW-26-(20170920) | Dissolved | Water | 7470A | |
| MB 240-296116/1-A | Method Blank | Total/NA | Water | 7470A | |
| LCS 240-296116/2-A | Lab Control Sample | Total/NA | Water | 7470A | |
| 240-85395-15 MS | AMW-22B-(20170919) | Dissolved | Water | 7470A | |
| 240-85395-15 MSD | AMW-22B-(20170919) | Dissolved | Water | 7470A | |

### Analysis Batch: 296383

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-1 | AMW-07-(20170919) | Dissolved | Water | 7470A | 296116 |
| 240-85395-5 | AMW-19-(20170919) | Dissolved | Water | 7470A | 296116 |
| 240-85395-7 | AMW-20-(20170920) | Dissolved | Water | 7470A | 296116 |
| 240-85395-9 | DUP-02-(20170920) | Dissolved | Water | 7470A | 296116 |
| 240-85395-11 | AMW-21-(20170919) | Dissolved | Water | 7470A | 296116 |
| 240-85395-13 | AMW-22-(20170919) | Dissolved | Water | 7470A | 296116 |
| 240-85395-15 | AMW-22B-(20170919) | Dissolved | Water | 7470A | 296116 |
| 240-85395-17 | AMW-23-(20170920) | Dissolved | Water | 7470A | 296116 |
| 240-85395-19 | AMW-23B-(20170920) | Dissolved | Water | 7470A | 296116 |
| 240-85395-21 | AMW-24-(20170920) | Dissolved | Water | 7470A | 296116 |
| 240-85395-23 | AMW-25-(20170920) | Dissolved | Water | 7470A | 296116 |
| 240-85395-25 | AMW-26-(20170920) | Dissolved | Water | 7470A | 296116 |
| MB 240-296116/1-A | Method Blank | Total/NA | Water | 7470A | 296116 |
| LCS 240-296116/2-A | Lab Control Sample | Total/NA | Water | 7470A | 296116 |
| 240-85395-15 MS | AMW-22B-(20170919) | Dissolved | Water | 7470A | 296116 |
| 240-85395-15 MSD | AMW-22B-(20170919) | Dissolved | Water | 7470A | 296116 |

### Analysis Batch: 296444

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-1 | AMW-07-(20170919) | Dissolved | Water | 6010B | 296107 |
| 240-85395-5 | AMW-19-(20170919) | Dissolved | Water | 6010B | 296107 |
| 240-85395-7 | AMW-20-(20170920) | Dissolved | Water | 6010B | 296107 |
| 240-85395-9 | DUP-02-(20170920) | Dissolved | Water | 6010B | 296107 |
| 240-85395-11 | AMW-21-(20170919) | Dissolved | Water | 6010B | 296107 |
| 240-85395-13 | AMW-22-(20170919) | Dissolved | Water | 6010B | 296107 |
| 240-85395-15 | AMW-22B-(20170919) | Dissolved | Water | 6010B | 296107 |
| 240-85395-17 | AMW-23-(20170920) | Dissolved | Water | 6010B | 296107 |
| 240-85395-19 | AMW-23B-(20170920) | Dissolved | Water | 6010B | 296107 |
| 240-85395-21 | AMW-24-(20170920) | Dissolved | Water | 6010B | 296107 |
| 240-85395-23 | AMW-25-(20170920) | Dissolved | Water | 6010B | 296107 |
| 240-85395-25 | AMW-26-(20170920) | Dissolved | Water | 6010B | 296107 |
| MB 240-296107/1-A | Method Blank | Total Recoverable | Water | 6010B | 296107 |
| LCS 240-296107/2-A | Lab Control Sample | Total Recoverable | Water | 6010B | 296107 |
| 240-85395-15 MS | AMW-22B-(20170919) | Dissolved | Water | 6010B | 296107 |
| 240-85395-15 MSD | AMW-22B-(20170919) | Dissolved | Water | 6010B | 296107 |

### Analysis Batch: 296446

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-1 | AMW-07-(20170919) | Dissolved | Water | 6020A | 296107 |
| 240-85395-5 | AMW-19-(20170919) | Dissolved | Water | 6020A | 296107 |
| 240-85395-7 | AMW-20-(20170920) | Dissolved | Water | 6020A | 296107 |
| 240-85395-9 | DUP-02-(20170920) | Dissolved | Water | 6020A | 296107 |
| 240-85395-11 | AMW-21-(20170919) | Dissolved | Water | 6020A | 296107 |

## Metals (Continued)

### Analysis Batch: 296446 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-13 | AMW-22-(20170919) | Dissolved | Water | 6020A | 296107 |
| 240-85395-15 | AMW-22B-(20170919) | Dissolved | Water | 6020A | 296107 |
| 240-85395-17 | AMW-23-(20170920) | Dissolved | Water | 6020A | 296107 |
| 240-85395-19 | AMW-23B-(20170920) | Dissolved | Water | 6020A | 296107 |
| 240-85395-21 | AMW-24-(20170920) | Dissolved | Water | 6020A | 296107 |
| 240-85395-23 | AMW-25-(20170920) | Dissolved | Water | 6020A | 296107 |
| 240-85395-25 | AMW-26-(20170920) | Dissolved | Water | 6020A | 296107 |
| LCS 240-296107/3-A | Lab Control Sample | Total Recoverable | Water | 6020A | 296107 |
| 240-85395-15 MS | AMW-22B-(20170919) | Dissolved | Water | 6020A | 296107 |
| 240-85395-15 MSD | AMW-22B-(20170919) | Dissolved | Water | 6020A | 296107 |

### Analysis Batch: 296549

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 240-296107/1-A | Method Blank | Total Recoverable | Water | 6020A | 296107 |

## General Chemistry

### Prep Batch: 463472

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-1 | AMW-07-(20170919) | Total/NA | Water | 9012B | |
| 240-85395-5 | AMW-19-(20170919) | Total/NA | Water | 9012B | |
| 240-85395-7 | AMW-20-(20170920) | Total/NA | Water | 9012B | |
| 240-85395-9 | DUP-02-(20170920) | Total/NA | Water | 9012B | |
| 240-85395-11 | AMW-21-(20170919) | Total/NA | Water | 9012B | |
| 240-85395-13 | AMW-22-(20170919) | Total/NA | Water | 9012B | |
| 240-85395-15 | AMW-22B-(20170919) | Total/NA | Water | 9012B | |
| MB 490-463472/1-A | Method Blank | Total/NA | Water | 9012B | |
| LCS 490-463472/2-A | Lab Control Sample | Total/NA | Water | 9012B | |
| 240-85395-15 MS | AMW-22B-(20170919) | Total/NA | Water | 9012B | |
| 240-85395-15 MSD | AMW-22B-(20170919) | Total/NA | Water | 9012B | |
| 240-85395-13 DU | AMW-22-(20170919) | Total/NA | Water | 9012B | |

### Prep Batch: 463663

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-17 | AMW-23-(20170920) | Total/NA | Water | 9012B | |
| 240-85395-19 | AMW-23B-(20170920) | Total/NA | Water | 9012B | |
| 240-85395-21 | AMW-24-(20170920) | Total/NA | Water | 9012B | |
| 240-85395-23 | AMW-25-(20170920) | Total/NA | Water | 9012B | |
| 240-85395-25 | AMW-26-(20170920) | Total/NA | Water | 9012B | |
| MB 490-463663/1-A | Method Blank | Total/NA | Water | 9012B | |
| LCS 490-463663/2-A | Lab Control Sample | Total/NA | Water | 9012B | |
| 240-85395-21 MS | AMW-24-(20170920) | Total/NA | Water | 9012B | |
| 240-85395-21 MSD | AMW-24-(20170920) | Total/NA | Water | 9012B | |
| 240-85431-F-6-B DU | Duplicate | Total/NA | Water | 9012B | |

### Analysis Batch: 463960

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-1 | AMW-07-(20170919) | Total/NA | Water | 9012B | 463472 |
| 240-85395-5 | AMW-19-(20170919) | Total/NA | Water | 9012B | 463472 |
| 240-85395-7 | AMW-20-(20170920) | Total/NA | Water | 9012B | 463472 |

