



The Chemours Company  
P.O. Box 788  
Lewiston, NY 14092  
chemours.com

(716) 221-4723t

February 28, 2018

Ms. Gloria Sosa  
Western New York Remediation Section  
New York Remediation Branch  
Emergency and Remediation Response Division  
U.S. EPA – Region II  
290 Broadway, 20<sup>th</sup> Floor  
New York, NY 10007-1866

Dear Ms. Sosa:

**NECCO PARK FOURTH QUARTER 2017 DATA PACKAGE**

Enclosed are two copies of the *Fourth 2017 (4Q17) Data Package* for The Chemours Necco Park Hydraulic Control System (HCS) in accordance with the approved Long Term Groundwater Monitoring Plan. The data package includes an operational summary, process sample analytical data, figures showing hydrographs, potentiometric surface contours map, and vertical gradient maps. The data package also includes a 4Q17 monitoring summary for dense non-aqueous phase liquid (DNAPL).

Pumping system uptime for 4Q17 was 72.7 percent. The total volume of groundwater treated during 4Q17 was 2,937,773 gallons. DNAPL was monitored monthly and no DNAPL was observed during the quarter.

Please contact me at (716) 221-4723 if you have any questions or comments regarding this submittal.

Sincerely,

CORPORATE REMEDIATION GROUP

A handwritten signature in black ink, appearing to read "Paul F. Mazierski", is written over a light blue horizontal line.

Paul F. Mazierski  
Project Director

Enc. 4Q2017 Data Package

cc: M. McIntosh/NYSDEC  
E. Felter/Parsons



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**SOURCE AREA HYDRAULIC CONTROL SYSTEM  
FOURTH QUARTER 2017  
GROUNDWATER MONITORING DATA PACKAGE  
CHEMOURS NECCO PARK  
NIAGARA FALLS, NIAGARA COUNTY, NEW YORK**

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EPA ID No. NYD980532162

*Prepared For:*

**THE CHEMOURS COMPANY FC LLC  
CORPORATE REMEDIATION GROUP**

Buffalo Avenue and 26th Street  
Niagara Falls, New York 14302

*Prepared By:*

**PARSONS**

40 La Riviere Drive, Suite 350  
Buffalo, New York 14202  
Phone: (716) 541-0730

**February 2018**

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## SECTION 1

### DATA PACKAGE SUMMARY

#### 1.1 INTRODUCTION

This data package presents a summary of operating and monitoring data collected during the fourth quarter of 2017 (4Q17) for groundwater remediation measures at the Chemours NECCO Park Site (Necco Park) in Niagara Falls, New York. Submission of this data package meets the reporting requirements defined in the agency-approved Long-Term Groundwater Monitoring Plan LTGMP (DuPont Corporate Remediation Group 2005) as well as agency-approved scope revisions (USEPA, 2010, 2012, 2015, and 2016).

This is the 50<sup>th</sup> data package submitted since the 2005 startup of the Necco Park Hydraulic Control System (HCS). It provides a summary of operations for the pumping wells and the Groundwater Treatment Facility (GWTF). Figures 1 through 13 are hydrographs depicting groundwater elevation since startup of the HCS, contours for six groundwater flow zones, and a map of vertical gradients between the A-Zone and the B-Zone. Groundwater elevation data are provided as a hard copy in Appendix A and as an electronic copy in Attachment 1.

#### 1.2 OPERATIONAL SUMMARY

The following table provides a summary of average HCS uptime, total gallons of groundwater treated, and gallons of dense non-aqueous phase liquid (DNAPL) removed for 4Q17:

|                   | HCS Uptime<br>(%) | Groundwater Treated<br>(gallons) | DNAPL Removed<br>(gallons) |
|-------------------|-------------------|----------------------------------|----------------------------|
| October           | 58.6%             | 923,221                          | 0                          |
| November          | 64.9%             | 817,332                          | 0                          |
| December          | 94.5%             | 1,197,220                        | 0                          |
| <b>4Q17 Total</b> | <b>72.7%</b>      | <b>2,937,773</b>                 | <b>0</b>                   |

System downtime is categorized into two groups: HCS downtime and individual recovery well downtime. Both categories are further grouped into two types: unscheduled and scheduled downtime.

There were 2 scheduled HCS maintenance shutdown events in the quarter: RW 4, 5, and 11 were down 48 hours on October 18-19 for ABC conveyance line cleaning. All recovery wells were down an average of 320 hours from October 23 to November 8 for annual GWTF influent and effluent process tank cleaning, inspections, and subsequent minor repairs that were required due to the inspection observations.

There were 2 unscheduled individual well shutdowns during the quarter: RW-4 was down 72 hours on October 7-11, and again on October 20-23 as a result of power and pump frequency drive failures. Table 1 provides a summary of well downtime for the quarter. Table 2 provides a historical operations summary by quarter since HCS operations began.

Semiannual DNAPL monitoring was completed October 6 and monthly DNAPL monitoring was completed November 30 and December 29 during 4Q17. No DNAPL was observed in any of the wells during the monitoring for this quarter, as such, no DNAPL was removed during the quarter.

### **1.3 GWTF PROCESS SAMPLING**

GWTF influent samples (from B/C-Zone and D/E/F-Zone) and a combined effluent sample were collected in 4Q17 in accordance with the SAMP and the approved reduction to VOCs only (USEPA, January 2012). Samples were collected by TestAmerica Laboratories of Amherst, New York on November 15, 2017 and shipped to the TestAmerica Laboratories in North Canton, Ohio for analysis. Sample results for the process sampling are included in Appendix B.

### **1.4 POTW COMPLIANCE**

As required by the publicly-owned treatment works (POTW) Significant Industrial User (SIU) Permit #76 for Necco Park, the GWTF discharge is sampled and reported quarterly to the Niagara Falls Water Board (NFWB). The most recent Necco Park 4Q17 sewer discharge samples were collected on September 29, 2017 (following NFWB quarterly calendar). There were no permit limit exceedances in 4Q17. The results indicate that the GWTF continued operating within normal parameters during 4Q17.

## SECTION 2

### REFERENCES

DuPont Corporate Remediation Group, 2005. DuPont Necco Park Operations and Maintenance Plan. November 11, 2005.

DuPont Corporate Remediation Group, 2011. Letter regarding revisions to DuPont NECCO Park Groundwater Monitoring Program, December 8, 2011.

USEPA, 2010. Letter approving changes to the monitoring program, July 16, 2010

USEPA, 2012. Letter approving changes to the monitoring program, January 27, 2012

USEPA, 2015. Letter approving changes to DNAPL monitoring program, June 11, 2015

USEPA, 2016. Letter approving changes to the monitoring program, October 19, 2016

## TABLES

**Table 1**  
**Individual Well Shutdown Summary for 4Q17**  
**Chemours Necco Park**

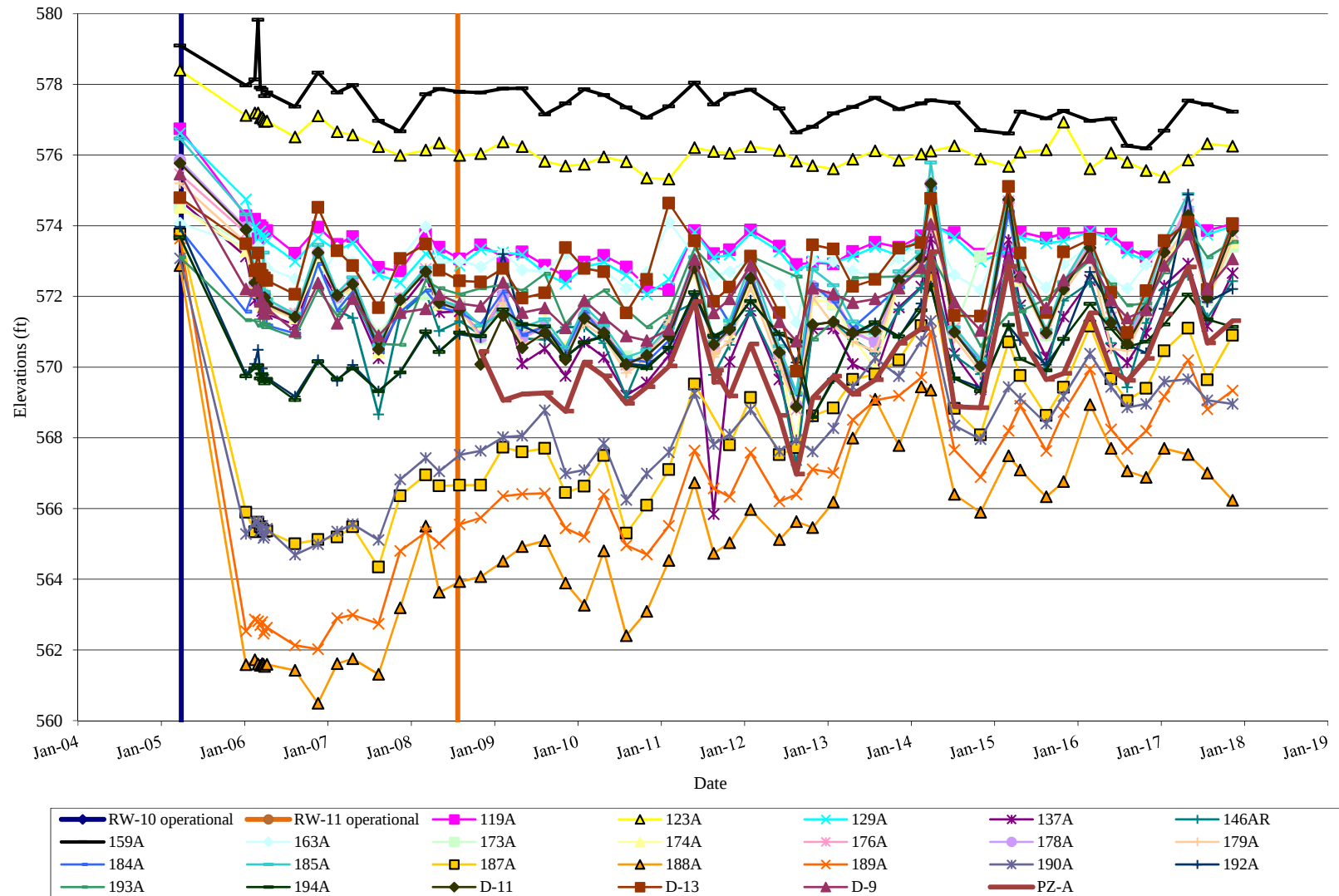
|          | Well ID               | Date(s)                       | Length of Shutdown<br>(hours) | Reason for Shutdown                                                                            | Remarks                                                        |
|----------|-----------------------|-------------------------------|-------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| October  | RW-4                  | October 7 through October 11  | 72                            | Power failure and pump frequency drive failure.                                                |                                                                |
|          | RW-4, 5, and 11       | October 18 through October 19 | 48                            | Conveyance line (ABC) cleaning.                                                                |                                                                |
|          | RW-4                  | October 20 through October 31 | 264                           | Frequency drive failure, influent and effluent process tank cleaning, repairs, and inspection. |                                                                |
|          | RW-5                  | October 23 through October 31 | 192                           | Influent and Effluent Process Tank cleaning, repairs, and inspection.                          |                                                                |
|          | RW-11                 | October 25 through 31         | 144                           | Influent and Effluent Process Tank cleaning, repairs, and inspection.                          |                                                                |
|          | RW-8 and 9            | October 25 through 31         | 120                           | Influent and Effluent Process Tank cleaning, repairs, and inspection.                          |                                                                |
| November | RW-4, 5, 8, 9, and 11 | November 1 through November 8 | 168                           | Influent and Effluent Process Tank cleaning and inspection.                                    |                                                                |
| December |                       |                               |                               |                                                                                                | No wells were down for greater than 48 hours in December 2017. |