## General Chemistry (Continued)

### Analysis Batch: 463960 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 240-85395-9 | DUP-02-(20170920) | Total/NA | Water | 9012B | 463472 |
| 240-85395-11 | AMW-21-(20170919) | Total/NA | Water | 9012B | 463472 |
| 240-85395-13 | AMW-22-(20170919) | Total/NA | Water | 9012B | 463472 |
| 240-85395-15 | AMW-22B-(20170919) | Total/NA | Water | 9012B | 463472 |
| 240-85395-17 | AMW-23-(20170920) | Total/NA | Water | 9012B | 463663 |
| 240-85395-19 | AMW-23B-(20170920) | Total/NA | Water | 9012B | 463663 |
| 240-85395-21 | AMW-24-(20170920) | Total/NA | Water | 9012B | 463663 |
| 240-85395-23 | AMW-25-(20170920) | Total/NA | Water | 9012B | 463663 |
| 240-85395-25 | AMW-26-(20170920) | Total/NA | Water | 9012B | 463663 |
| MB 490-463472/1-A | Method Blank | Total/NA | Water | 9012B | 463472 |
| MB 490-463663/1-A | Method Blank | Total/NA | Water | 9012B | 463663 |
| LCS 490-463472/2-A | Lab Control Sample | Total/NA | Water | 9012B | 463472 |
| LCS 490-463663/2-A | Lab Control Sample | Total/NA | Water | 9012B | 463663 |
| 240-85395-15 MS | AMW-22B-(20170919) | Total/NA | Water | 9012B | 463472 |
| 240-85395-15 MSD | AMW-22B-(20170919) | Total/NA | Water | 9012B | 463472 |
| 240-85395-21 MS | AMW-24-(20170920) | Total/NA | Water | 9012B | 463663 |
| 240-85395-21 MSD | AMW-24-(20170920) | Total/NA | Water | 9012B | 463663 |
| 240-85395-13 DU | AMW-22-(20170919) | Total/NA | Water | 9012B | 463472 |
| 240-85431-F-6-B DU | Duplicate | Total/NA | Water | 9012B | 463663 |

## Client Sample ID: AMW-07-(20170919)

**Lab Sample ID: 240-85395-1**

**Date Collected: 09/19/17 09:25**

**Matrix: Water**

**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297061 | 10/01/17 21:12 | LRW | TAL CAN |
| Total/NA | Prep | 3510C | | | 296281 | 09/26/17 08:36 | BMB | TAL CAN |
| Total/NA | Analysis | 8270C | | 1 | 296829 | 09/29/17 18:07 | JMG | TAL CAN |
| Total/NA | Analysis | WI-GRO | | 1 | 297098 | 10/02/17 22:30 | RTR | TAL CAN |
| Total/NA | Prep | 3520C | | | 296387 | 09/26/17 14:40 | CS | TAL CAN |
| Total/NA | Analysis | 8082 | | 1 | 296589 | 09/28/17 16:52 | LSH | TAL CAN |
| Total/NA | Prep | 3510C | | | 296388 | 09/26/17 14:46 | CS | TAL CAN |
| Total/NA | Analysis | WI-DRO | | 1 | 296547 | 09/27/17 18:18 | DEB | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6010B | | 1 | 296444 | 09/26/17 20:14 | AS1 | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6020A | | 1 | 296446 | 09/26/17 15:15 | DSH | TAL CAN |
| Dissolved | Prep | 7470A | | | 296116 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 7470A | | 1 | 296383 | 09/26/17 11:44 | DTN | TAL CAN |
| Total/NA | Prep | 9012B | | | 463472 | 09/27/17 13:01 | LDT | TAL NSH |
| Total/NA | Analysis | 9012B | | 1 | 463960 | 09/28/17 16:25 | SDL | TAL NSH |

## Client Sample ID: TRIP BLANK1

**Lab Sample ID: 240-85395-2**

**Date Collected: 09/19/17 00:00**

**Matrix: Water**

**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297061 | 10/01/17 21:34 | LRW | TAL CAN |

## Client Sample ID: AMW-19-(20170919)

**Lab Sample ID: 240-85395-5**

**Date Collected: 09/19/17 16:05**

**Matrix: Water**

**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297061 | 10/01/17 21:56 | LRW | TAL CAN |
| Total/NA | Prep | 3510C | | | 296281 | 09/26/17 08:36 | BMB | TAL CAN |
| Total/NA | Analysis | 8270C | | 1 | 296829 | 09/29/17 16:06 | JMG | TAL CAN |
| Total/NA | Analysis | WI-GRO | | 1 | 297098 | 10/02/17 23:10 | RTR | TAL CAN |
| Total/NA | Prep | 3520C | | | 296387 | 09/26/17 14:40 | CS | TAL CAN |
| Total/NA | Analysis | 8082 | | 1 | 296589 | 09/28/17 17:11 | LSH | TAL CAN |
| Total/NA | Prep | 3510C | | | 296388 | 09/26/17 14:46 | CS | TAL CAN |
| Total/NA | Analysis | WI-DRO | | 1 | 296547 | 09/27/17 18:46 | DEB | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6010B | | 1 | 296444 | 09/26/17 20:18 | AS1 | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6020A | | 1 | 296446 | 09/26/17 15:19 | DSH | TAL CAN |
| Dissolved | Prep | 7470A | | | 296116 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 7470A | | 1 | 296383 | 09/26/17 11:46 | DTN | TAL CAN |

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 9012B | | | 463472 | 09/27/17 13:01 | LDT | TAL NSH |
| Total/NA | Analysis | 9012B | | 1 | 463960 | 09/28/17 16:26 | SDL | TAL NSH |

## Client Sample ID: TRIP BLANK3

**Lab Sample ID: 240-85395-6**
**Date Collected: 09/19/17 00:00**
**Matrix: Water**
**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297061 | 10/01/17 23:22 | LRW | TAL CAN |

## Client Sample ID: AMW-20-(20170920)

**Lab Sample ID: 240-85395-7**
**Date Collected: 09/20/17 09:33**
**Matrix: Water**
**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297061 | 10/01/17 23:44 | LRW | TAL CAN |
| Total/NA | Prep | 3510C | | | 296485 | 09/27/17 09:28 | BMB | TAL CAN |
| Total/NA | Analysis | 8270C | | 1 | 296829 | 09/29/17 13:40 | JMG | TAL CAN |
| Total/NA | Analysis | WI-GRO | | 1 | 297098 | 10/02/17 23:50 | RTR | TAL CAN |
| Total/NA | Prep | 3520C | | | 296554 | 09/27/17 13:47 | CS | TAL CAN |
| Total/NA | Analysis | 8082 | | 1 | 296783 | 09/29/17 10:46 | CSC | TAL CAN |
| Total/NA | Prep | 3510C | | | 296388 | 09/26/17 14:46 | CS | TAL CAN |
| Total/NA | Analysis | WI-DRO | | 1 | 296547 | 09/27/17 19:13 | DEB | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6010B | | 1 | 296444 | 09/26/17 20:23 | AS1 | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6020A | | 1 | 296446 | 09/26/17 15:23 | DSH | TAL CAN |
| Dissolved | Prep | 7470A | | | 296116 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 7470A | | 1 | 296383 | 09/26/17 11:48 | DTN | TAL CAN |
| Total/NA | Prep | 9012B | | | 463472 | 09/27/17 13:01 | LDT | TAL NSH |
| Total/NA | Analysis | 9012B | | 1 | 463960 | 09/28/17 16:28 | SDL | TAL NSH |

## Client Sample ID: TRIP BLANK4

**Lab Sample ID: 240-85395-8**
**Date Collected: 09/20/17 00:00**
**Matrix: Water**
**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297061 | 10/02/17 00:06 | LRW | TAL CAN |

## Client Sample ID: DUP-02-(20170920)

**Lab Sample ID: 240-85395-9**
**Date Collected: 09/20/17 00:00**
**Matrix: Water**
**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297061 | 10/02/17 00:28 | LRW | TAL CAN |
| Total/NA | Prep | 3510C | | | 296485 | 09/27/17 09:28 | BMB | TAL CAN |
| Total/NA | Analysis | 8270C | | 1 | 296829 | 09/29/17 14:04 | JMG | TAL CAN |

# Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | WI-GRO | | 1 | 297098 | 10/03/17 00:30 | RTR | TAL CAN |
| Total/NA | Prep | 3520C | | | 296554 | 09/27/17 13:47 | CS | TAL CAN |
| Total/NA | Analysis | 8082 | | 1 | 296783 | 09/29/17 11:07 | CSC | TAL CAN |
| Total/NA | Prep | 3510C | | | 296388 | 09/26/17 14:46 | CS | TAL CAN |
| Total/NA | Analysis | WI-DRO | | 1 | 296547 | 09/27/17 19:41 | DEB | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6010B | | 1 | 296444 | 09/26/17 20:27 | AS1 | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6020A | | 1 | 296446 | 09/26/17 15:28 | DSH | TAL CAN |
| Dissolved | Prep | 7470A | | | 296116 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 7470A | | 1 | 296383 | 09/26/17 11:50 | DTN | TAL CAN |
| Total/NA | Prep | 9012B | | | 463472 | 09/27/17 13:01 | LDT | TAL NSH |
| Total/NA | Analysis | 9012B | | 1 | 463960 | 09/28/17 16:30 | SDL | TAL NSH |

## Client Sample ID: TRIP BLANK5

**Lab Sample ID: 240-85395-10**

**Date Collected: 09/20/17 00:00**

**Matrix: Water**

**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297061 | 10/02/17 00:50 | LRW | TAL CAN |

## Client Sample ID: AMW-21-(20170919)

**Lab Sample ID: 240-85395-11**

**Date Collected: 09/19/17 10:45**

**Matrix: Water**

**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297061 | 10/02/17 01:13 | LRW | TAL CAN |
| Total/NA | Prep | 3510C | | | 296281 | 09/26/17 08:36 | BMB | TAL CAN |
| Total/NA | Analysis | 8270C | | 1 | 296829 | 09/29/17 18:31 | JMG | TAL CAN |
| Total/NA | Analysis | WI-GRO | | 1 | 297098 | 10/03/17 01:11 | RTR | TAL CAN |
| Total/NA | Prep | 3520C | | | 296387 | 09/26/17 14:40 | CS | TAL CAN |
| Total/NA | Analysis | 8082 | | 1 | 296982 | 09/30/17 20:04 | LSH | TAL CAN |
| Total/NA | Prep | 3510C | | | 296388 | 09/26/17 14:46 | CS | TAL CAN |
| Total/NA | Analysis | WI-DRO | | 1 | 296547 | 09/27/17 20:08 | DEB | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6010B | | 1 | 296444 | 09/26/17 20:31 | AS1 | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6020A | | 1 | 296446 | 09/26/17 15:32 | DSH | TAL CAN |
| Dissolved | Prep | 7470A | | | 296116 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 7470A | | 1 | 296383 | 09/26/17 11:52 | DTN | TAL CAN |
| Total/NA | Prep | 9012B | | | 463472 | 09/27/17 13:01 | LDT | TAL NSH |
| Total/NA | Analysis | 9012B | | 1 | 463960 | 09/28/17 16:32 | SDL | TAL NSH |

## Client Sample ID: TRIP BLANK6

**Lab Sample ID: 240-85395-12**
**Matrix: Water**
**Date Collected: 09/19/17 00:00**
**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297056 | 10/01/17 21:00 | LRW | TAL CAN |

## Client Sample ID: AMW-22-(20170919)

**Lab Sample ID: 240-85395-13**
**Matrix: Water**
**Date Collected: 09/19/17 12:00**
**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297056 | 10/01/17 21:23 | LRW | TAL CAN |
| Total/NA | Prep | 3510C | | | 296281 | 09/26/17 08:36 | BMB | TAL CAN |
| Total/NA | Analysis | 8270C | | 1 | 296829 | 09/29/17 16:30 | JMG | TAL CAN |
| Total/NA | Analysis | WI-GRO | | 1 | 297098 | 10/03/17 01:51 | RTR | TAL CAN |
| Total/NA | Prep | 3520C | | | 296387 | 09/26/17 14:40 | CS | TAL CAN |
| Total/NA | Analysis | 8082 | | 1 | 296589 | 09/28/17 17:49 | LSH | TAL CAN |
| Total/NA | Prep | 3510C | | | 296388 | 09/26/17 14:46 | CS | TAL CAN |
| Total/NA | Analysis | WI-DRO | | 1 | 296547 | 09/27/17 20:35 | DEB | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6010B | | 1 | 296444 | 09/26/17 20:44 | AS1 | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6020A | | 1 | 296446 | 09/26/17 15:46 | DSH | TAL CAN |
| Dissolved | Prep | 7470A | | | 296116 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 7470A | | 1 | 296383 | 09/26/17 11:53 | DTN | TAL CAN |
| Total/NA | Prep | 9012B | | | 463472 | 09/27/17 13:01 | LDT | TAL NSH |
| Total/NA | Analysis | 9012B | | 1 | 463960 | 09/28/17 16:34 | SDL | TAL NSH |

## Client Sample ID: TRIP BLANK7

**Lab Sample ID: 240-85395-14**
**Matrix: Water**
**Date Collected: 09/19/17 00:00**
**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297056 | 10/01/17 21:46 | LRW | TAL CAN |

## Client Sample ID: AMW-22B-(20170919)

**Lab Sample ID: 240-85395-15**
**Matrix: Water**
**Date Collected: 09/19/17 13:00**
**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297056 | 10/01/17 22:09 | LRW | TAL CAN |
| Total/NA | Prep | 3510C | | | 296281 | 09/26/17 08:36 | BMB | TAL CAN |
| Total/NA | Analysis | 8270C | | 1 | 296632 | 09/28/17 19:40 | JMG | TAL CAN |
| Total/NA | Analysis | WI-GRO | | 1 | 297098 | 10/03/17 02:31 | RTR | TAL CAN |
| Total/NA | Prep | 3520C | | | 296387 | 09/26/17 14:40 | CS | TAL CAN |
| Total/NA | Analysis | 8082 | | 1 | 296589 | 09/28/17 18:08 | LSH | TAL CAN |

## Client Sample ID: AMW-22B-(20170919)

**Lab Sample ID: 240-85395-15**

**Date Collected: 09/19/17 13:00**

**Matrix: Water**

**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3510C | | | 296388 | 09/26/17 14:46 | CS | TAL CAN |
| Total/NA | Analysis | WI-DRO | | 1 | 296547 | 09/27/17 21:03 | DEB | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6010B | | 1 | 296444 | 09/26/17 13:27 | AS1 | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6020A | | 1 | 296446 | 09/26/17 14:08 | DSH | TAL CAN |
| Dissolved | Prep | 7470A | | | 296116 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 7470A | | 1 | 296383 | 09/26/17 11:19 | DTN | TAL CAN |
| Total/NA | Prep | 9012B | | | 463472 | 09/27/17 13:01 | LDT | TAL NSH |
| Total/NA | Analysis | 9012B | | 1 | 463960 | 09/28/17 16:38 | SDL | TAL NSH |

## Client Sample ID: TRIP BLANK8

**Lab Sample ID: 240-85395-16**

**Date Collected: 09/19/17 00:00**

**Matrix: Water**

**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297061 | 10/02/17 01:35 | LRW | TAL CAN |

## Client Sample ID: AMW-23-(20170920)

**Lab Sample ID: 240-85395-17**

**Date Collected: 09/20/17 13:00**

**Matrix: Water**

**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297179 | 10/02/17 16:38 | LRW | TAL CAN |
| Total/NA | Prep | 3510C | | | 296485 | 09/27/17 09:28 | BMB | TAL CAN |
| Total/NA | Analysis | 8270C | | 1 | 296829 | 09/29/17 14:28 | JMG | TAL CAN |
| Total/NA | Analysis | WI-GRO | | 1 | 297098 | 10/03/17 03:10 | RTR | TAL CAN |
| Total/NA | Prep | 3520C | | | 296554 | 09/27/17 13:47 | CS | TAL CAN |
| Total/NA | Analysis | 8082 | | 1 | 296783 | 09/29/17 11:26 | CSC | TAL CAN |
| Total/NA | Prep | 3510C | | | 296579 | 09/27/17 17:14 | CS | TAL CAN |
| Total/NA | Analysis | WI-DRO | | 1 | 296717 | 09/28/17 18:43 | DEB | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6010B | | 1 | 296444 | 09/26/17 20:48 | AS1 | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6020A | | 1 | 296446 | 09/26/17 15:50 | DSH | TAL CAN |
| Dissolved | Prep | 7470A | | | 296116 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 7470A | | 1 | 296383 | 09/26/17 11:55 | DTN | TAL CAN |
| Total/NA | Prep | 9012B | | | 463663 | 09/28/17 08:48 | LDT | TAL NSH |
| Total/NA | Analysis | 9012B | | 1 | 463960 | 09/28/17 16:53 | SDL | TAL NSH |

## Client Sample ID: TRIP BLANK9

**Lab Sample ID: 240-85395-18**
**Matrix: Water**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297179 | 10/02/17 17:00 | LRW | TAL CAN |

## Client Sample ID: AMW-23B-(20170920)

**Lab Sample ID: 240-85395-19**
**Matrix: Water**
**Date Collected: 09/20/17 12:00**
**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297179 | 10/02/17 17:22 | LRW | TAL CAN |
| Total/NA | Prep | 3510C | | | 296485 | 09/27/17 09:28 | BMB | TAL CAN |
| Total/NA | Analysis | 8270C | | 1 | 296829 | 09/29/17 14:53 | JMG | TAL CAN |
| Total/NA | Analysis | WI-GRO | | 1 | 297098 | 10/03/17 04:27 | RTR | TAL CAN |
| Total/NA | Prep | 3520C | | | 296554 | 09/27/17 13:47 | CS | TAL CAN |
| Total/NA | Analysis | 8082 | | 1 | 296783 | 09/29/17 11:45 | CSC | TAL CAN |
| Total/NA | Prep | 3510C | | | 296579 | 09/27/17 17:14 | CS | TAL CAN |
| Total/NA | Analysis | WI-DRO | | 1 | 296717 | 09/28/17 19:11 | DEB | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6010B | | 1 | 296444 | 09/26/17 20:53 | AS1 | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6020A | | 1 | 296446 | 09/26/17 15:55 | DSH | TAL CAN |
| Dissolved | Prep | 7470A | | | 296116 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 7470A | | 1 | 296383 | 09/26/17 11:57 | DTN | TAL CAN |
| Total/NA | Prep | 9012B | | | 463663 | 09/28/17 08:48 | LDT | TAL NSH |
| Total/NA | Analysis | 9012B | | 1 | 463960 | 09/28/17 16:54 | SDL | TAL NSH |

## Client Sample ID: TRIP BLANK10

**Lab Sample ID: 240-85395-20**
**Matrix: Water**
**Date Collected: 09/20/17 00:00**
**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297179 | 10/02/17 17:44 | LRW | TAL CAN |