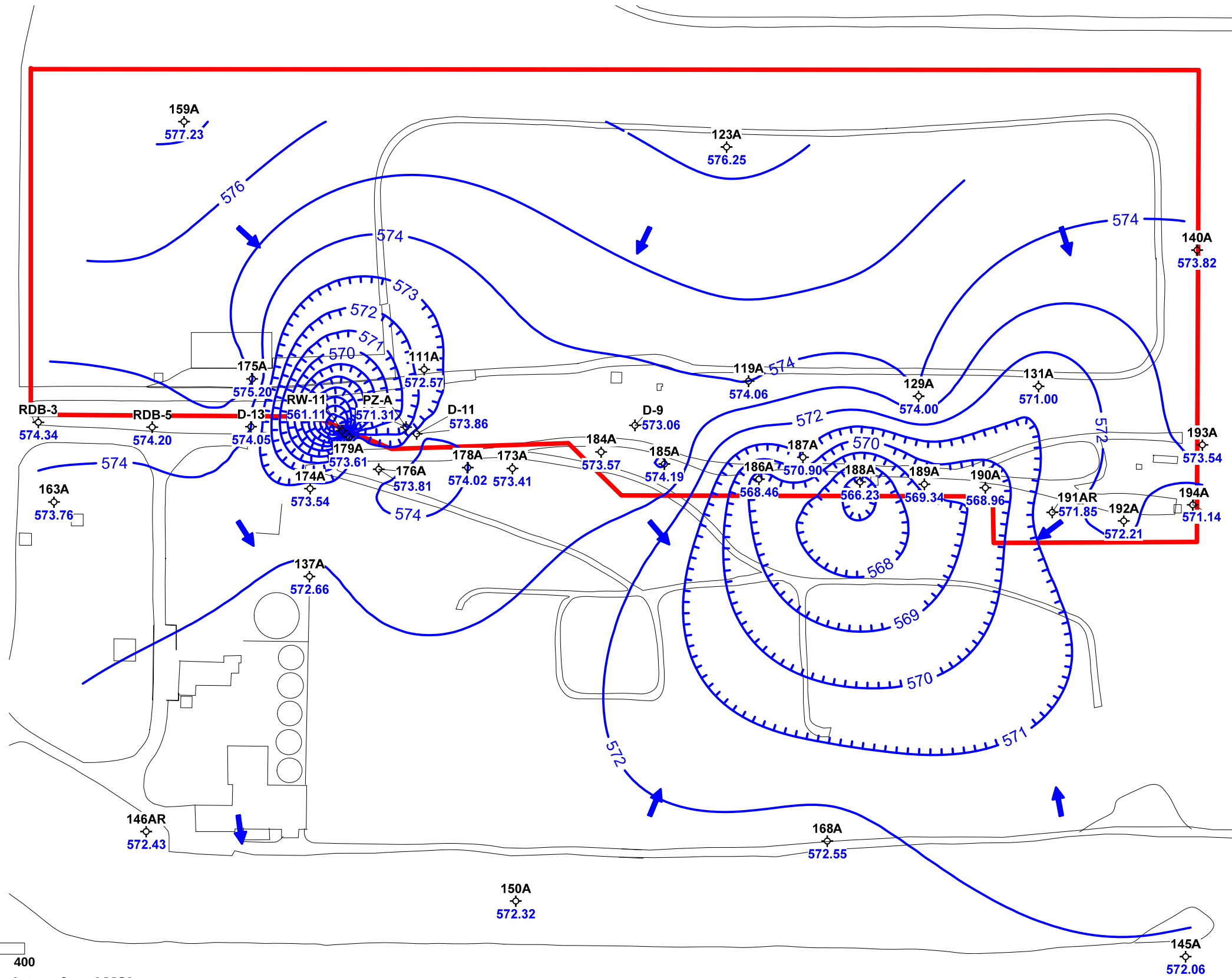
**Table 2**  
**Historical HCS Operational Summary - 4Q17**  
**Chemours Necco Park**

| <b>Reporting Period</b> | <b>HCS Uptime (%)</b> | <b>HCS Uptime Excluding Scheduled Maintenance Downtime (%)</b> | <b>Groundwater Treated (Gallons)</b> | <b>DNAPL Removed (Gallons)</b> |
|-------------------------|-----------------------|----------------------------------------------------------------|--------------------------------------|--------------------------------|
| 2Q05                    | 97.3                  | 97.6                                                           | 3,349,590                            | 73.5                           |
| 3Q05                    | 89.3                  | 91.4                                                           | 3,117,280                            | 30                             |
| 4Q05                    | 93.6                  | 96.5                                                           | 3,225,819                            | 0                              |
| 1Q06                    | 99.4                  | 99.4                                                           | 2,889,134                            | 24                             |
| 2Q06                    | 97.5                  | 98.1                                                           | 3,486,835                            | 74                             |
| 3Q06                    | 88.7                  | 90.9                                                           | 3,181,365                            | 28                             |
| 4Q06                    | 91.0                  | 93.8                                                           | 2,787,745                            | 25                             |
| 1Q07                    | 91.2                  | 91.2                                                           | 2,638,005                            | 15                             |
| 2Q07                    | 93.8                  | 94.2                                                           | 2,882,064                            | 52                             |
| 3Q07                    | 92.0                  | 92.5                                                           | 3,497,149                            | 51                             |
| 4Q07                    | 91.2                  | 92.0                                                           | 2,697,915                            | 35                             |
| 1Q08                    | 92.6                  | 93.5                                                           | 2,761,674                            | 65                             |
| 2Q08                    | 95.9                  | 95.9                                                           | 2,902,261                            | 279                            |
| 3Q08                    | 77.2                  | 80.0                                                           | 3,112,202                            | 124                            |
| 4Q08                    | 70.3                  | 72.2                                                           | 3,468,710                            | 44                             |
| 1Q09                    | 88.7                  | 89.6                                                           | 4,442,026                            | 0                              |
| 2Q09                    | 95.0                  | 95.0                                                           | 4,117,084                            | 0                              |
| 3Q09                    | 95.3                  | 95.3                                                           | 4,069,280                            | 0                              |
| 4Q09                    | 95.8                  | 95.8                                                           | 3,663,740                            | 0                              |
| 1Q10                    | 98.3                  | 98.3                                                           | 3,921,478                            | 90                             |
| 2Q10                    | 77.0                  | 100.0                                                          | 3,259,485                            | 0                              |
| 3Q10                    | 100.0                 | 100.0                                                          | 3,398,078                            | 0                              |
| 4Q10                    | 93.8                  | 99.1                                                           | 3,195,727                            | 0                              |
| 1Q11                    | 94.6                  | 97.6                                                           | 3,679,957                            | 70                             |
| 2Q11                    | 89.6                  | 89.6                                                           | 3,370,066                            | 48                             |
| 3Q11                    | 91.7                  | 96.2                                                           | 2,947,721                            | 0                              |
| 4Q11                    | 86.5                  | 91.4                                                           | 3,167,844                            | 12                             |
| 1Q12                    | 93.6                  | 93.6                                                           | 3,138,892                            | 0                              |
| 2Q12                    | 94.3                  | 94.3                                                           | 3,926,572                            | 72                             |
| 3Q12                    | 89.1                  | 89.8                                                           | 3,913,978                            | 0                              |
| 4Q12                    | 94.6                  | 94.6                                                           | 4,248,337                            | 0                              |
| 1Q13                    | 93.4                  | 93.4                                                           | 4,200,081                            | 40                             |
| 2Q13                    | 88.6                  | 88.6                                                           | 4,115,050                            | 57                             |
| 3Q13                    | 90.3                  | 90.3                                                           | 3,758,479                            | 25                             |
| 4Q13                    | 91.2                  | 91.2                                                           | 3,559,683                            | 0                              |
| 1Q14                    | 96.0                  | 96.0                                                           | 3,683,342                            | 0                              |
| 2Q14                    | 95.3                  | 95.3                                                           | 3,789,669                            | 0                              |
| 3Q14                    | 89.3                  | 89.3                                                           | 3,660,343                            | 0                              |
| 4Q14                    | 96.8                  | 96.8                                                           | 3,291,496                            | 0                              |
| 1Q15                    | 92.0                  | 92.0                                                           | 3,297,700                            | 28                             |
| 2Q15                    | 77.7                  | 98.9                                                           | 3,262,714                            | 0                              |
| 3Q15                    | 56.4                  | 97.8                                                           | 1,993,440                            | 0                              |
| 4Q15                    | 90.1                  | 95.6                                                           | 3,453,781                            | 40                             |
| 1Q16                    | 97.5                  | 97.5                                                           | 3,440,875                            | 0                              |
| 2Q16                    | 74.4                  | 97.1                                                           | 3,723,706                            | 0                              |
| 3Q16                    | 71.2                  | 90.4                                                           | 2,471,085                            | 0                              |
| 4Q16                    | 90.5                  | 100.0                                                          | 3,086,585                            | 0                              |
| 1Q17                    | 95.2                  | 95.2                                                           | 3,234,923                            | 0                              |
| 2Q17                    | 87.0                  | 88.5                                                           | 4,022,608                            | 0                              |
| 3Q17                    | 86.0                  | 86.0                                                           | 3,632,509                            | 0                              |
| 4Q17                    | 72.7                  | 96.7                                                           | 2,937,773                            | 0                              |
| <b>TOTALS</b>           | <b>---</b>            | <b>---</b>                                                     | <b>173,073,855</b>                   | <b>1,402</b>                   |
| <b>AVERAGE</b>          | <b>89.6</b>           | <b>93.6</b>                                                    | <b>---</b>                           | <b>---</b>                     |

## FIGURES

**Figure 1**  
**Select A-Zone Monitoring Wells**  
**Groundwater Elevations 2005 Through 4th Quarter 2017**  
**Chemours Necco Park**





Scale: Feet



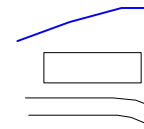
Contour Interval = 1 foot Elevation datum feet AMSL

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|                          |                |
|--------------------------|----------------|
| Created by: RBP          | Date: 12-14-17 |
| Checked by: JWS          | Date: 12-20-17 |
| Project Manager: EAF     | Date: 12-20-17 |
| Job number: 450326.02020 |                |