## Client Sample ID: AMW-24-(20170920)

**Lab Sample ID: 240-85395-21**
**Matrix: Water**
**Date Collected: 09/20/17 14:40**
**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297179 | 10/02/17 18:06 | LRW | TAL CAN |
| Total/NA | Prep | 3510C | | | 296485 | 09/27/17 09:28 | BMB | TAL CAN |
| Total/NA | Analysis | 8270C | | 1 | 296829 | 09/29/17 15:17 | JMG | TAL CAN |
| Total/NA | Analysis | WI-GRO | | 1 | 297098 | 10/03/17 05:06 | RTR | TAL CAN |
| Total/NA | Prep | 3520C | | | 296554 | 09/27/17 13:47 | CS | TAL CAN |
| Total/NA | Analysis | 8082 | | 1 | 296783 | 09/29/17 12:05 | CSC | TAL CAN |

## Client Sample ID: AMW-24-(20170920)

**Lab Sample ID: 240-85395-21**

**Date Collected: 09/20/17 14:40**

**Matrix: Water**

**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3510C | | | 296579 | 09/27/17 17:14 | CS | TAL CAN |
| Total/NA | Analysis | WI-DRO | | 1 | 296717 | 09/28/17 19:38 | DEB | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6010B | | 1 | 296444 | 09/26/17 20:57 | AS1 | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6020A | | 1 | 296446 | 09/26/17 15:59 | DSH | TAL CAN |
| Dissolved | Prep | 7470A | | | 296116 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 7470A | | 1 | 296383 | 09/26/17 12:04 | DTN | TAL CAN |
| Total/NA | Prep | 9012B | | | 463663 | 09/28/17 08:48 | LDT | TAL NSH |
| Total/NA | Analysis | 9012B | | 1 | 463960 | 09/28/17 16:56 | SDL | TAL NSH |

## Client Sample ID: TRIP BLANK11

**Lab Sample ID: 240-85395-22**

**Date Collected: 09/20/17 00:00**

**Matrix: Water**

**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297179 | 10/02/17 18:28 | LRW | TAL CAN |

## Client Sample ID: AMW-25-(20170920)

**Lab Sample ID: 240-85395-23**

**Date Collected: 09/20/17 15:48**

**Matrix: Water**

**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 20 | 297179 | 10/02/17 18:50 | LRW | TAL CAN |
| Total/NA | Analysis | 8260B | | 20 | 297346 | 10/03/17 15:45 | LRW | TAL CAN |
| Total/NA | Prep | 3510C | | | 296485 | 09/27/17 09:28 | BMB | TAL CAN |
| Total/NA | Analysis | 8270C | | 1 | 296829 | 09/29/17 15:41 | JMG | TAL CAN |
| Total/NA | Analysis | WI-GRO | | 10 | 297098 | 10/03/17 05:45 | RTR | TAL CAN |
| Total/NA | Prep | 3520C | | | 296554 | 09/27/17 13:47 | CS | TAL CAN |
| Total/NA | Analysis | 8082 | | 1 | 296783 | 09/29/17 12:24 | CSC | TAL CAN |
| Total/NA | Prep | 3510C | | | 296579 | 09/27/17 17:14 | CS | TAL CAN |
| Total/NA | Analysis | WI-DRO | | 10 | 296923 | 09/29/17 16:35 | DEB | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6010B | | 1 | 296444 | 09/26/17 21:01 | AS1 | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6020A | | 1 | 296446 | 09/26/17 16:04 | DSH | TAL CAN |
| Dissolved | Prep | 7470A | | | 296116 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 7470A | | 1 | 296383 | 09/26/17 12:05 | DTN | TAL CAN |
| Total/NA | Prep | 9012B | | | 463663 | 09/28/17 08:48 | LDT | TAL NSH |
| Total/NA | Analysis | 9012B | | 1 | 463960 | 09/28/17 17:02 | SDL | TAL NSH |

# Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

## Client Sample ID: TRIP BLANK12

**Lab Sample ID: 240-85395-24**

**Date Collected: 09/20/17 00:00**

**Matrix: Water**

**Date Received: 09/22/17 09:00**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297179 | 10/02/17 19:12 | LRW | TAL CAN |

## Client Sample ID: AMW-26-(20170920)

**Lab Sample ID: 240-85395-25**

**Date Collected: 09/20/17 17:15**

**Matrix: Water**

**Date Received: 09/23/17 09:20**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297179 | 10/02/17 19:34 | LRW | TAL CAN |
| Total/NA | Analysis | 8260B | | 1 | 297346 | 10/03/17 16:09 | LRW | TAL CAN |
| Total/NA | Prep | 3510C | | | 296485 | 09/27/17 09:28 | BMB | TAL CAN |
| Total/NA | Analysis | 8270C | | 1 | 296829 | 09/29/17 18:55 | JMG | TAL CAN |
| Total/NA | Analysis | WI-GRO | | 1 | 297098 | 10/03/17 06:25 | RTR | TAL CAN |
| Total/NA | Prep | 3520C | | | 296554 | 09/27/17 13:47 | CS | TAL CAN |
| Total/NA | Analysis | 8082 | | 1 | 296783 | 09/29/17 12:44 | CSC | TAL CAN |
| Total/NA | Prep | 3510C | | | 296579 | 09/27/17 17:14 | CS | TAL CAN |
| Total/NA | Analysis | WI-DRO | | 1 | 296717 | 09/28/17 20:32 | DEB | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6010B | | 1 | 296444 | 09/26/17 21:05 | AS1 | TAL CAN |
| Dissolved | Prep | 3005A | | | 296107 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 6020A | | 1 | 296446 | 09/26/17 16:08 | DSH | TAL CAN |
| Dissolved | Prep | 7470A | | | 296116 | 09/25/17 14:00 | AJC | TAL CAN |
| Dissolved | Analysis | 7470A | | 1 | 296383 | 09/26/17 12:07 | DTN | TAL CAN |
| Total/NA | Prep | 9012B | | | 463663 | 09/28/17 08:48 | LDT | TAL NSH |
| Total/NA | Analysis | 9012B | | 1 | 463960 | 09/28/17 17:04 | SDL | TAL NSH |

## Client Sample ID: TRIP BLANK13

**Lab Sample ID: 240-85395-26**

**Date Collected: 09/20/17 00:00**

**Matrix: Water**

**Date Received: 09/23/17 09:20**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | 8260B | | 1 | 297179 | 10/02/17 19:56 | LRW | TAL CAN |

**Laboratory References:**

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

# Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

## Laboratory: TestAmerica Canton

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

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| California | State Program | 9 | 2927 | 02-23-18 |
| Connecticut | State Program | 1 | PH-0590 | 12-31-17 * |
| Florida | NELAP | 4 | E87225 | 06-30-18 |
| Illinois | NELAP | 5 | 200004 | 07-31-18 |
| Kansas | NELAP | 7 | E-10336 | 01-31-18 * |
| Kentucky (UST) | State Program | 4 | 58 | 02-23-18 |
| Kentucky (WW) | State Program | 4 | 98016 | 12-31-17 * |
| Minnesota | NELAP | 5 | 039-999-348 | 12-31-17 * |
| Minnesota (Petrofund) | State Program | 1 | 3506 | 07-31-18 |
| Nevada | State Program | 9 | OH-000482008A | 07-31-18 |
| New Jersey | NELAP | 2 | OH001 | 06-30-18 |
| New York | NELAP | 2 | 10975 | 03-31-18 |
| Ohio VAP | State Program | 5 | CL0024 | 09-06-19 |
| Oregon | NELAP | 10 | 4062 | 02-23-18 |
| Pennsylvania | NELAP | 3 | 68-00340 | 08-31-18 |
| Texas | NELAP | 6 | T104704517-17-9 | 08-31-18 |
| USDA | Federal | | P330-16-00404 | 12-28-19 |
| Virginia | NELAP | 3 | 460175 | 09-14-18 |
| Washington | State Program | 10 | C971 | 01-12-18 * |
| West Virginia DEP | State Program | 3 | 210 | 12-31-17 * |

## Laboratory: TestAmerica Nashville

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

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| A2LA | A2LA | | NA: NELAP & A2LA | 12-31-17 |
| A2LA | ISO/IEC 17025 | | 0453.07 | 12-31-17 |
| Alaska (UST) | State Program | 10 | UST-087 | 01-01-18 |
| Arizona | State Program | 9 | AZ0473 | 05-05-18 |
| Arkansas DEQ | State Program | 6 | 88-0737 | 04-25-18 |
| California | State Program | 9 | 2938 | 10-31-18 |
| Connecticut | State Program | 1 | PH-0220 | 12-31-17 |
| Florida | NELAP | 4 | E87358 | 06-30-18 |
| Georgia | State Program | 4 | E87358(FL)/453.07(A2LA) | 12-31-17 |
| Illinois | NELAP | 5 | 200010 | 12-09-17 |
| Iowa | State Program | 7 | 131 | 04-01-18 |
| Kansas | NELAP | 7 | E-10229 | 10-31-17 |
| Kentucky (UST) | State Program | 4 | 19 | 06-30-18 |
| Kentucky (WW) | State Program | 4 | 90038 | 12-31-17 |
| Louisiana | NELAP | 6 | 30613 | 06-30-18 |
| Maine | State Program | 1 | TN00032 | 11-03-17 |
| Maryland | State Program | 3 | 316 | 03-31-18 |
| Massachusetts | State Program | 1 | M-TN032 | 06-30-18 |
| Minnesota | NELAP | 5 | 047-999-345 | 12-31-17 |
| Mississippi | State Program | 4 | N/A | 06-30-18 |
| Montana (UST) | State Program | 8 | NA | 02-24-20 |
| Nevada | State Program | 9 | TN00032 | 07-31-18 |
| New Hampshire | NELAP | 1 | 2963 | 10-09-17 |
| New Jersey | NELAP | 2 | TN965 | 06-30-18 |
| New York | NELAP | 2 | 11342 | 03-31-18 |

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

Client: ARCADIS U.S., Inc.
Project/Site: Ford TCAP - E200572

TestAmerica Job ID: 240-85395-1

## Laboratory: TestAmerica Nashville (Continued)

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

| Authority | Program | EPA Region | Identification Number | Expiration Date |
|---|---|---|---|---|
| North Carolina (WW/SW) | State Program | 4 | 387 | 12-31-17 |
| North Dakota | State Program | 8 | R-146 | 06-30-18 |
| Ohio VAP | State Program | 5 | CL0033 | 07-06-19 |
| Oklahoma | State Program | 6 | 9412 | 08-31-18 |
| Oregon | NELAP | 10 | TN200001 | 04-27-18 |
| Pennsylvania | NELAP | 3 | 68-00585 | 06-30-18 |
| Rhode Island | State Program | 1 | LAO00268 | 12-30-17 |
| South Carolina | State Program | 4 | 84009 (001) | 02-28-18 |
| South Carolina (Do Not Use - DW) | State Program | 4 | 84009 (002) | 12-16-17 |
| Tennessee | State Program | 4 | 2008 | 02-23-20 |
| Texas | NELAP | 6 | T104704077 | 08-31-18 |
| USDA | Federal | | P330-13-00306 | 12-01-19 |
| Utah | NELAP | 8 | TN00032 | 07-31-18 |
| Virginia | NELAP | 3 | 460152 | 06-14-18 |
| Washington | State Program | 10 | C789 | 07-19-18 |
| West Virginia DEP | State Program | 3 | 219 | 02-28-18 |
| Wisconsin | State Program | 5 | 998020430 | 08-31-18 |
| Wyoming (UST) | A2LA | 8 | 453.07 | 12-31-17 |

**TestAmerica Canton**
4101 Shuffel Street NW
North Canton, OH 44720
Phone (330) 497-9396 Fax (330) 497-0772

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: Adam Thompson | Lab PM: Pohl, Denise | Carrier Tracking No(s): | COC No: 240-45567-19862.2 |
|---|---|---|---|---|
| Client Contact: Jim Ziska | Phone: 218-260-7854 | E-Mail: denise.pohl@testamericainc.com | | Page: Page 2 of 2 |
| Company: ARCADIS U.S., Inc. | | | | Job #: |
| Address: 430 First Avenue, North Suite 720 | Due Date Requested: | | | |
| City: Minneapolis | TAT Requested (days): Standard / Two Weeks | | | |
| State, Zip: MN, 55304 | | | | |
| Phone: 612-339-9434 | PO #: MN000631.0001 | | | |
| Email: James.Ziska@arcadis.com | WO #: Cadena # E200572 | | | |
| Project Name: Ford TCAP - E200572 | Project #: 24006638 | | | |
| Site: St Paul, MN | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

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

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260B - Trip Blank- 8260B, 465 VOCs | 8260B, WI_GRO | 8082, 8270C SVOC, PCB | WI_DRO - WI DRO | 6010B, 6020A, 7470A TAL Metals, Mercury, Hexavalent | 9012B - Total Cyanide | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | A | A | N | A | D | B | | |
| AMW-07-(20170919) | 9/19/17 | 0925 | G | Water | X | | X | X | X | X | X | X | | |
| AMW-19-(20170919) | 9/19/17 | 1605 | G | Water | X | | X | X | X | X | X | X | | |
| Dup-01-(20170919) | 9/19/17 | — | G | Water | X | | X | X | X | X | X | X | | |
| AMW-20-(20170920) | 9/20/17 | 0933 | G | Water | X | | X | X | X | X | X | X | | |
| Dup-02-(20170920) | 9/20/17 | — | G | Water | X | | X | X | X | X | X | X | | |
| AMW-21-(20170919) | 9/19/17 | 1045 | G | Water | X | | X | X | X | X | X | X | | |
| AMW-22-(20170919) | 9/19/17 | 1200 | G | Water | X | | X | X | X | X | X | X | | |
| AMW-22B-(20170919) | 9/19/17 | 1300 | G | Water | X | X | X | X | X | X | X | X | | MS/MSD |
| AMW-23-(20170920) | 9/20/17 | 1300 | G | Water | X | | X | X | X | X | X | X | | |
| AMW-23B-(20170920) | 9/20/17 | 1200 | G | water | X | | X | X | X | X | X | X | | |
| AMW-24-(20170920) | 9/20/17 | 1440 | G | water | X | | X | X | X | X | X | X | | |

240-85395 Chain of Custody

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Adam Thompson | 09/21/17 1530 | Arcadis | Thomas L. Lee | 9-21-17 15:30 | T. AMERICA |
| 2 | | | | | 9-22-17 900 | TA |
| 3 | | | | | | |

Custody Seals Intact: △ Yes △ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

**TestAmerica Canton**
4101 Shuffel Street NW
North Canton, OH 44720
Phone (330) 497-9396 Fax (330) 497-0772

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: Adam Thompson | Lab PM: Pohl, Denise | Carrier Tracking No(s): | COC No: 240-45567-19862.1 |
|---|---|---|---|---|
| Client Contact: Jim Ziska | Phone: 218-260-7854 | E-Mail: denise.pohl@testamericainc.com | | Page: Page 1 of 2 |
| Company: ARCADIS U.S., Inc. | | | | Job #: |
| Address: 430 First Avenue, North Suite 720 | Due Date Requested: | | | |
| City: Minneapolis | TAT Requested (days): Standard / Two Weeks | | | |
| State, Zip: MN, 55304 | | | | |
| Phone: 612-339-9434 | PO #: MN000631.0001 | | | |
| Email: James.Ziska@arcadis.com | WO #: Cadena # E200572 | | | |
| Project Name: Ford TCAP - E200572 | Project #: 24006638 | | | |
| Site: St Paul, MN | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

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

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260B - Trip Blank- 8260B, 465 VOCs | 8260B, WI_GRO | 8082, 8270C SVOC + PCB | WI_DRO - WI DRO | 6010B, 6020A, 7470A TAL Metals, Mercury, Rollup | 9012B - Total Cyanide | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | A | A | N | A | D | B | | |
| AMW-25-(20170920) | 9/20/17 | 1548 | G | Water | X | | X | X | X | X | X | X | | |
| AMW-26-(20170920) | 9/20/17 | 1715 | G | Water | X | | X | X | X | X | X | X | | |
| | | | | Water | | | | | | | | | | |
| TRIP BLANK | | | | Water | | | | | | | | | | |
| TEMP BLANK | | | | Water | | | | | | | | | | |
| | | | | Water | | | | | | | | | | |
| | | | | Water | | | | | | | | | | |
| | | | | Water | | | | | | | | | | |
| | | | | Water | | | | | | | | | | |
| | | | | Water | | | | | | | | | | |
| | | | | Water | | | | | | | | | | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|---|
| 1 | Adam Thompson/ARCADIS | 9/21/17 1530 | ARCADIS | Thomas S. Rei | 9-21-17 15:20 | TA AMERICA |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: 9-22-17 900 | Company TA |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |


10/5/2017

**TestAmerica Canton Sample Receipt Form/Narrative**
**Canton Facility**

Login # : 85395

Client Arcadis Site Name

Cooler unpacked by:

Cooler Received on 9-22-17 Opened on 9-22-17

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

**Receipt After-hours**: Drop-off Date/Time Storage Location

TestAmerica Cooler # Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☑ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #36 (CF +0.3°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN # 627 (CF -1.3°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

| | | |
|---|---|---|
| 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 13 | Yes | No |
| -Were the seals on the outside of the cooler(s) signed & dated? | Yes | No NA |
| -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? | Yes | No NA |
| -Were tamper/custody seals intact and uncompromised? | Yes | No NA |
| 3. Shippers' packing slip attached to the cooler(s)? | Yes | No |
| 4. Did custody papers accompany the sample(s)? | Yes | No |
| 5. Were the custody papers relinquished & signed in the appropriate place? | Yes | No |
| 6. Was/were the person(s) who collected the samples clearly identified on the COC? | Yes | No |
| 7. Did all bottles arrive in good condition (Unbroken)? | Yes | No |
| 8. Could all bottle labels be reconciled with the COC? | Yes | No |
| 9. Were correct bottle(s) used for the test(s) indicated? | Yes | No |
| 10. Sufficient quantity received to perform indicated analyses? | Yes | No |
| 11. Are these work share samples? | Yes | No |
| If yes, Questions 11-15 have been checked at the originating laboratory. | | |
| 11. Were all preserved sample(s) at the correct pH upon receipt? | Yes | No NA |
| 12. Were VOAs on the COC? | Yes | No |
| 13. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. | Yes | No NA |
| 14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ | Yes | No |
| 15. Was a LL Hg or Me Hg trip blank present? _____ | Yes | No |

pH Strip Lot# **HC697954**

**Tests that are not checked for pH by Receiving:**

**VOAs**
**Oil and Grease**
**TOC**

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

**16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES**

Samples processed by:

Missing 3 coolers, Each cooler was sample specific
Missing sample AMW-19@1605 and also 2/3 of the MS/MSD AMW-22B.
Missing sample AMW-26

**17. SAMPLE CONDITION**

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) 1xL (HCL-DRO) DUP02 + AMW-24 were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

**18. SAMPLE PRESERVATION**

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

**TestAmerica Multiple Cooler Receipt Form/Narrative**
**Canton Facility**

Login # : 85395

| Cooler # | IR Gun # | Observed Temp °C | Corrected Temp °C | Coolant |
|---|---|---|---|---|
| client | 8 | 2.4 | 2.4 | ice |
| | | 2.6 | 2.6 | |
| | | 1.6 | 1.6 | |
| | | 1.2 | 1.2 | |
| | | 1.0 | 1.0 | |
| | | 3.8 | 3.8 | |
| | | 2.0 | 2.0 | |
| | | 1.4 | 1.4 | |
| | | 1.4 | 1.4 | |
| | | 0.8 | 0.8 | |
| | | 3.6 | 3.6 | |
| | | 1.2 | 1.2 | |
| | | 1.8 | 1.8 | |

# Login Container Summary Report



Temperature readings: _____

| Client Sample ID | Lab ID | Container Type | Container pH | Preservative Added (mls) | Lot # |
|---|---|---|---|---|---|
| AMW-07-(20170919) | 240-85395-G-1 | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-07-(20170919) | 240-85395-H-1 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-07-(20170919) | 240-85395-M-1 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-07-(20170919) | 240-85395-N-1 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-19-(20170919) | 240-85395-G-3 | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-19-(20170919) | 240-85395-H-3 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-19-(20170919) | 240-85395-M-3 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-19-(20170919) | 240-85395-N-3 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| DUP-01-(20170919) | 240-85395-G-5 | Plastic 250ml - with Sodium Hydro | <12 | | |
| DUP-01-(20170919) | 240-85395-H-5 | Plastic 500ml - with Nitric Acid | >2 | | |
| DUP-01-(20170919) | 240-85395-M-5 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| DUP-01-(20170919) | 240-85395-N-5 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-20-(20170920) | 240-85395-G-7 | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-20-(20170920) | 240-85395-H-7 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-20-(20170920) | 240-85395-M-7 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-20-(20170920) | 240-85395-N-7 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| DUP-02-(20170920) | 240-85395-G-9 | Plastic 250ml - with Sodium Hydro | <12 | | |
| DUP-02-(20170920) | 240-85395-H-9 | Plastic 500ml - with Nitric Acid | >2 | | |
| DUP-02-(20170920) | 240-85395-M-9 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| DUP-02-(20170920) | 240-85395-N-9 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-21-(20170919) | 240-85395-G-11 | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-21-(20170919) | 240-85395-H-11 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-21-(20170919) | 240-85395-M-11 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-21-(20170919) | 240-85395-N-11 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-22-(20170919) | 240-85395-G-13 | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-22-(20170919) | 240-85395-H-13 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-22-(20170919) | 240-85395-M-13 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-22-(20170919) | 240-85395-N-13 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-22B-(20170919) | 240-85395-G-15 | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-22B-(20170919) | 240-85395-G-15 MS | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-22B-(20170919) | 240-85395-G-15 MSD | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-22B-(20170919) | 240-85395-H-15 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-22B-(20170919) | 240-85395-H-15 MS | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-22B-(20170919) | 240-85395-H-15 MSD | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-22B-(20170919) | 240-85395-M-15 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-22B-(20170919) | 240-85395-M-15 MS | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-22B-(20170919) | 240-85395-M-15 MSI | Amber Glass 1 liter - Hydrochloric | <2 | | |

| Client Sample ID | Lab ID | Container Type | Container pH | Preservative Added (mls) | Lot # |
|---|---|---|---|---|---|
| AMW-22B-(20170919) | 240-85395-N-15 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-22B-(20170919) | 240-85395-N-15 MS | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-22B-(20170919) | 240-85395-N-15 MSD | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-23-(20170920) | 240-85395-G-17 | Plastic 250ml - with Sodium Hydrox | <12 | | |
| AMW-23-(20170920) | 240-85395-H-17 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-23-(20170920) | 240-85395-M-17 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-23-(20170920) | 240-85395-N-17 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-23B-(20170920) | 240-85395-G-19 | Plastic 250ml - with Sodium Hydrox | <12 | | |
| AMW-23B-(20170920) | 240-85395-H-19 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-23B-(20170920) | 240-85395-M-19 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-23B-(20170920) | 240-85395-N-19 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-24-(20170920) | 240-85395-G-21 | Plastic 250ml - with Sodium Hydrox | <12 | | |
| AMW-24-(20170920) | 240-85395-H-21 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-24-(20170920) | 240-85395-M-21 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-24-(20170920) | 240-85395-N-21 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-25-(20170920) | 240-85395-G-23 | Plastic 250ml - with Sodium Hydrox | <12 | | |
| AMW-25-(20170920) | 240-85395-H-23 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-25-(20170920) | 240-85395-M-23 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-25-(20170920) | 240-85395-N-23 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-26-(20170920) | 240-85395-G-25 | Plastic 250ml - with Sodium Hydrox | <12 | | |
| AMW-26-(20170920) | 240-85395-H-25 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-26-(20170920) | 240-85395-M-25 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-26-(20170920) | 240-85395-N-25 | Amber Glass 1 liter - Hydrochloric | <2 | | |

**TestAmerica Canton**
4101 Shuffel Street NW
North Canton, OH 44720
Phone (330) 497-9396 Fax (330) 497-0772

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: Adam Thompson | Lab PM: Pohl, Denise | Carrier Tracking No(s): | COC No: 240-45567-19862.2 |
|---|---|---|---|---|
| Client Contact: Jim Ziska | Phone: 218-260-7854 | E-Mail: denise.pohl@testamericainc.com | | Page: Page 2 of 2 |
| Company: ARCADIS U.S., Inc. | | | | Job #: |
| Address: 430 First Avenue, North Suite 720 | Due Date Requested: | | | |
| City: Minneapolis | TAT Requested (days): Standard / Two Weeks | | | |
| State, Zip: MN, 55304 | | | | |
| Phone: 612-339-9434 | PO #: MN000631.0001 | | | |
| Email: James.Ziska@arcadis.com | WO #: Cadena # E200572 | | | |
| Project Name: Ford TCAP - E200572 | Project #: 24006638 | | | |
| Site: St Paul, MN | SSOW#: | | | |

**Analysis Requested**

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

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260B - Trip Blank- 8260B, 465 VOCs | 8260B, WI_GRO | 8082, 8270C SVOC, PCB | WI_DRO - WI DRO | 6010B, 6020A, 7470A TAL Metals, Mercury, Thallium | 9012B - Total Cyanide | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Preservation Code: | | | A | A | N | A | D | B | | |
| AMW-07-(20170919) | 9/19/17 | 0925 | G | Water | X | | X | X | X | X | X | X | | |
| AMW-19-(20170919) | 9/19/17 | 1605 | G | Water | X | | X | X | X | X | X | X | | |
| Dup-01-(20170919) | 9/19/17 | — | G | Water | X | | X | X | X | X | X | X | | |
| AMW-20-(20170920) | 9/20/17 | 0933 | G | Water | X | | X | X | X | X | X | X | | |
| Dup-02-(20170920) | 9/20/17 | — | G | Water | X | | X | X | X | X | X | X | | |
| AMW-21-(20170919) | 9/19/17 | 1045 | G | Water | X | | X | X | X | X | X | X | | |
| AMW-22-(20170919) | 9/19/17 | 1200 | G | Water | X | | X | X | X | X | X | X | | |
| AMW-22B-(20170919) | 9/19/17 | 1300 | G | Water | X | X | X | X | X | X | X | X | | MS/MSD |
| AMW-23-(20170920) | 9/20/17 | 1300 | G | Water | X | | X | X | X | X | X | X | | |
| AMW-23B-(20170920) | 9/20/17 | 1200 | G | water | X | | X | X | X | X | X | X | | |
| AMW-24-(20170920) | 9/20/17 | 1440 | G | water | X | | X | X | X | X | X | X | | |