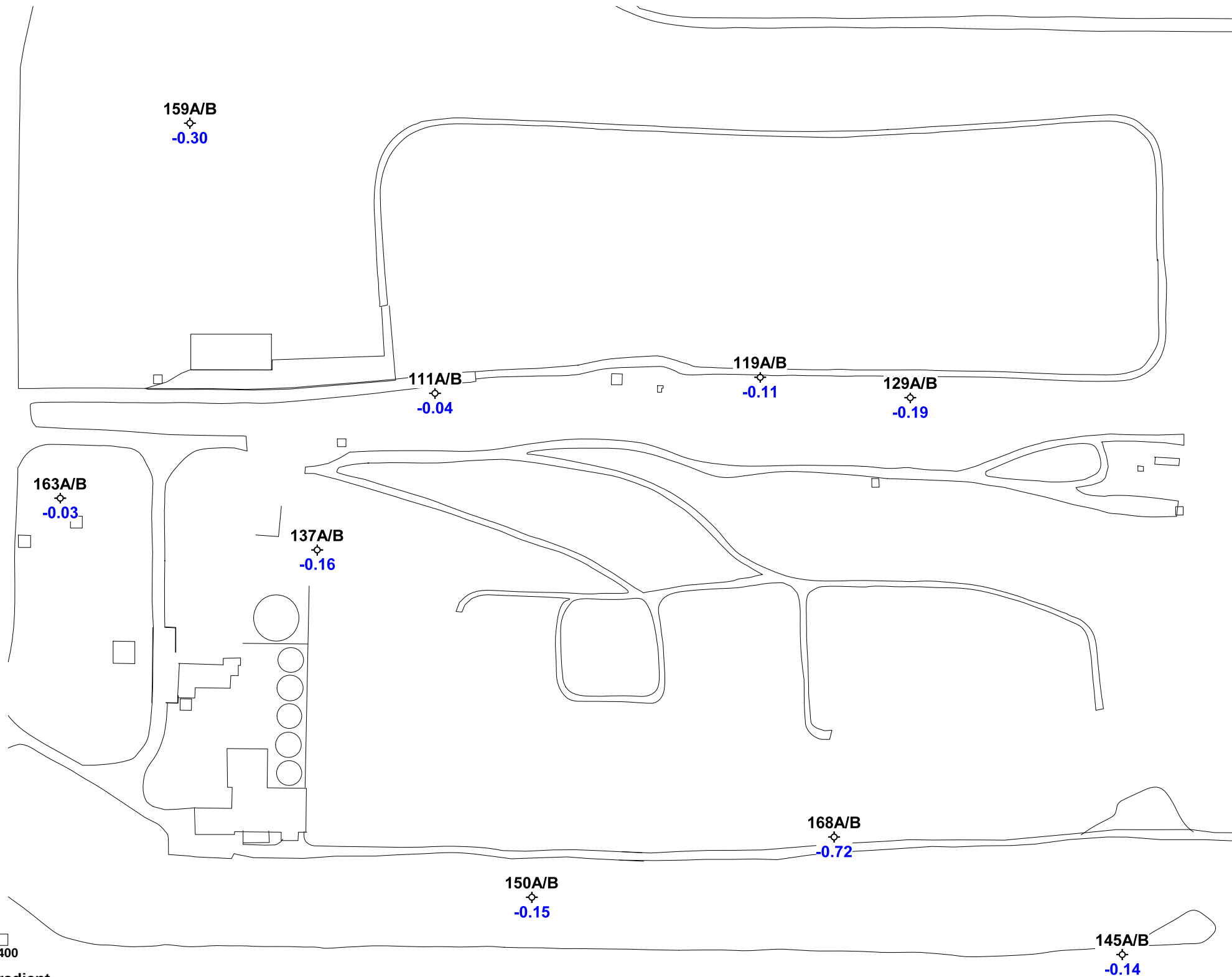
- 3B Well ID
- Monitoring Well
  - Pumping Well



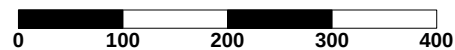
**LEGEND**

- Potentiometric Contour
- Structure
- Road
- Source Area Extent

**Figure 2**  
**Potentiometric Surface Map**  
**Chemours Necco Park: A-Zone**  
**November 22, 2017**



Scale: Feet



Negative value indicates downward gradient

Elevation datum feet AMSL

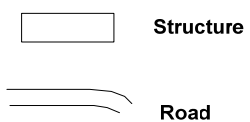
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| Project Manager: EAF     | Date: 12-20-17 |
| Job number: 450326.02020 |                |

#### LEGEND

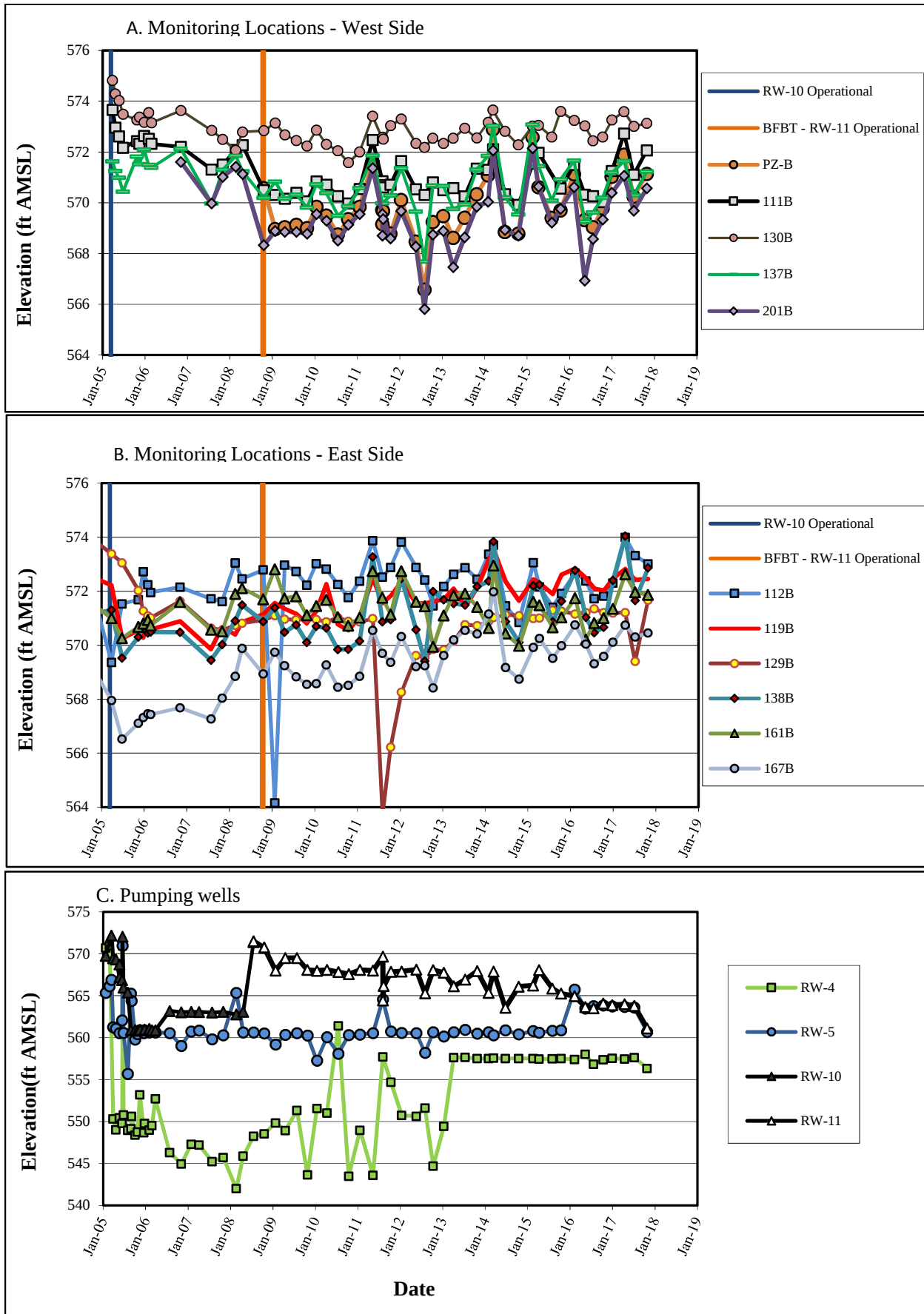
- 150A/B Well ID
- ◇ Monitoring Well
- ◆ Pumping Well

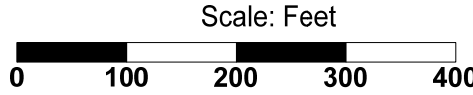
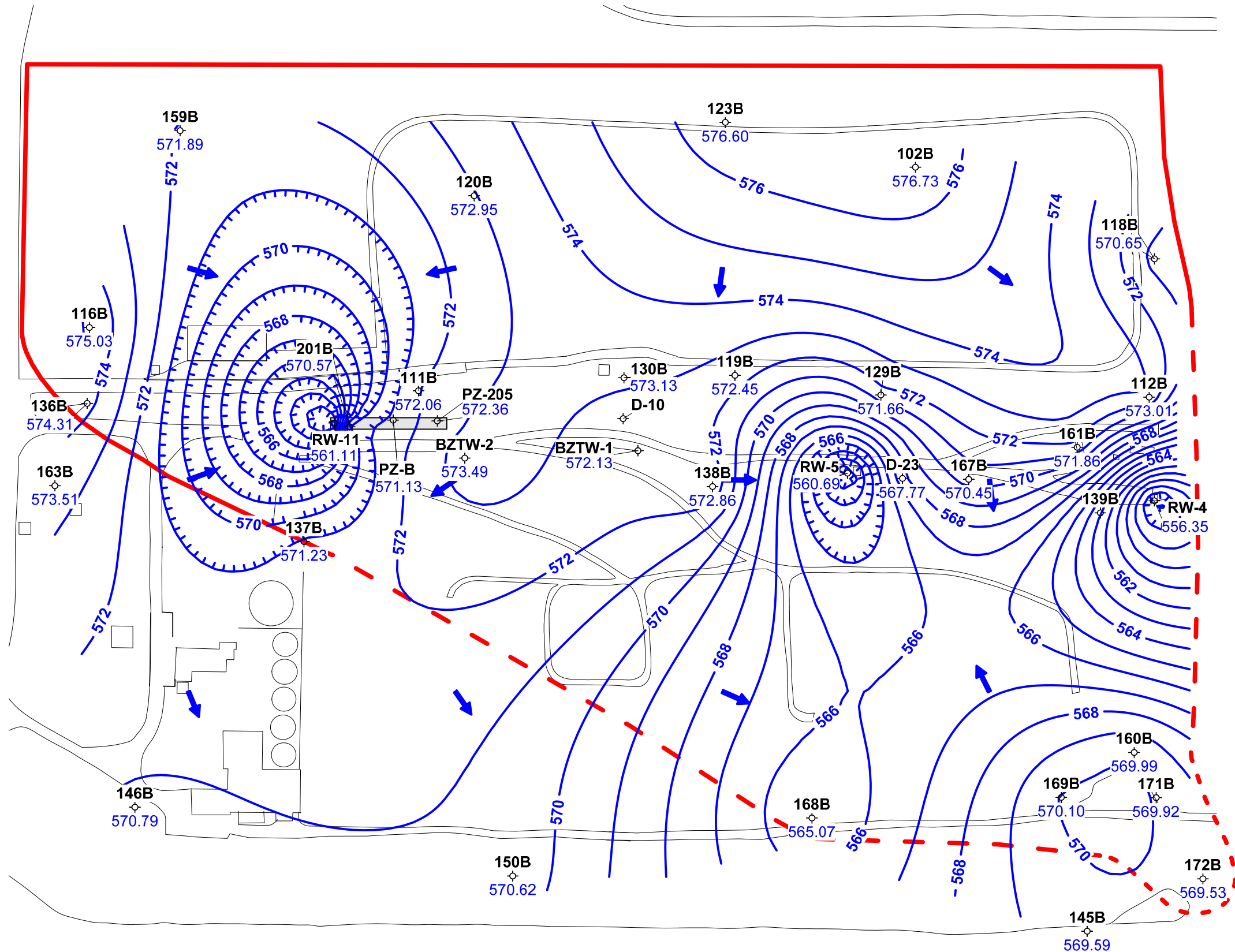


-0.10 Vertical Hydraulic Gradient

**Figure 3**  
**Vertical Gradient: A-Zone to B-Zone**  
**Chemours Necco Park**  
**November 22, 2017**

**Figure 4**  
**Select B-Zone Monitoring Wells**  
**Groundwater Elevations 2005 through 4th Quarter 2017**  
**Chemours Necco Park**





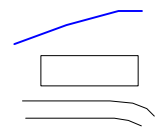
Contour interval = 1.0 foot  
Elevation datum feet AMSL  
Wells 149B and 151B are outside the area shown, but were used in the contouring.  
Wells 170B, D-10, 139B, TRW-6, and TRW-7 were not used in the contouring.

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| Project Manager: EAF     | Date: 12-20-17 |
| Job number: 450326.02020 |                |

- 3B Well ID
- Monitoring Well
- Pumping Well



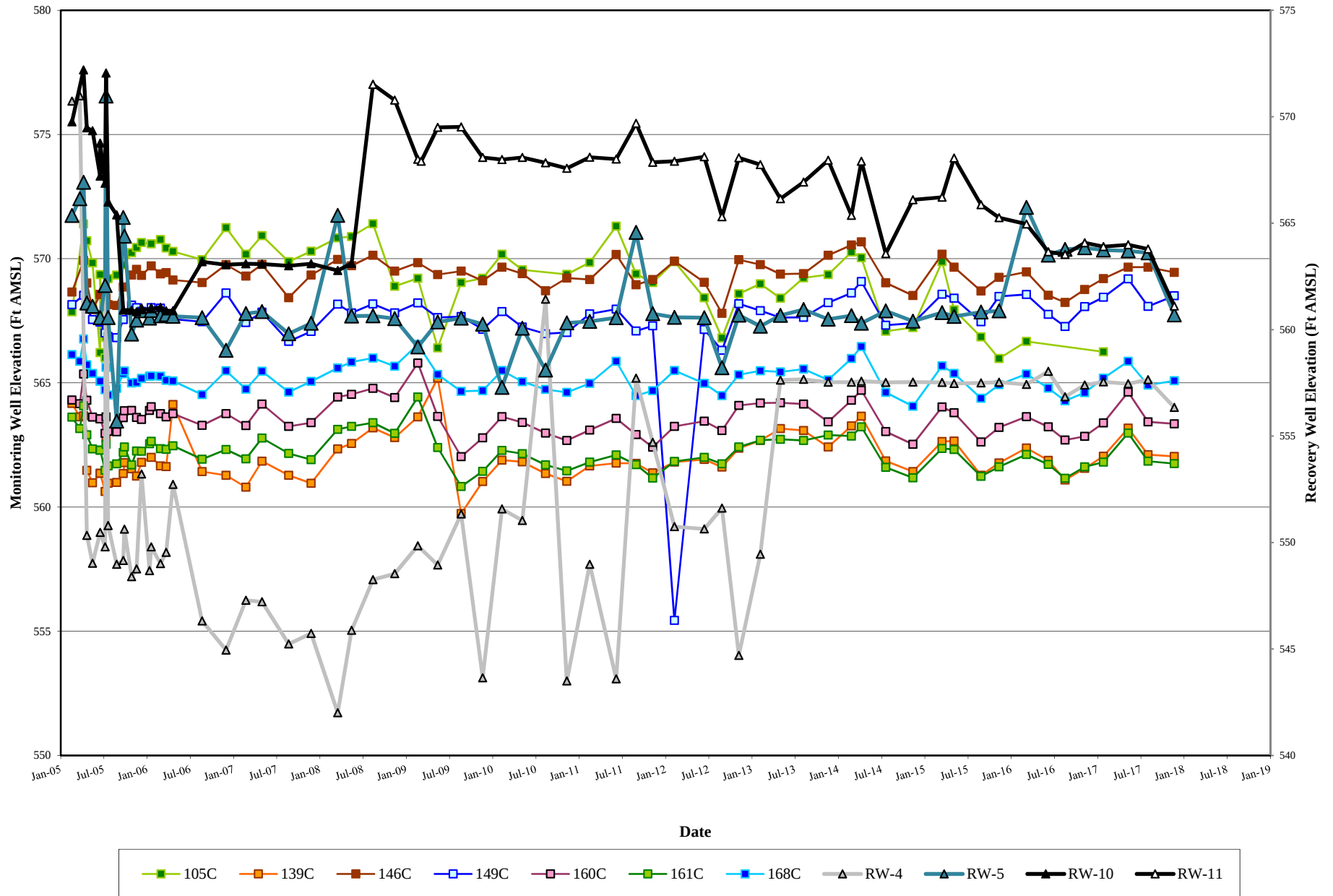
**LEGEND**

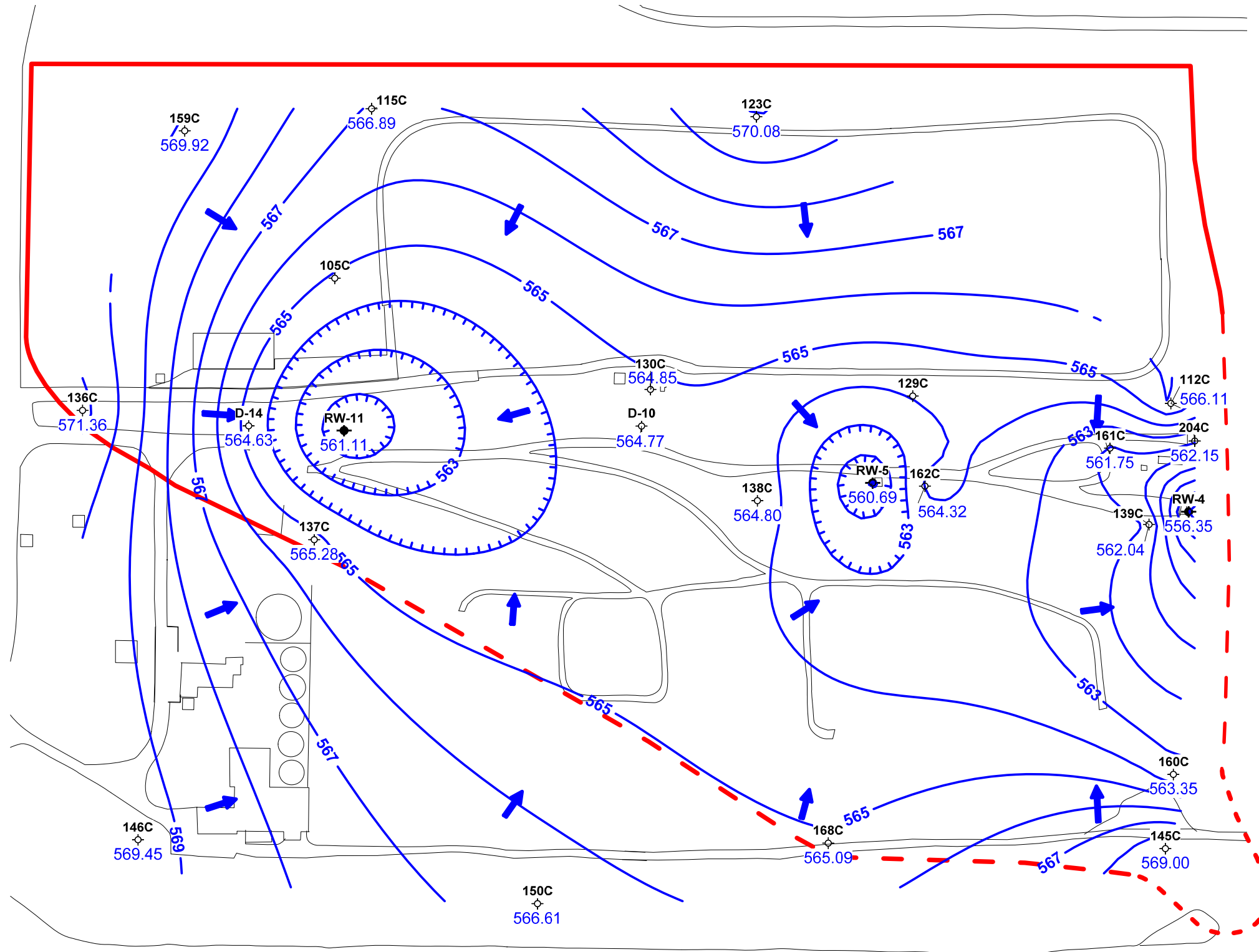
- Potentiometric Contour
- Structure
- Road

- Source Area Extent
- Approximate Location of Bedrock Fractured Blast Trench

**Figure 5**  
**Potentiometric Surface Map**  
**Chemours Necco Park: B-Zone**  
**November 22, 2017**

**Figure 6**  
**Select C-Zone Monitoring Wells**  
**Groundwater Elevations 2005 Through 4th Quarter 2017**  
**Chemours Necco Park**





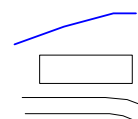
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| Checked by: JWS          | Date: 12-20-17 |
| Project Manager: EAF     | Date: 12-20-17 |
| Job number: 450326.02020 |                |

#### LEGEND

- 3B Well ID
- Monitoring Well
- Pumping Well

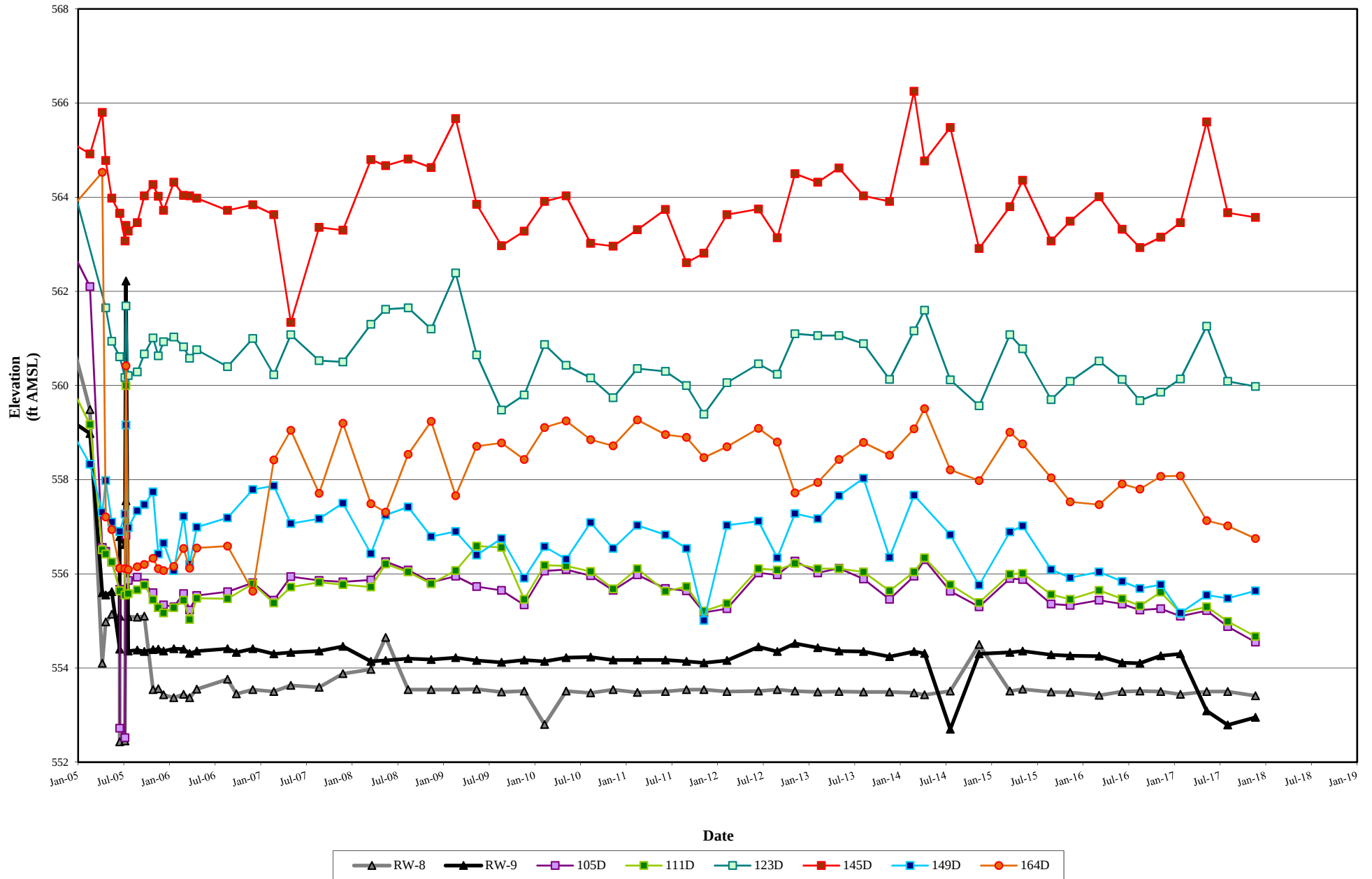


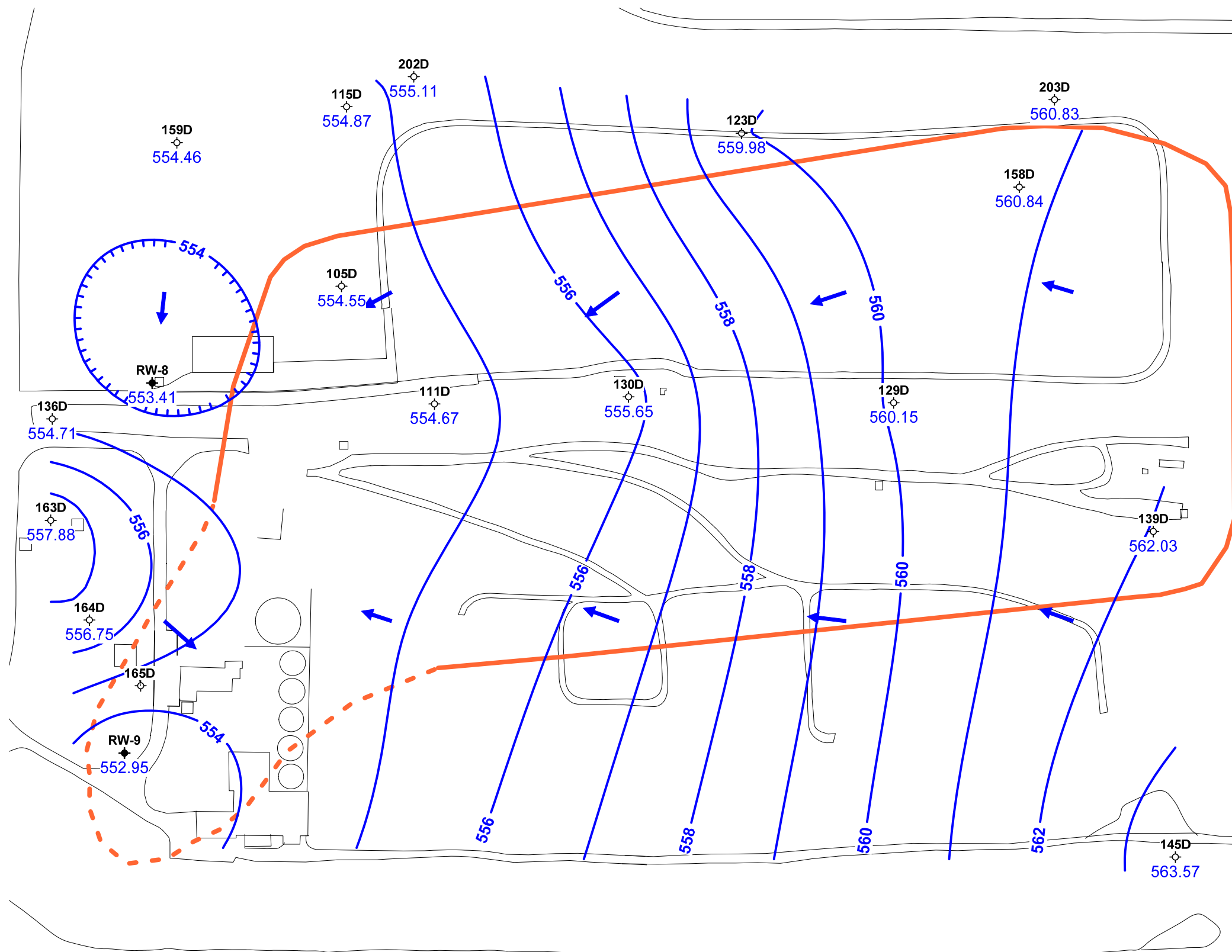
- Potentiometric Contour
- Structure
- Road

- Source Area Extent

**Figure 7**  
**Potentiometric Surface Map**  
**Chemours Necco Park: C-Zone**  
**November 22, 2017**

**Figure 8**  
**Select D-Zone Monitoring Wells**  
**Groundwater Elevations 2005 through 4th Quarter 2017**  
**Chemours Necco Park**





Scale: Feet  
0 100 200 300 400

Contour interval = 1.0 feet

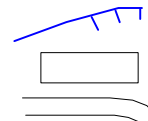
Well 149D, located outside the map area, was used in the contour interpolation.  
Well 148D located downgradient was not used in the interpolation.  
Well 165D was not used in the contour interpolation.

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| Project Manager: EAF     | Date: 12-20-17 |
| Job number: 450326.02020 |                |

3B Well ID  
Monitoring Well  
Pumping Well

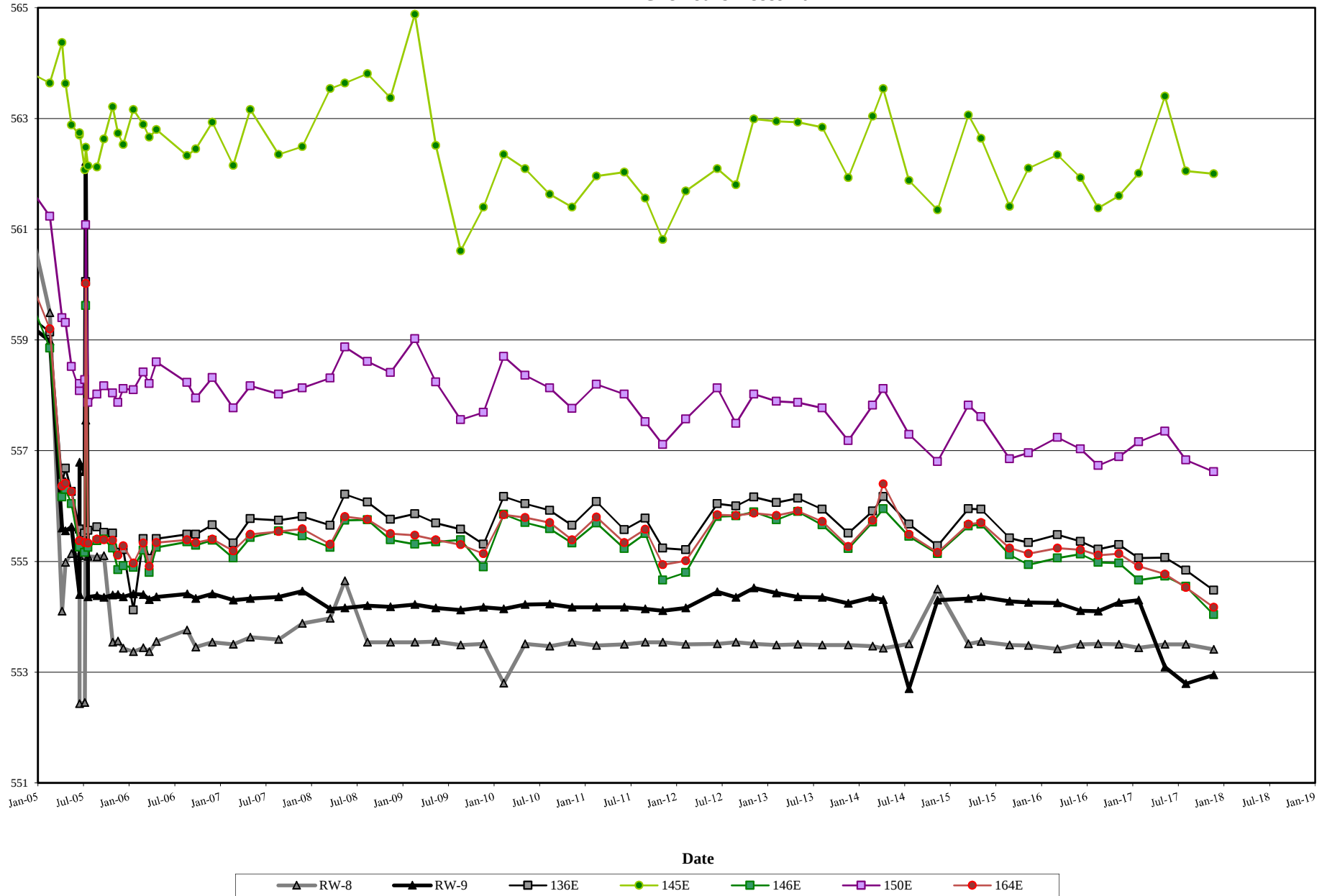


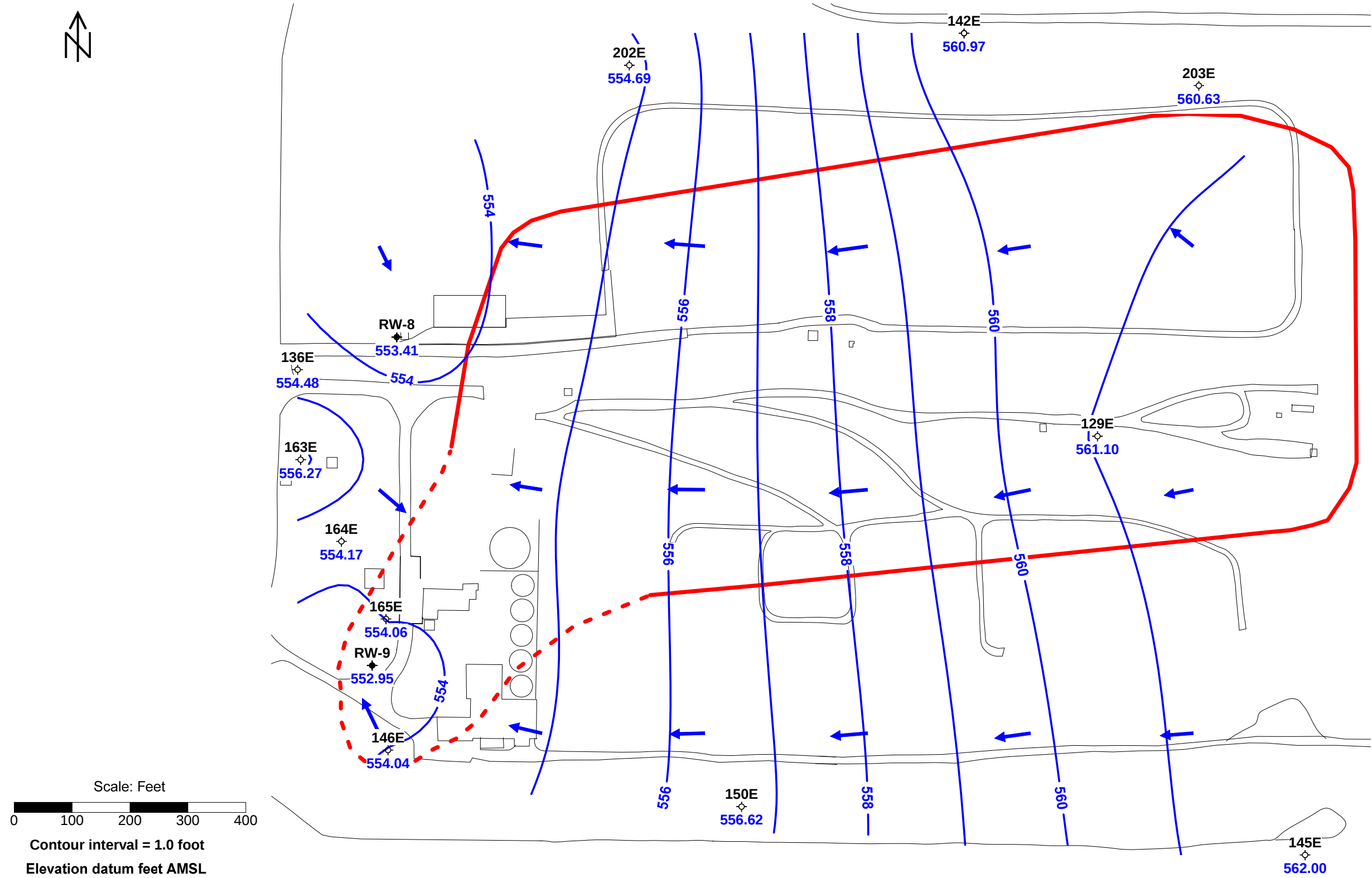
**LEGEND**

Potentiometric Contour  
Structure  
Road  
Source Area Extent

**Figure 9**  
**Potentiometric Surface Map**  
**Chemours Necco Park: D-Zone**  
**November 22, 2017**

**Figure 10**  
**Select E-Zone Monitoring Wells**  
**Groundwater Elevations 2005 Through 4th Quarter 2017**  
**Chemours Necco Park**



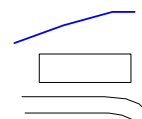


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| Project Manager: EAF     | Date: 12-20-17 |
| Job number: 450326.02020 |                |

3B Well ID  
◇ Monitoring Well  
★ Pumping Well

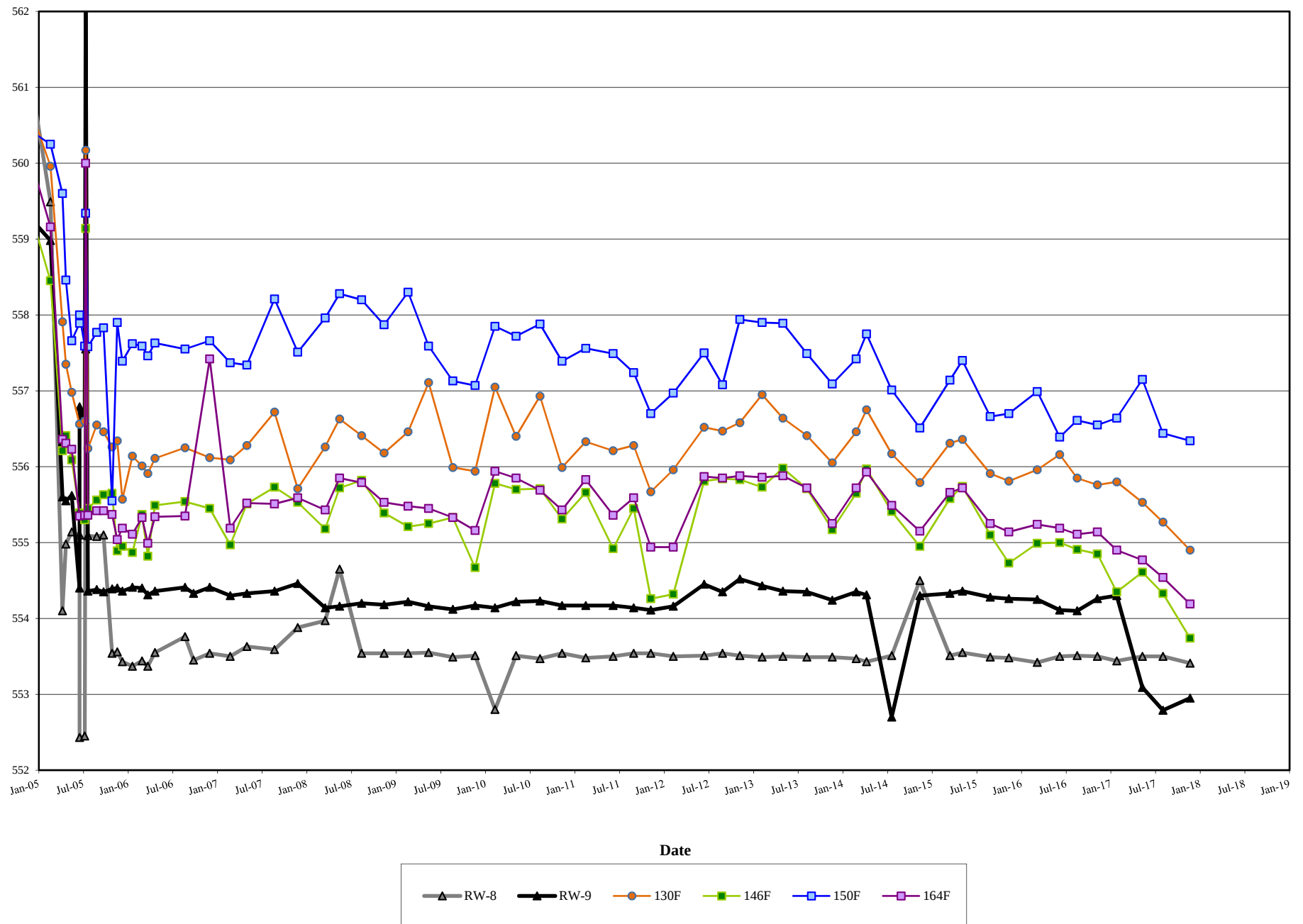


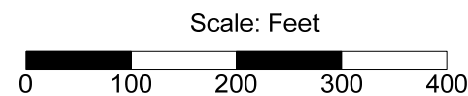
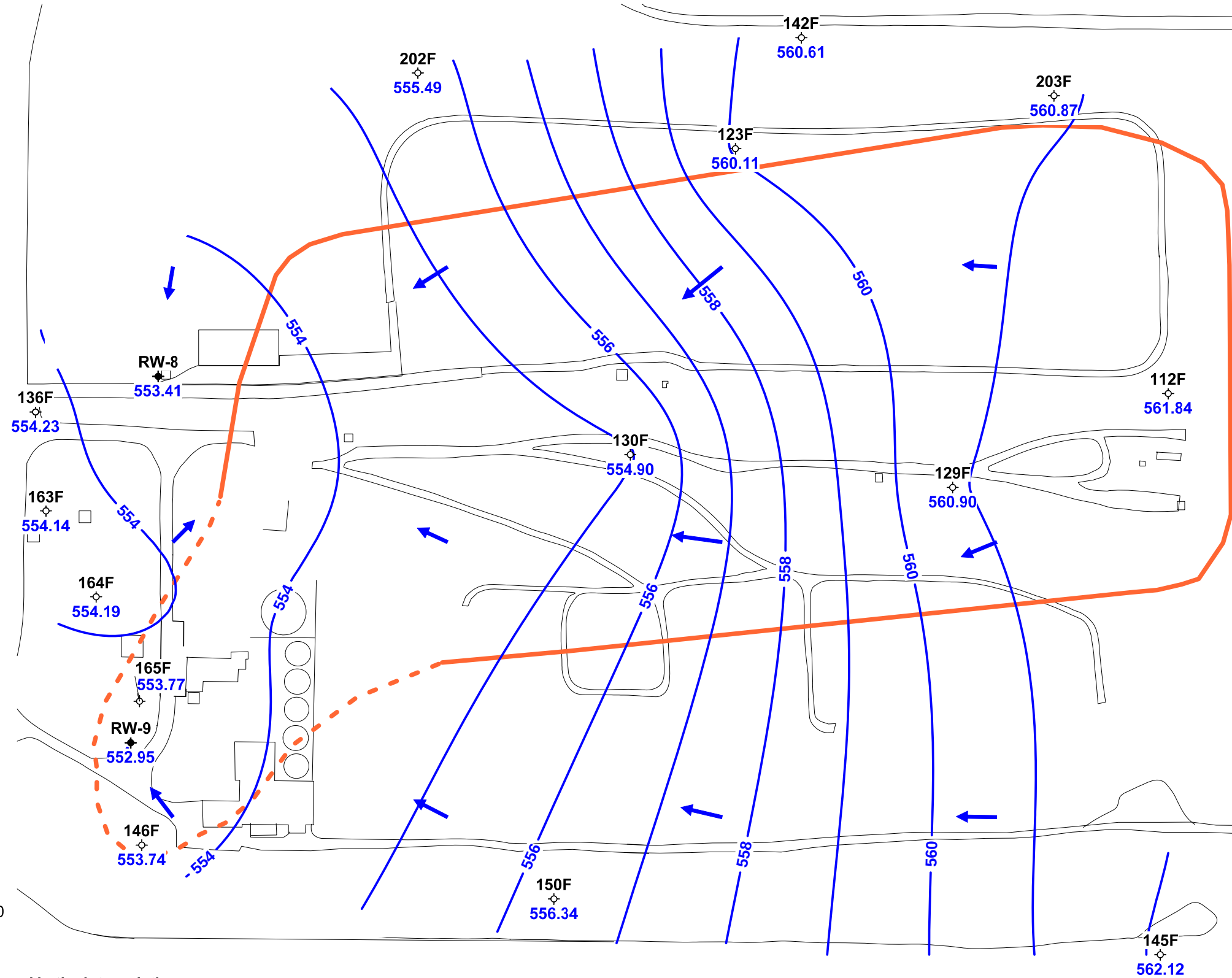
**LEGEND**

Potentiometric Contour  
Structure  
Road  
- - - Source Area Extent

**Figure 11**  
**Potentiometric Surface Map**  
**Chemours Necco Park: E-Zone**  
**November 22, 2017**

**Figure 12**  
**Select F-Zone Monitoring Wells**  
**Groundwater Elevations 2005 Through 4th Quarter 2017**  
**Chemours Necco Park**





Contour interval = 0.5 foot

Elevation datum feet AMSL

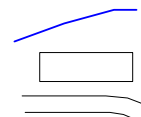
148F located downgradient was not used in the interpolation.

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|--------------------------|----------------|
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| Project Manager: EAF     | Date: 12-20-17 |
| Job number: 450326.02020 |                |

3B Well ID  
◇ Monitoring Well  
★ Pumping Well



**LEGEND**

Potentiometric Contour (blue line)  
Source Area Extent (thick orange line)

**Figure 13**  
**Potentiometric Surface Map**  
**Chemours Necco Park: F-Zone**  
**November 22, 2017**

**APPENDIX A**

**CHEMOURS NECCO PARK**  
**GROUNDWATER ELEVATION DATA**  
**FOURTH QUARTER 2017**

**APPENDIX A**  
**GROUNDWATER ELEVATION DATA - 4Q17**  
**Chemours Necco Park**

| Location ID | Date Measured | Depth to Water | Reference Elevation | Groundwater Elevation | Time Measured |
|-------------|---------------|----------------|---------------------|-----------------------|---------------|
| 102B        | 11/22/2017    | 22.28          | 599.01              | 576.73                | 12:13         |
| 105C        | 11/22/2017    | Dry            | 595.28              | Dry                   | 13:06         |
| 105D        | 11/22/2017    | 40.22          | 594.77              | 554.55                | 13:07         |
| 111A        | 11/22/2017    | 14.32          | 586.89              | 572.57                | 11:38         |
| 111B        | 11/22/2017    | 12.88          | 584.94              | 572.06                | 11:40         |
| 111D        | 11/22/2017    | 29.63          | 584.30              | 554.67                | 11:41         |
| 112B        | 11/22/2017    | 8.89           | 581.90              | 573.01                | 12:03         |
| 112C        | 11/22/2017    | 16.82          | 582.93              | 566.11                | 12:02         |
| 112F        | 11/22/2017    | 21.45          | 583.29              | 561.84                | 12:04         |
| 115C        | 11/22/2017    | 29.04          | 595.93              | 566.89                | 13:07         |
| 115D        | 11/22/2017    | 41.75          | 596.62              | 554.87                | 13:08         |
| 116B        | 11/22/2017    | 15.02          | 590.05              | 575.03                | 11:31         |
| 118B        | 11/22/2017    | 13.25          | 583.90              | 570.65                | 12:06         |
| 119A        | 11/22/2017    | 12.28          | 586.34              | 574.06                | 11:51         |
| 119B        | 11/22/2017    | 14.32          | 586.77              | 572.45                | 11:52         |
| 120B        | 11/22/2017    | 26.23          | 599.18              | 572.95                | 12:25         |
| 123A        | 11/22/2017    | 21.68          | 597.93              | 576.25                | 12:17         |
| 123B        | 11/22/2017    | 19.38          | 595.98              | 576.60                | 12:21         |
| 123C        | 11/22/2017    | 25.34          | 595.42              | 570.08                | 12:20         |
| 123D        | 11/22/2017    | 36.53          | 596.51              | 559.98                | 12:19         |
| 123F        | 11/22/2017    | 38.46          | 598.57              | 560.11                | 12:16         |
| 129A        | 11/22/2017    | 10.80          | 584.80              | 574.00                | 11:57         |
| 129B        | 11/22/2017    | 13.58          | 585.24              | 571.66                | 11:55         |
| 129C        | 11/22/2017    | 11.45          | 585.68              | 574.23                | 11:56         |
| 129D        | 11/22/2017    | 25.88          | 586.03              | 560.15                | 11:54         |
| 129E        | 11/22/2017    | 19.78          | 580.88              | 561.10                | 11:55         |
| 129F        | 11/22/2017    | 20.46          | 581.36              | 560.90                | 11:57         |
| 130B        | 11/22/2017    | 12.50          | 585.63              | 573.13                | 11:48         |
| 130C        | 11/22/2017    | 20.66          | 585.51              | 564.85                | 11:47         |
| 130D        | 11/22/2017    | 29.31          | 584.96              | 555.65                | 11:46         |
| 130F        | 11/22/2017    | 26.59          | 581.49              | 554.90                | 11:36         |
| 131A        | 11/22/2017    | 14.43          | 585.43              | 571.00                | 12:00         |
| 136B        | 11/22/2017    | 7.38           | 581.69              | 574.31                | 11:10         |
| 136C        | 11/22/2017    | 10.26          | 581.62              | 571.36                | 11:10         |
| 136D        | 11/22/2017    | 24.97          | 579.68              | 554.71                | 11:09         |
| 136E        | 11/22/2017    | 25.11          | 579.59              | 554.48                | 11:08         |
| 136F        | 11/22/2017    | 26.10          | 580.33              | 554.23                | 11:06         |
| 136F        | 11/22/2017    | 26.09          | 580.33              | 554.24                | 12:37         |
| 136G        | 11/22/2017    | 22.01          | 579.76              | 557.75                | 11:07         |
| 136G        | 11/22/2017    | 22.21          | 579.76              | 557.55                | 12:38         |
| 137A        | 11/22/2017    | 5.81           | 578.47              | 572.66                | 11:18         |
| 137B        | 11/22/2017    | 7.08           | 578.31              | 571.23                | 11:16         |

**APPENDIX A**  
**GROUNDWATER ELEVATION DATA - 4Q17**  
**Chemours Necco Park**

| Location ID | Date Measured | Depth to Water | Reference Elevation | Groundwater Elevation | Time Measured |
|-------------|---------------|----------------|---------------------|-----------------------|---------------|
| 137C        | 11/22/2017    | 13.11          | 578.39              | 565.28                | 11:15         |
| 137D        | 11/22/2017    | 14.85          | 579.09              | 564.24                | 11:17         |
| 138B        | 11/22/2017    | 11.12          | 583.98              | 572.86                | 11:42         |
| 138C        | 11/22/2017    | 22.26          | 587.06              | 564.80                | 11:44         |
| 139A        | 11/22/2017    | 13.76          | 585.14              | 571.38                | 12:08         |
| 139B        | 11/22/2017    | 5.18           | 585.39              | 580.21                | 12:11         |
| 139C        | 11/22/2017    | 23.23          | 585.27              | 562.04                | 12:19         |
| 139D        | 11/22/2017    | 23.46          | 585.49              | 562.03                | 12:19         |
| 140A        | 11/22/2017    | 7.73           | 581.55              | 573.82                | 12:08         |
| 142E        | 11/22/2017    | 25.03          | 586.00              | 560.97                | 12:30         |
| 142F        | 11/22/2017    | 25.08          | 585.69              | 560.61                | 12:31         |
| 145A        | 11/22/2017    | 3.78           | 575.84              | 572.06                | 11:52         |
| 145B        | 11/22/2017    | 5.89           | 575.48              | 569.59                | 11:53         |
| 145C        | 11/22/2017    | 6.90           | 575.90              | 569.00                | 12:21         |
| 145D        | 11/22/2017    | 12.48          | 576.05              | 563.57                | 12:22         |
| 145E        | 11/22/2017    | 13.98          | 575.98              | 562.00                | 11:53         |
| 145F        | 11/22/2017    | 13.93          | 576.05              | 562.12                | 11:54         |
| 146AR       | 11/22/2017    | 4.49           | 576.92              | 572.43                | 12:31         |
| 146B        | 11/22/2017    | 6.11           | 576.90              | 570.79                | 12:32         |
| 146C        | 11/22/2017    | 6.90           | 576.35              | 569.45                | 12:32         |
| 146E        | 11/22/2017    | 22.04          | 576.08              | 554.04                | 12:33         |
| 146F        | 11/22/2017    | 22.30          | 576.04              | 553.74                | 12:33         |
| 148D        | 11/22/2017    | 8.30           | 579.38              | 571.08                | 11:10         |
| 148F        | 11/22/2017    | 23.99          | 576.21              | 552.22                | 11:11         |
| 149B        | 11/22/2017    | 2.73           | 572.87              | 570.14                | 11:28         |
| 149C        | 11/22/2017    | 4.75           | 573.26              | 568.51                | 11:29         |
| 149D        | 11/22/2017    | 17.22          | 572.86              | 555.64                | 11:29         |
| 150A        | 11/22/2017    | 3.54           | 575.86              | 572.32                | 11:41         |
| 150B        | 11/22/2017    | 5.37           | 575.99              | 570.62                | 11:41         |
| 150C        | 11/22/2017    | 9.52           | 576.13              | 566.61                | 11:42         |
| 150E        | 11/22/2017    | 19.53          | 576.15              | 556.62                | 11:42         |
| 150F        | 11/22/2017    | 19.64          | 575.98              | 556.34                | 11:42         |
| 151B        | 11/22/2017    | 6.23           | 573.36              | 567.13                | 11:18         |
| 151C        | 11/22/2017    | 4.48           | 573.18              | 568.70                | 11:19         |
| 158D        | 11/22/2017    | 37.36          | 598.20              | 560.84                | 12:11         |
| 159A        | 11/22/2017    | 18.93          | 596.16              | 577.23                | 13:01         |
| 159B        | 11/22/2017    | 24.48          | 596.37              | 571.89                | 13:02         |
| 159C        | 11/22/2017    | 27.44          | 597.36              | 569.92                | 13:02         |
| 159D        | 11/22/2017    | 43.21          | 597.67              | 554.46                | 13:05         |
| 160B        | 11/22/2017    | 12.76          | 582.75              | 569.99                | 12:20         |
| 160C        | 11/22/2017    | 19.37          | 582.72              | 563.35                | 12:20         |
| 161B        | 11/22/2017    | 10.98          | 582.84              | 571.86                | 12:04         |

**APPENDIX A**  
**GROUNDWATER ELEVATION DATA - 4Q17**  
**Chemours Necco Park**

| Location ID | Date Measured | Depth to Water | Reference Elevation | Groundwater Elevation | Time Measured |
|-------------|---------------|----------------|---------------------|-----------------------|---------------|
| 161C        | 11/22/2017    | 20.89          | 582.64              | 561.75                | 12:05         |
| 162C        | 11/22/2017    | 16.68          | 581.00              | 564.32                | 11:52         |
| 163A        | 11/22/2017    | 4.38           | 578.14              | 573.76                | 11:25         |
| 163B        | 11/22/2017    | 4.43           | 577.94              | 573.51                | 11:26         |
| 163D        | 11/22/2017    | 20.94          | 578.82              | 557.88                | 11:22         |
| 163E        | 11/22/2017    | 22.79          | 579.06              | 556.27                | 11:23         |
| 163F        | 11/22/2017    | 24.62          | 578.76              | 554.14                | 11:24         |
| 164D        | 11/22/2017    | 20.67          | 577.42              | 556.75                | 11:19         |
| 164E        | 11/22/2017    | 23.15          | 577.32              | 554.17                | 11:18         |
| 164F        | 11/22/2017    | 23.08          | 577.27              | 554.19                | 11:17         |
| 165D        | 11/22/2017    | 13.80          | 577.52              | 563.72                | 12:44         |
| 165E        | 11/22/2017    | 23.50          | 577.56              | 554.06                | 12:44         |
| 165F        | 11/22/2017    | 23.95          | 577.72              | 553.77                | 12:44         |
| 167B        | 11/22/2017    | 10.48          | 580.93              | 570.45                | 11:59         |
| 168A        | 11/22/2017    | 6.17           | 578.72              | 572.55                | 12:05         |
| 168B        | 11/22/2017    | 13.83          | 578.90              | 565.07                | 12:06         |
| 168C        | 11/22/2017    | 14.12          | 579.21              | 565.09                | 12:06         |
| 169B        | 11/22/2017    | 10.33          | 580.43              | 570.10                | 12:19         |
| 170B        | 11/22/2017    | 10.29          | 579.10              | 568.81                | 12:19         |
| 171B        | 11/22/2017    | 9.62           | 579.54              | 569.92                | 12:20         |
| 172B        | 11/22/2017    | 7.42           | 576.95              | 569.53                | 11:54         |
| 173A        | 11/22/2017    | 7.30           | 580.71              | 573.41                | 11:32         |
| 174A        | 11/22/2017    | 4.08           | 577.62              | 573.54                | 11:11         |
| 175A        | 11/22/2017    | 11.61          | 586.81              | 575.20                | 11:36         |
| 176A        | 11/22/2017    | 6.22           | 580.03              | 573.81                | 11:23         |
| 178A        | 11/22/2017    | 5.90           | 579.92              | 574.02                | 11:30         |
| 179A        | 11/22/2017    | 5.40           | 579.01              | 573.61                | 11:21         |
| 184A        | 11/22/2017    | 6.31           | 579.88              | 573.57                | 11:34         |
| 185A        | 11/22/2017    | 6.65           | 580.84              | 574.19                | 11:41         |
| 186A        | 11/22/2017    | 11.30          | 579.76              | 568.46                | 11:44         |
| 187A        | 11/22/2017    | 9.04           | 579.94              | 570.90                | 11:46         |
| 188A        | 11/22/2017    | 14.68          | 580.91              | 566.23                | 11:48         |
| 189A        | 11/22/2017    | 10.48          | 579.82              | 569.34                | 11:52         |
| 190A        | 11/22/2017    | 11.62          | 580.58              | 568.96                | 11:58         |
| 191AR       | 11/22/2017    | 8.77           | 580.62              | 571.85                | 12:02         |
| 192A        | 11/22/2017    | 11.87          | 584.08              | 572.21                | 12:10         |
| 193A        | 11/22/2017    | 10.59          | 584.13              | 573.54                | 12:17         |
| 194A        | 11/22/2017    | 13.21          | 584.35              | 571.14                | 12:13         |
| 201B        | 11/22/2017    | 8.68           | 579.25              | 570.57                | 11:22         |
| 202D        | 11/22/2017    | 37.62          | 592.73              | 555.11                | 12:35         |
| 202E        | 11/22/2017    | 38.04          | 592.73              | 554.69                | 12:36         |
| 202F        | 11/22/2017    | 37.24          | 592.73              | 555.49                | 12:36         |

**APPENDIX A**  
**GROUNDWATER ELEVATION DATA - 4Q17**  
**Chemours Necco Park**

| Location ID | Date Measured | Depth to Water | Reference Elevation | Groundwater Elevation | Time Measured |
|-------------|---------------|----------------|---------------------|-----------------------|---------------|
| 203D        | 11/22/2017    | 33.02          | 593.85              | 560.83                | 12:31         |
| 203E        | 11/22/2017    | 33.22          | 593.85              | 560.63                | 12:29         |
| 203F        | 11/22/2017    | 32.98          | 593.85              | 560.87                | 12:32         |
| 204C        | 11/22/2017    | 19.62          | 581.77              | 562.15                | 12:16         |
| BZTW-1      | 11/22/2017    | 7.54           | 579.67              | 572.13                | 11:41         |
| BZTW-2      | 11/22/2017    | 5.89           | 579.38              | 573.49                | 11:30         |
| BZTW-4      | 11/22/2017    | 4.22           | 578.18              | 573.96                | 11:14         |
| D-10        | 11/22/2017    | 15.25          | 580.02              | 564.77                | 11:39         |
| D-11        | 11/22/2017    | 4.21           | 578.07              | 573.86                | 11:25         |
| D-13        | 11/22/2017    | 5.02           | 579.07              | 574.05                | 11:09         |
| D-14        | 11/22/2017    | 14.38          | 579.01              | 564.63                | 11:08         |
| D-23        | 11/22/2017    | 12.84          | 580.61              | 567.77                | 11:53         |
| D-9         | 11/22/2017    | 7.09           | 580.15              | 573.06                | 11:38         |
| PZ-205B     | 11/22/2017    | 7.02           | 579.38              | 572.36                | 11:28         |
| PZ-A        | 11/22/2017    | 7.75           | 579.06              | 571.31                | 11:26         |
| PZ-B        | 11/22/2017    | 8.34           | 579.47              | 571.13                | 11:26         |
| RDB-3       | 11/22/2017    | 4.97           | 579.31              | 574.34                | 11:11         |
| RDB-5       | 11/22/2017    | 4.37           | 578.57              | 574.20                | 11:14         |
| RW-11       | 11/22/2017    | 17.67          | 578.78              | 561.11                | 11:22         |
| RW-4        | 11/22/2017    | 25.17          | 581.52              | 556.35                | 12:13         |
| RW-5        | 11/22/2017    | 18.19          | 578.88              | 560.69                | 11:49         |
| RW-8        | 11/22/2017    | 32.11          | 585.52              | 553.41                | 11:33         |
| RW-9        | 11/22/2017    | 22.18          | 575.13              | 552.95                | 12:43         |
| TRW-6       | 11/22/2017    | 7.25           | 580.21              | 572.96                | 11:32         |
| TRW-7       | 11/22/2017    | 5.74           | 577.89              | 572.15                | 11:13         |

**APPENDIX B**

**CHEMOURS NECCO PARK**  
**GWTF PROCESS SAMPLING RESULTS**  
**FOURTH QUARTER 2017**

**Appendix B**  
**Summary of Analytical Results**  
**Chemours Necco Park**  
**Fourth Quarter 2017**

| Method | CAS #    | Parameter                     | Location<br>Date<br>Units | BC-INFLUENT<br>11/15/2017<br>FS | DEF-INFLUENT<br>11/15/2017<br>FS | COMB-EFFLUENT<br>11/15/2017<br>FS | TRIP BLANK<br>11/15/2017<br>TB |
|--------|----------|-------------------------------|---------------------------|---------------------------------|----------------------------------|-----------------------------------|--------------------------------|
|        |          | <b>Field Parameters</b>       |                           |                                 |                                  |                                   |                                |
|        |          | COLOR                         | NONE                      | Gray                            | Clear                            | Clear                             | -                              |
|        |          | ODOR                          | NONE                      | None                            | None                             | None                              | -                              |
|        |          | OXIDATION REDUCTION POTENTIAL | MV                        | -39                             | -46                              | -102                              | -                              |
|        |          | PH                            | STD UNITS                 | 5.64                            | 6.69                             | 6.88                              | -                              |
|        |          | SPECIFIC CONDUCTANCE          | UMHOS/CM                  | 7385                            | 4650                             | 3738                              | -                              |
|        |          | TEMPERATURE                   | DEGREES C                 | 13.1                            | 12.4                             | 12.1                              | -                              |
|        |          | TURBIDITY QUANTITATIVE        | NTU                       | 29.7                            | 4.02                             | 13.94                             | -                              |
|        |          | <b>Volatile Organics</b>      |                           |                                 |                                  |                                   |                                |
| 8260C  | 79-34-5  | 1,1,2,2-Tetrachloroethane     | UG/L                      | 3900                            | 1100                             | 890                               | <0.32                          |
| 8260C  | 79-00-5  | 1,1,2-Trichloroethane         | UG/L                      | 2900                            | 2200                             | 410                               | <0.34                          |
| 8260C  | 75-35-4  | 1,1-Dichloroethene            | UG/L                      | 430 J                           | 320 J                            | <11                               | <0.27                          |
| 8260C  | 107-06-2 | 1,2-Dichloroethane            | UG/L                      | 590 J                           | 180 J                            | 26 J                              | <0.3                           |
| 8260C  | 56-23-5  | Carbon Tetrachloride          | UG/L                      | 7800                            | 930                              | <14                               | <0.35                          |
| 8260C  | 67-66-3  | Chloroform                    | UG/L                      | 18000                           | 2800                             | 110                               | <0.31                          |
| 8260C  | 156-59-2 | cis-1,2 Dichloroethene        | UG/L                      | 9500                            | 11000                            | 110                               | <0.3                           |
| 8260C  | 75-09-2  | Methylene Chloride            | UG/L                      | 3800                            | 5000                             | 83                                | <0.53                          |
| 8260C  | 127-18-4 | Tetrachloroethene             | UG/L                      | 10000                           | 910                              | 20 J                              | <0.3                           |
| 8260C  | 156-60-5 | trans-1,2-Dichloroethene      | UG/L                      | 450 J                           | 690                              | <12                               | <0.29                          |
| 8260C  | 79-01-6  | Trichloroethene               | UG/L                      | 15000                           | 4800                             | 41                                | <0.33                          |
| 8260C  | 75-01-4  | Vinyl Chloride                | UG/L                      | 2700                            | 1900                             | <18                               | <0.45                          |
|        |          | Total VOCs                    | UG/L                      | 75070                           | 31830                            | 1690                              | 0                              |

< Not detected at stated reporting limit

J Estimated concentration

2017 4Q Necco Quarterly crosstab\_.xlsx

**ATTACHMENT 1**

**CHEMOURS NECCO PARK  
NECCO PARK  
4Q17 WATER LEVELS**

**(ELECTRONIC FORMAT ONLY)**