240-85395 Chain of Custody

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| Adam Thompson/ADR | 09/21/17 1530 | Arcadis | Thomas J. Lee | 9-21-17 15:30 | T. AMERICA |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: 922-17 900 | Company TA |
| Relinquished by: | Date/Time: | Company | Received by: Barry Bruno | Date/Time: 9/23/17 0920 | Company TAC (Limo-26+ this) |

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

**TestAmerica Canton**
4101 Shuffel Street NW
North Canton, OH 44720
Phone (330) 497-9396 Fax (330) 497-0772

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: Adam Thompson | Lab PM: Pohl, Denise | Carrier Tracking No(s): | COC No: 240-45567-19862.1 |
|---|---|---|---|---|
| Client Contact: Jim Ziska | Phone: 218-260-7854 | E-Mail: denise.pohl@testamericainc.com | | Page: Page 1 of 2 |
| Company: ARCADIS U.S., Inc. | | | | Job #: |
| Address: 430 First Avenue, North Suite 720 | Due Date Requested: | | | |
| City: Minneapolis | TAT Requested (days): Standard / Two Weeks | | | |
| State, Zip: MN, 55304 | | | | |
| Phone: 612-339-9434 | PO #: MN000631.0001 | | | |
| Email: James.Ziska@arcadis.com | WO #: Cadena # E200572 | | | |
| Project Name: Ford TCAP - E200572 | Project #: 24006638 | | | |
| Site: St Paul, MN | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

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

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 8260B - Trip Blank- 8260B, 465 VOCs | 8260B, WI_GRO | 8082, 8270C SVOC + PCB | WI_DRO - WI DRO | 6010B, 6020A, 7470A TAL-Metals, Mercury, Rollup | 9012B - Total Cyanide | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | A | A | N | A | D | B | | |
| AMW-25-(20170920) | 9/20/17 | 1548 | G | Water | X | | X | X | X | X | X | X | | |
| AMW-26-(20170920) | 9/20/17 | 1715 | G | Water | X | | X | X | X | X | X | X | | |
| | | | | Water | | | | | | | | | | |
| TRIP BLANK | | | | Water | | | | | | | | | | |
| TEMP BLANK | | | | Water | | | | | | | | | | |
| | | | | Water | | | | | | | | | | |
| | | | | Water | | | | | | | | | | |
| | | | | Water | | | | | | | | | | |
| | | | | Water | | | | | | | | | | |
| | | | | Water | | | | | | | | | | |
| | | | | Water | | | | | | | | | | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| Relinquished by | Date/Time | Company | Received by | Date/Time | Company |
|---|---|---|---|---|---|
| Adam Thompson/ARCADIS | 9/21/17 1530 | ARCADIS | [signature] | 9-21-17 15:20 | TA AMERICA |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: 9-22-17 900 | Company TA |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact:


10/5/2017

**TestAmerica Canton Sample Receipt Form/Narrative** **Login # : 85595**
**Canton Facility**

Client Arcadis Site Name _____ Cooler unpacked by:

Cooler Received on 9-22-17 Opened on 9/22/17

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

**Receipt After-hours**: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☑ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #36 (CF +0.3°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN # 627 (CF -1.3°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

| | | |
|---|---|---|
| 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 13 | Yes | No |
| -Were the seals on the outside of the cooler(s) signed & dated? | Yes | No NA |
| -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? | Yes | No NA |
| -Were tamper/custody seals intact and uncompromised? | Yes | No NA |
| 3. Shippers' packing slip attached to the cooler(s)? | Yes | No |
| 4. Did custody papers accompany the sample(s)? | Yes | No |
| 5. Were the custody papers relinquished & signed in the appropriate place? | Yes | No |
| 6. Was/were the person(s) who collected the samples clearly identified on the COC? | Yes | No |
| 7. Did all bottles arrive in good condition (Unbroken)? | Yes | No |
| 8. Could all bottle labels be reconciled with the COC? | Yes | No |
| 9. Were correct bottle(s) used for the test(s) indicated? | Yes | No |
| 10. Sufficient quantity received to perform indicated analyses? | Yes | No |
| 11. Are these work share samples? | Yes | No |
| If yes, Questions 11-15 have been checked at the originating laboratory. | | |
| 11. Were all preserved sample(s) at the correct pH upon receipt? | Yes | No NA |
| 12. Were VOAs on the COC? | Yes | No |
| 13. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. | Yes | No NA |
| 14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ | Yes | No |
| 15. Was a LL Hg or Me Hg trip blank present? _____ | Yes | No |

**Tests that are not checked for pH by Receiving:**
**VOAs**
**Oil and Grease**
**TOC**

pH Strip Lot# **HC697954**

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

**16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES** Samples processed by:

Missing 3 coolers, Each cooler was sample specific
Missing sample AMW-19 @1605 and also 2/3 of the MS/MSD AMW-22B.
Missing sample AMW-26

**17. SAMPLE CONDITION**

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) 1xL (HCL-DRO) DUP02 + AMW-24 were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

**18. SAMPLE PRESERVATION**

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

**TestAmerica Multiple Cooler Receipt Form/Narrative**
**Canton Facility**

**Login # :** 85295

| Cooler # | IR Gun # | Observed Temp °C | Corrected Temp °C | Coolant |
|---|---|---|---|---|
| client | 8 | 2.4 | 2.4 | ice |
| | | 2.6 | 2.6 | |
| | | 1.6 | 1.6 | |
| | | 1.2 | 1.2 | |
| | | 1.0 | 1.0 | |
| | | 3.8 | 3.8 | |
| | | 2.0 | 2.0 | |
| | | 1.4 | 1.4 | |
| | | 1.4 | 1.4 | |
| | | 0.8 | 0.8 | |
| | | 3.6 | 3.6 | |
| | | 1.2 | 1.2 | |
| | | 1.8 | 1.8 | |

**TestAmerica Canton Sample Receipt Form/Narrative** **Login # :** _____

**Canton Facility**

Client Arcadis Site Name TCAP

Cooler unpacked by: Jerry Burns

Cooler Received on 9/23/17 Opened on 9/23/17

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

**Receipt After-hours**: Drop-off Date/Time Storage Location

TestAmerica Cooler # CANTON Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-8 (CF +0 °C) Observed Cooler Temp 2.4 °C Corrected Cooler Temp. 2.4 °C

IR GUN #36 (CF +0.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

IR GUN # 627 (CF -1.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

| | | |
|---|---|---|
| 2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity _____ | Yes | No |
| -Were the seals on the outside of the cooler(s) signed & dated? | Yes | No NA |
| -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? | Yes | No NA |
| -Were tamper/custody seals intact and uncompromised? | Yes | No NA |
| 3. Shippers' packing slip attached to the cooler(s)? | Yes | No |
| 4. Did custody papers accompany the sample(s)? | Yes | No |
| 5. Were the custody papers relinquished & signed in the appropriate place? | Yes | No |
| 6. Was/were the person(s) who collected the samples clearly identified on the COC? | Yes | No |
| 7. Did all bottles arrive in good condition (Unbroken)? | Yes | No |
| 8. Could all bottle labels be reconciled with the COC? | Yes | No |
| 9. Were correct bottle(s) used for the test(s) indicated? | Yes | No |
| 10. Sufficient quantity received to perform indicated analyses? | Yes | No |
| 11. Are these work share samples? | Yes | No |
| If yes, Questions 11-15 have been checked at the originating laboratory. | | |
| 11. Were all preserved sample(s) at the correct pH upon receipt? | Yes | No NA |
| 12. Were VOAs on the COC? | Yes | No |
| 13. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. | Yes | No NA |
| 14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # B712801UB | Yes | No |
| 15. Was a LL Hg or Me Hg trip blank present? ↳ # 021960018 | Yes | No |

copy of COC

**Tests that are not checked for pH by Receiving:**

**VOAs**
**Oil and Grease**
**TOC**

pH Strip Lot# **HC697954**

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

**16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES**

Samples processed by:

Rec'd AMW-26-(20170920) 9/20/17 @ 1715
+ 2x40 trip blanks missing from 9/22/17

**17. SAMPLE CONDITION**

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

**18. SAMPLE PRESERVATION**

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

# Login Container Summary Report



Temperature readings: _____

| Client Sample ID | Lab ID | Container Type | Container pH | Preservative Added (mls) | Lot # |
|---|---|---|---|---|---|
| AMW-07-(20170919) | 240-85395-G-1 | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-07-(20170919) | 240-85395-H-1 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-07-(20170919) | 240-85395-M-1 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-07-(20170919) | 240-85395-N-1 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-19-(20170919) | 240-85395-G-3 | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-19-(20170919) | 240-85395-H-3 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-19-(20170919) | 240-85395-M-3 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-19-(20170919) | 240-85395-N-3 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| DUP-01-(20170919) | 240-85395-G-5 | Plastic 250ml - with Sodium Hydro | <12 | | |
| DUP-01-(20170919) | 240-85395-H-5 | Plastic 500ml - with Nitric Acid | >2 | | |
| DUP-01-(20170919) | 240-85395-M-5 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| DUP-01-(20170919) | 240-85395-N-5 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-20-(20170920) | 240-85395-G-7 | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-20-(20170920) | 240-85395-H-7 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-20-(20170920) | 240-85395-M-7 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-20-(20170920) | 240-85395-N-7 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| DUP-02-(20170920) | 240-85395-G-9 | Plastic 250ml - with Sodium Hydro | <12 | | |
| DUP-02-(20170920) | 240-85395-H-9 | Plastic 500ml - with Nitric Acid | >2 | | |
| DUP-02-(20170920) | 240-85395-M-9 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| DUP-02-(20170920) | 240-85395-N-9 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-21-(20170919) | 240-85395-G-11 | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-21-(20170919) | 240-85395-H-11 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-21-(20170919) | 240-85395-M-11 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-21-(20170919) | 240-85395-N-11 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-22-(20170919) | 240-85395-G-13 | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-22-(20170919) | 240-85395-H-13 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-22-(20170919) | 240-85395-M-13 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-22-(20170919) | 240-85395-N-13 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-22B-(20170919) | 240-85395-G-15 | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-22B-(20170919) | 240-85395-G-15 MS | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-22B-(20170919) | 240-85395-G-15 MSD | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-22B-(20170919) | 240-85395-H-15 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-22B-(20170919) | 240-85395-H-15 MS | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-22B-(20170919) | 240-85395-H-15 MSD | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-22B-(20170919) | 240-85395-M-15 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-22B-(20170919) | 240-85395-M-15 MS | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-22B-(20170919) | 240-85395-M-15 MSI | Amber Glass 1 liter - Hydrochloric | <2 | | |

| Client Sample ID | Lab ID | Container Type | Container pH | Preservative Added (mls) | Lot # |
|---|---|---|---|---|---|
| AMW-22B-(20170919) | 240-85395-N-15 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-22B-(20170919) | 240-85395-N-15 MS | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-22B-(20170919) | 240-85395-N-15 MSD | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-23-(20170920) | 240-85395-G-17 | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-23-(20170920) | 240-85395-H-17 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-23-(20170920) | 240-85395-M-17 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-23-(20170920) | 240-85395-N-17 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-23B-(20170920) | 240-85395-G-19 | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-23B-(20170920) | 240-85395-H-19 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-23B-(20170920) | 240-85395-M-19 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-23B-(20170920) | 240-85395-N-19 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-24-(20170920) | 240-85395-G-21 | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-24-(20170920) | 240-85395-H-21 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-24-(20170920) | 240-85395-M-21 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-24-(20170920) | 240-85395-N-21 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-25-(20170920) | 240-85395-G-23 | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-25-(20170920) | 240-85395-H-23 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-25-(20170920) | 240-85395-M-23 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-25-(20170920) | 240-85395-N-23 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-26-(20170920) | 240-85395-G-25 | Plastic 250ml - with Sodium Hydro | <12 | | |
| AMW-26-(20170920) | 240-85395-H-25 | Plastic 500ml - with Nitric Acid | >2 | | |
| AMW-26-(20170920) | 240-85395-M-25 | Amber Glass 1 liter - Hydrochloric | <2 | | |
| AMW-26-(20170920) | 240-85395-N-25 | Amber Glass 1 liter - Hydrochloric | <2 | | |

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

240-85395 Chain of Custody

# COOLER RECEIPT FORM

Cooler Received/Opened On_09-26-2017 10:10

Time Samples Removed From Cooler_____ Time Samples Placed In Storage_____ (2 Hour Window)

1. Tracking #_7420848317 31_ (last 4 digits, FedEx) Courier: FedEx Standard Overnight

IR Gun ID_31470366_____ pH Strip Lot_____ Chlorine Strip Lot_____

2. Temperature of rep. sample or temp blank when opened: 0.3 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where:_____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

*I certify that I opened the cooler and answered questions 1-6 (intial)* KD

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

Larger than this.

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

*I certify that I unloaded the cooler and answered questions 7-14 (intial)* es

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

*I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)* es

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

*I certify that I entered this project into LIMS and answered questions 17-20 (intial)* es

*I certify that I attached a label with the unique LIMS number to each container (intial)* es

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...# es

BIS = Broken in shipment

**TestAmerica Canton**
4101 Shuffel Street NW
North Canton, OH 44720
Phone (330) 497-9396 Fax (330) 497-0772

# Chain of Custody Record

# 240-85395

TestAmerica
DER IN ENVIRONMENTAL TESTING

34.1

| | | | |
|---|---|---|---|
| **Client Information (Sub Contract Lab)** | Sampler: | Lab PM: Pohl, Denise | Page: Page 1 of 2 |
| Client Contact: Shipping/Receiving | Phone: | E-Mail: denise.pohl@testamericainc.com | State of Origin: Minnesota |
| Company: TestAmerica Laboratories, Inc | | Accreditations Required (See note): | Job #: 240-85395-1 |
| Address: 2960 Foster Creighton Drive, , | Due Date Requested: 10/4/2017 | | |
| City: Nashville | TAT Requested (days): | | |
| State, Zip: TN, 37204 | | | |
| Phone: 615-726-0177(Tel) 615-726-3404(Fax) | PO #: | | |
| Email: | WO #: | | |
| Project Name: Ford TCAP - E200572 | Project #: 24006638 | | |
| Site: | SSOW#: | | |

**Analysis Requested**

**Preservation Codes:**

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

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 9012B/9012B_Prep Total Cyanide | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | |
| AMW-07-(20170919) (240-85395-1) | 9/19/17 | 09:25 Central | | Water | | | X | 1 | |
| DUP-01-(20170919) (240-85395-5) | 9/19/17 | Central | | Water | | | X | 1 | |
| AMW-20-(20170920) (240-85395-7) | 9/20/17 | 09:33 Central | | Water | | | X | 1 | |
| DUP-02-(20170920) (240-85395-9) | 9/20/17 | Central | | Water | | | X | 1 | |
| AMW-21-(20170919) (240-85395-11) | 9/19/17 | 10:45 Central | | Water | | | X | 1 | |
| AMW-22-(20170919) (240-85395-13) | 9/19/17 | 12:00 Central | | Water | | | X | 1 | |
| AMW-22B-(20170919) (240-85395-15) | 9/19/17 | 13:00 Central | | Water | | | X | 1 | |
| AMW-23-(20170920) (240-85395-17) | 9/20/17 | 13:00 Central | | Water | | | X | 1 | |
| AMW-23B-(20170920) (240-85395-19) | 9/20/17 | 12:00 Central | | Water | | | X | 1 | |

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

| | |
|---|---|
| ***Possible Hazard Identification*** *Unconfirmed* | ***Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months* |
| Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 | Special Instructions/QC Requirements: |

| | | | | | |
|---|---|---|---|---|---|
| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: | | |
| Relinquished by: | Date/Time: 9-25-17 1300 | Company 240 | Received by: | Date/Time: 9-26-17 10:10 | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: 0.3 | Company |

Page 1 of 2
10/5/2017

**TestAmerica Canton**
4101 Shuffel Street NW
North Canton, OH 44720
Phone (330) 497-9396 Fax (330) 497-0772

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information (Sub Contract Lab) | Sampler: | Lab PM: Pohl, Denise | Carrier Tracking No(s): | COC No: 240-77234.2 |
|---|---|---|---|---|
| Client Contact: Shipping/Receiving | Phone: | E-Mail: denise.pohl@testamericainc.com | State of Origin: Minnesota | Page: Page 2 of 2 |
| Company: TestAmerica Laboratories, Inc | | Accreditations Required (See note): | | Job #: 240-85395-1 |
| Address: 2960 Foster Creighton Drive, , | Due Date Requested: 10/4/2017 | | | |
| City: Nashville | TAT Requested (days): | | | |
| State, Zip: TN, 37204 | | | | |
| Phone: 615-726-0177(Tel) 615-726-3404(Fax) | PO #: | | | |
| Email: | WO #: | | | |
| Project Name: Ford TCAP - E200572 | Project #: 24006638 | | | |
| Site: | SSOW#: | | | |

**Analysis Requested**

Loc: 240
85395

**Preservation Codes:**

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

Other:

| Sample Identification - Client ID (Lab ID) | Sample Date | Sample Time | Sample Type (C=Comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | 9012B/9012B_Prep Total Cyanide | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | |
| AMW-24-(20170920) (240-85395-21) | 9/20/17 | 14:40 Central | | Water | | | X | 1 | |
| AMW-25-(20170920) (240-85395-23) | 9/20/17 | 15:48 Central | | Water | | | X | 1 | |
| AMW-26-(20170920) (240-85395-25) | 9/20/17 | 17:15 Central | | Water | | | X | 1 | |

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody.

| *Possible Hazard Identification* | *Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)* |
|---|---|
| *Unconfirmed* | ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months* |
| Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 | Special Instructions/QC Requirements: |

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
|---|---|---|---|

| | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|---|
| 1 | [signature] | 4-25-17 1300 | 240 | [signature] | 9-26-17 1020 | |
| 2 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| 3 | Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 0.1 |
|---|---|---|



10/5/2017

# Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 240-85395-1

**Login Number: 85395**
**List Number: 2**
**Creator: Stewart, Eric S**

**List Source: TestAmerica Nashville**
**List Creation: 09/26/17 03:43 PM**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |