DuPont Corporate Remediation Group
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Building 35 4th Floor
Niagara Falls, NY 14302
(716) 278-5496

November 24, 2014

Ms. Gloria Sosa
Western New York Remediation Section
New York Remediation Branch
Emergency and Remediation Response Division
U.S. Environmental Protection Agency – Region 2
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Sosa:

**NECCO PARK THIRD QUARTER 2014 DATA PACKAGE**

Enclosed are two copies of the *Third Quarter 2014 (3Q14) Data Package* for the E. I. du Pont de Nemours and Company (DuPont) 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 3Q14 monitoring summary for dense non-aqueous phase liquid (DNAPL).

Pumping system uptime for 3Q14 was 89.3 percent. The total volume of groundwater treated was 3,660,343 gallons. No recoverable DNAPL was identified during the period.

Please contact me at (716) 278-5496 if you have any questions or comments regarding this submittal.

Sincerely,

CORPORATE REMEDIATION GROUP

Paul F. Mazierski
Project Director

PFM/EAF
Enc.

cc: M. Hinton/NYSDEC
E. Felter/Parsons
T. Pezzino/URS
Mary Cedeno/URS

# SOURCE AREA HYDRAULIC CONTROL SYSTEM
# THIRD QUARTER 2014
## GROUNDWATER MONITORING DATA PACKAGE
## DUPONT NECCO PARK
## NIAGARA FALLS, NIAGARA COUNTY, NEW YORK

**EPA ID No. NYD980532162**

*Prepared For:*

**DuPont Corporate Remediation Group**

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

*Prepared By:*

PARSONS

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Buffalo, New York 14202
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**November 2014**

# TABLE OF CONTENTS

# SECTION 1

# DATA PACKAGE SUMMARY

## 1.1 INTRODUCTION

This data package presents a summary of operating and monitoring data collected during the third quarter of 2014 (3Q14) for groundwater remediation measures at the E. I. du Pont de Nemours and Company (DuPont) 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) and the Sampling, Analysis, and Monitoring Plan (SAMP), which are both incorporated into the DuPont Necco Park Operations and Maintenance Plan (DuPont Corporate Remediation Group 2005). Furthermore, this data package reflects revisions in the monitoring program that were detailed in a December 8, 2011 proposal by DuPont and approved by the U.S. Environmental Protection Agency (USEPA 2012).

This is the 37th 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 3Q14:

| | HCS Uptime (%) | Groundwater Treated (gallons) | DNAPL Removed (gallons) |
|---|---|---|---|
| July | 91.5% | 1,206,852 | 0 |
| August | 93.4% | 1,350,296 | 0 |
| September | 83% | 1,103,195 | 0 |
| **3Q14 Total** | **89.3%** | **3,660,343** | **0** |

System downtime is categorized into two groups: individual recovery well downtime and HCS system downtime. Table 1 provides a list of pumping well outages during the quarter. RW-5 was down for approximately 65.5 hours between August 30th and September 2nd due to a low flow interlock. Additionally the flow meters and transducers were recalibrated during this period. Between September 5th and 8th all of the recovery wells were down due to a power outage caused by an electrical storm. There was no scheduled or unscheduled reportable HCS downtime during the quarter. Table 2 provides a historical operations summary by quarter since HCS operations began.

Monthly DNAPL monitoring was completed during 3Q14. No measurable thickness of DNAPL was observed in any of the wells during the monthly 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 3Q14 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 July 21, 2014 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 #64 for Necco Park, the GWTF discharge is sampled and reported quarterly to the Niagara Falls Water Board (NFWB). The Necco Park 3Q14 sewer discharge samples were collected on September 12, 2014. There were no permit limit exceedances in 3Q14. The results indicate that the GWTF continued operating within normal parameters during 3Q14.

The SIU permit #64 was renewed during 2Q14 with an effective date of May 2, 2014. Minor limit increases for tricholophenol, hexachloroethane, and 1,2-dichloroethane were approved by NFWB. The current sewer discharge permit expires on May 2, 2019.

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

# TABLES

# Table 1
## Individual Well Shutdown Summary for 3Q14
## DuPont Necco Park

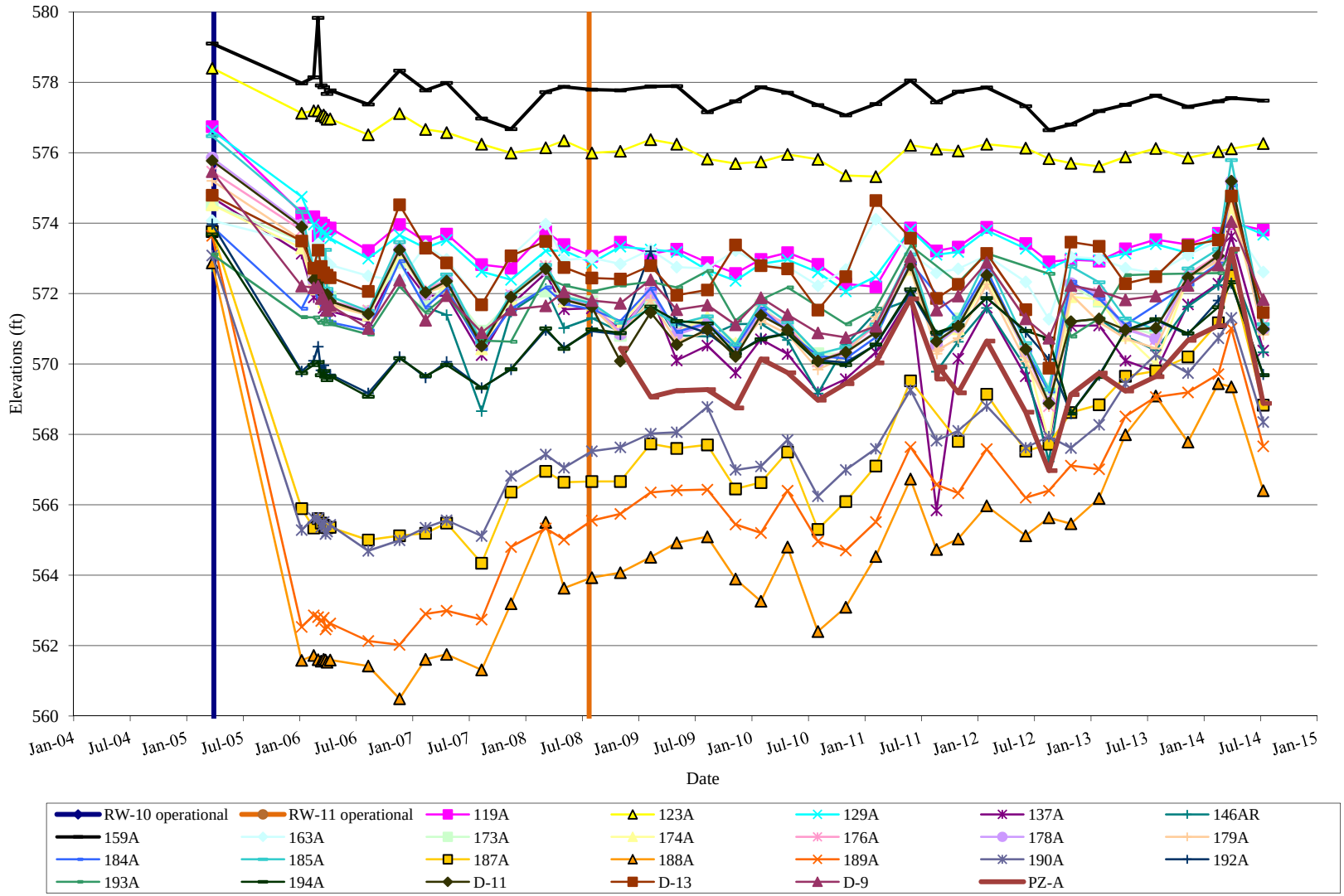
| | Well ID | Date(s) | Length of Shutdown (hours) | Reason for Shutdown | Remarks |
|---|---|---|---|---|---|
| July | | | | | No wells were down greater than 48 hours in October 2013 |
| August | RW-5 | August 30 through September 2 | 65.5 | Lo-lo flow interlock. Flow meters and transducers were recalibrated. | |
| September | RW-4, RW-5, RW-8, RW-9, and RW-11 | September 5 through September 8 | 70.0 | Power outage due to electrical storm. | |

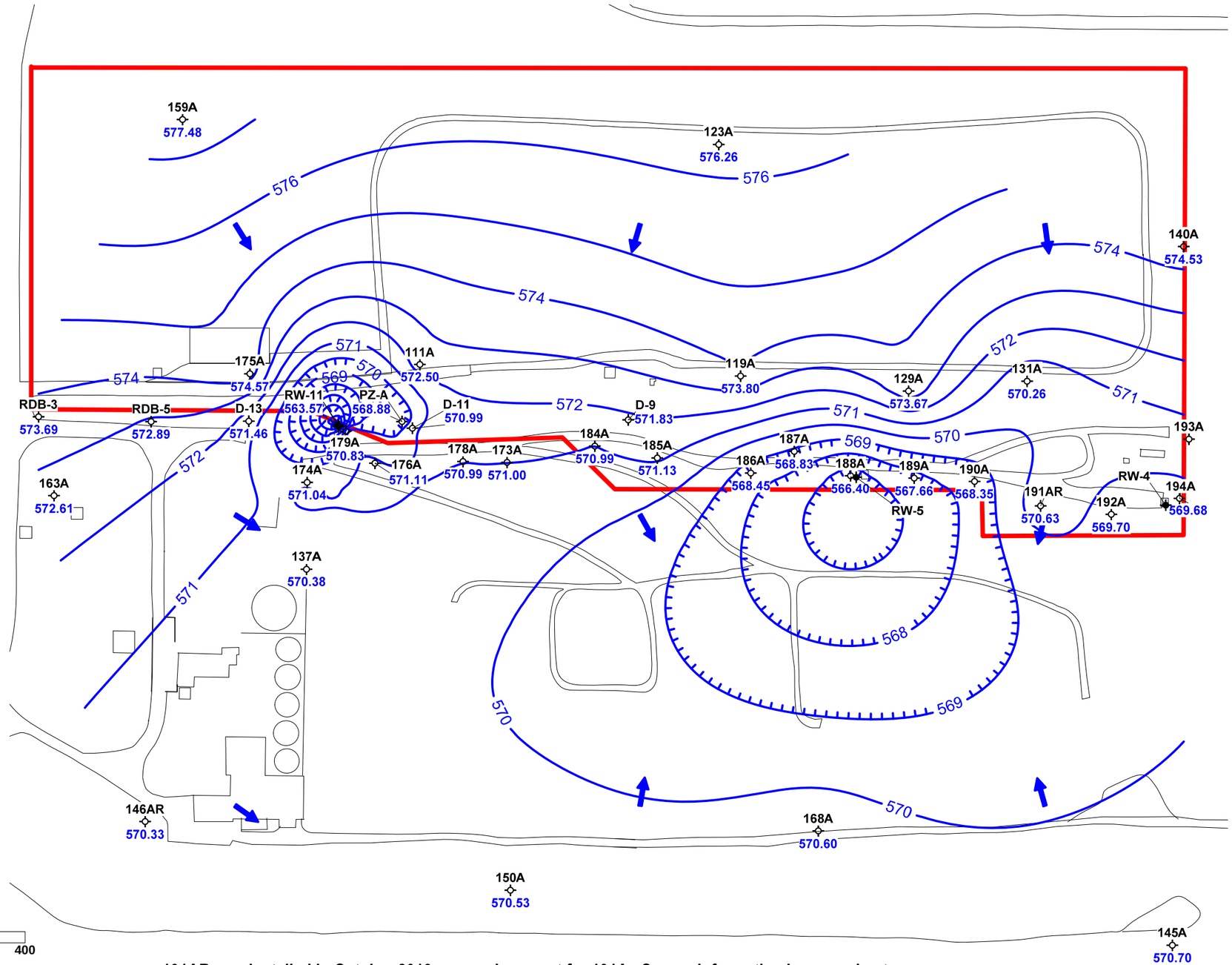
**Table 2**
**Historical HCS Operational Summary - 3Q14**
**DuPont Necco Park**

| Reporting Period | HCS Uptime (%) | HCS Uptime Excluding Scheduled Maintenance Downtime (%) | Groundwater Treated (Gallons) | DNAPL Removed (Gallons) |
|---|---|---|---|---|
| 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 |
| **TOTALS** | **---** | **---** | **131,224,660** | **1,334** |
| **AVERAGE** | **91.7** | **93.3** | **---** | **---** |

# FIGURES

**Figure 1**
**Select A-Zone Monitoring Wells**
**Groundwater Elevations 2005 Through 3rd Quarter 2014**
**DuPont Necco Park**






Contour Interval = 1 foot  Elevation datum feet AMSL

191AR was installed in October 2013 as a replacement for 191A. Survey information is approximate.
No water level was collected from 193A during July 2014 as the well cap could not be removed.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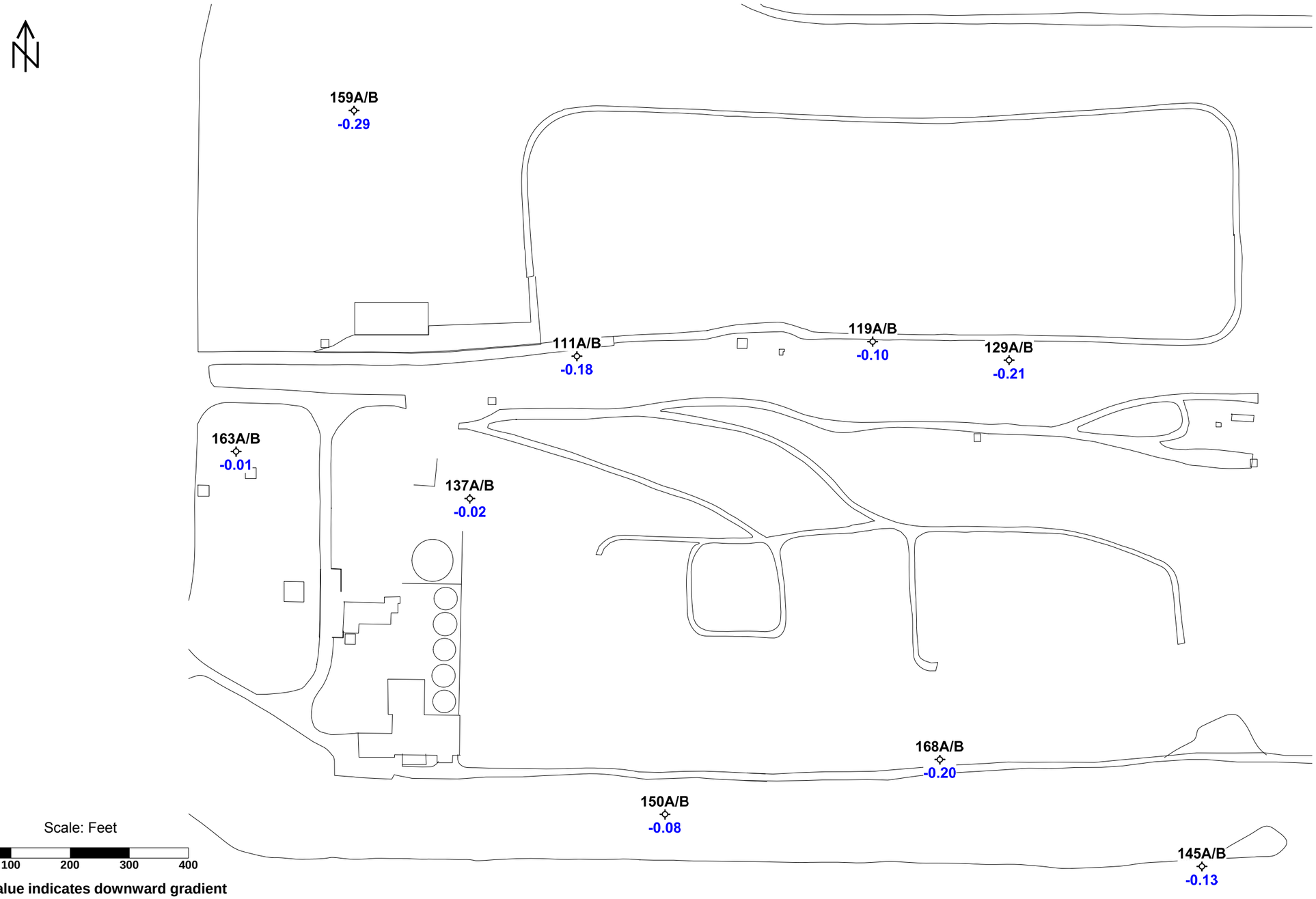
| | |
|---|---|
| Created by: RBP | Date: 08-27-14 |
| Checked by: JWS | Date: 08-29-14 |
| Project Manager: EAF | Date: 08-29-14 |
| | |
| Job number: 448576.02050 | |

**LEGEND**

- 3B — Well ID
- Monitoring Well
- Pumping Well
- Potentiometric Contour
- Structure
- Road
- Source Area Extent

# Figure 2
# Potentiometric Surface Map
# DuPont Necco Park: A-Zone
# July 21, 2014

//nybuf03fs01/DuPont$/Necco/HydroGeo/Hydro/GW_contours/2014-07-21 NEC Contour Tool/2014-07-21 - A PZ - F2.srf




Scale: Feet

0 100 200 300 400

**Negative value indicates downward gradient**

**Elevation datum feet AMSL**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| Project Manager: EAF | Date: 08-29-14 |
| | |
| Job number: 448576.02050 | |

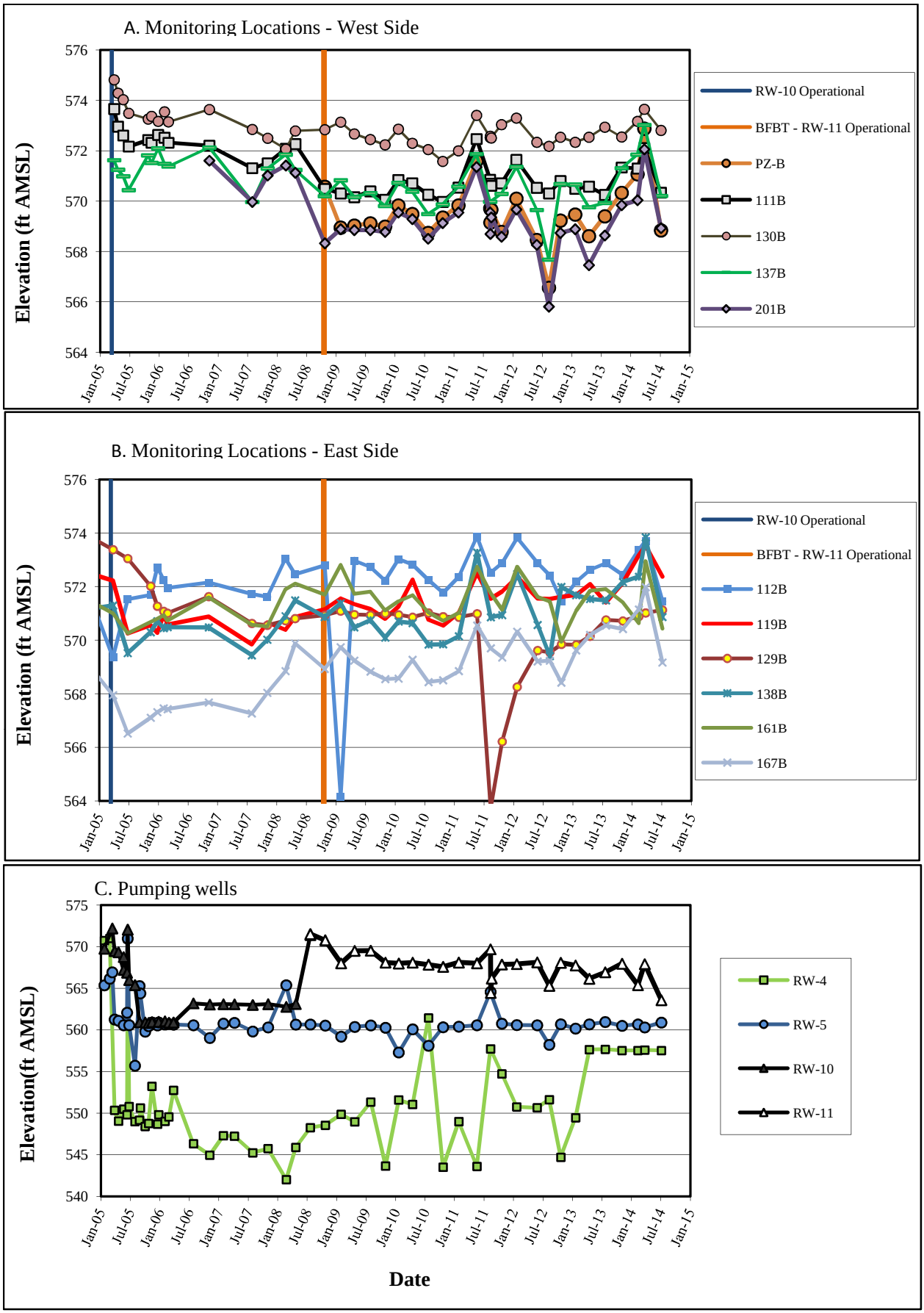
**LEGEND**

| | | | |
|---|---|---|---|
| 150A/B | Well ID | Structure | -0.08 Vertical Hydraulic Gradient |
| | Monitoring Well | | |
| | Pumping Well | Road | |

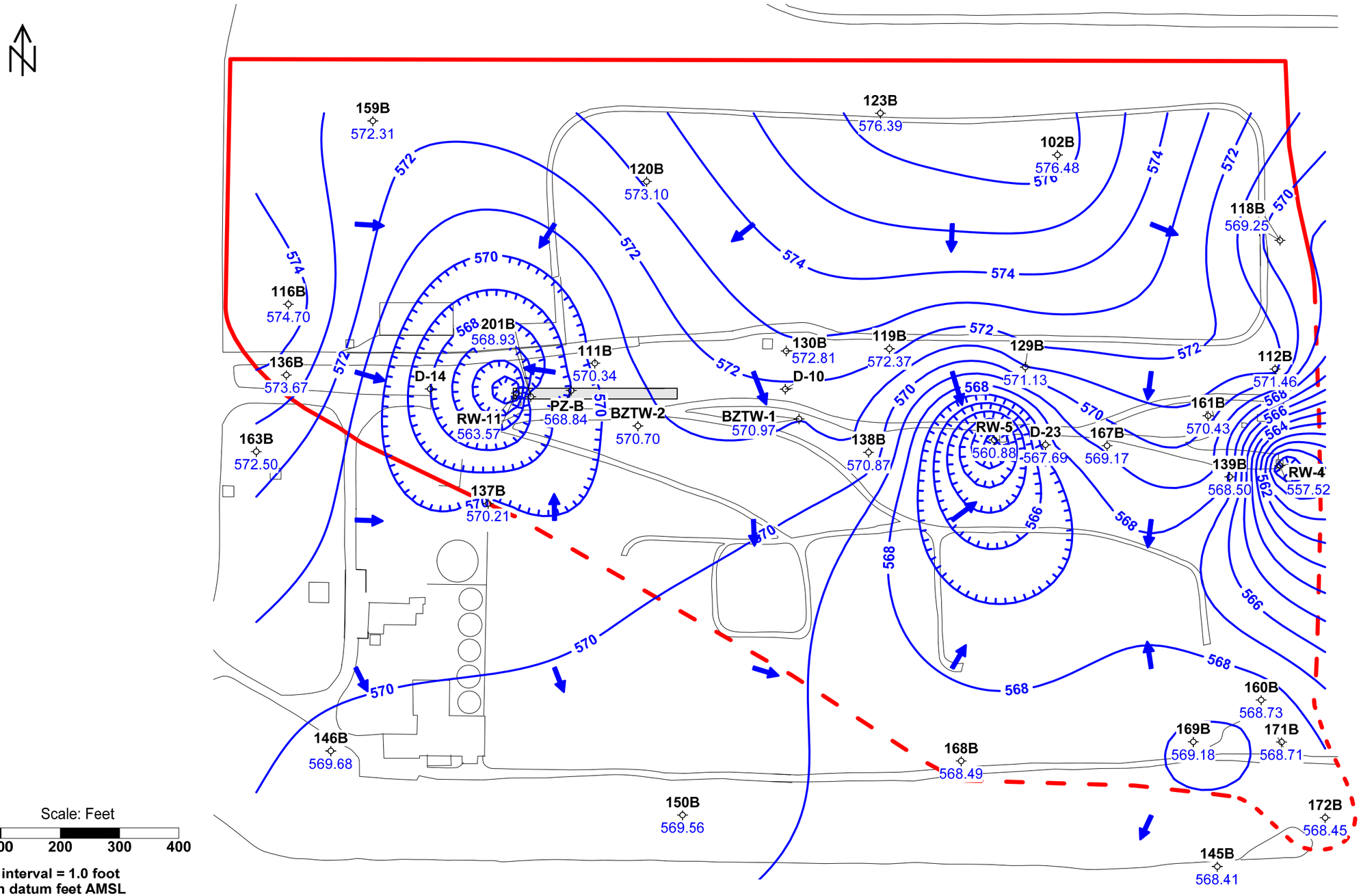
# Figure 3
# Vertical Gradient: A-Zone to B-Zone
# DuPont Necco Park
# July 21, 2014

//nybuf03fs01/DuPont$/Necco/HydroGeo/Hydro/GW_contours/2014-07-21 NEC Contour Tool/2014-07-21 - ABvgrad - F3.srf

# Figure 4
# Select B-Zone Monitoring Wells
# Groundwater Elevations 2005 through 3rd Quarter 2014




Necco 2014 B Zone Water Elev Trends.xlsx




Scale: Feet

0 100 200 300 400

**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, TRW-6, and TRW-7 were not used in the contouring.**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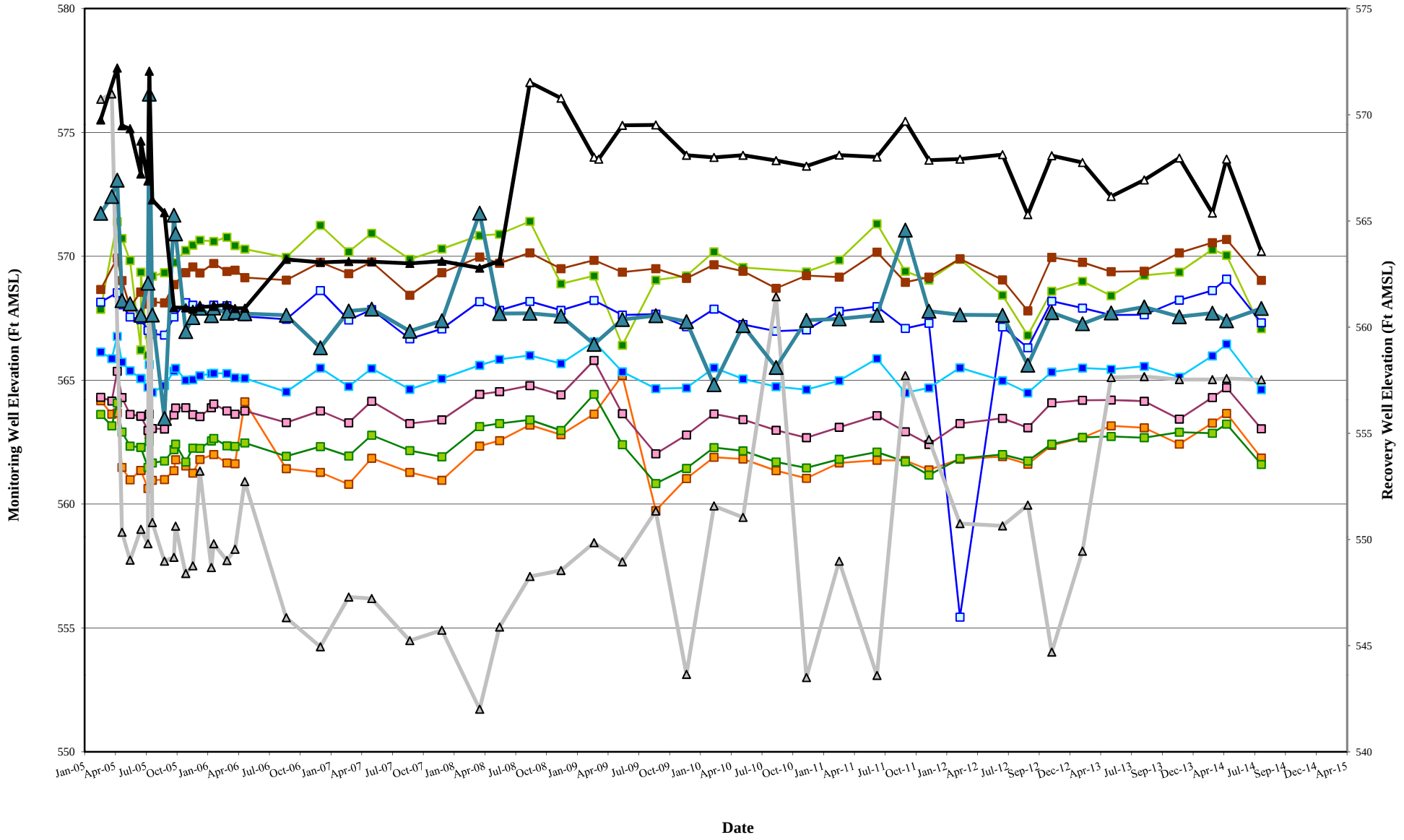
| Project Manager: EAF | Date: 08-29-14 |
| | |
| Job number: 448576.02050 | |

**LEGEND**

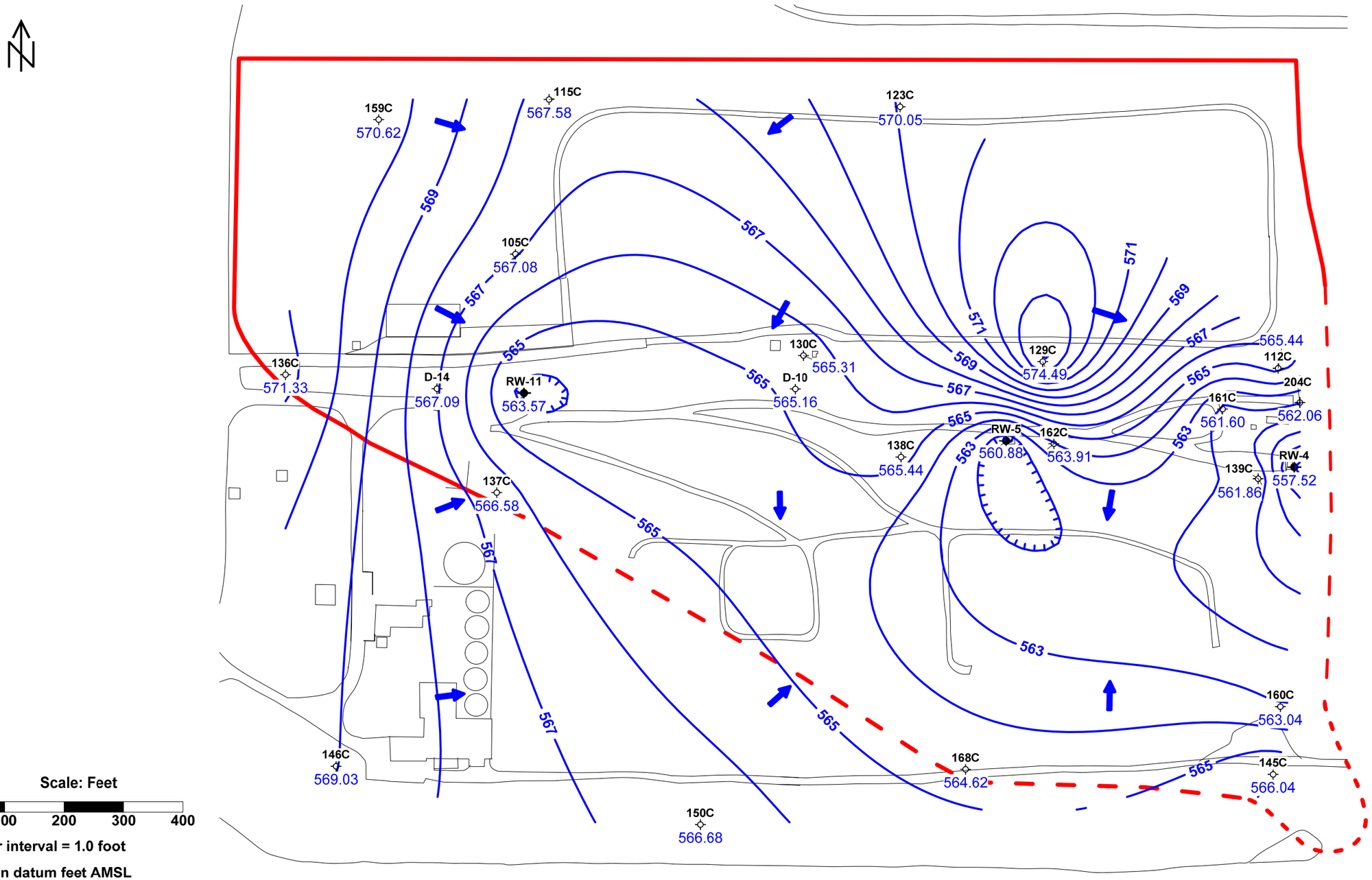
- 3B — Well ID
- Monitoring Well
- Pumping Well
- Potentiometric Contour
- Structure
- Road
- Source Area Extent
- Bedrock Fractured Blast Trench

# Figure 5
# Potentiometric Surface Map
# DuPont Necco Park: B-Zone
# July 21, 2014

**Figure 6**
**Select C-Zone Monitoring Wells**
**Groundwater Elevations 2005 Through 3rd Quarter 2014**
**DuPont Necco Park**




Necco 2014 C Zone Water Elev Trends.xlsx





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| Checked by: JWS | Date: 08-29-14 |
| Project Manager: EAF | Date: 08-29-14 |
| | |
| Job number: 448576.02050 | |

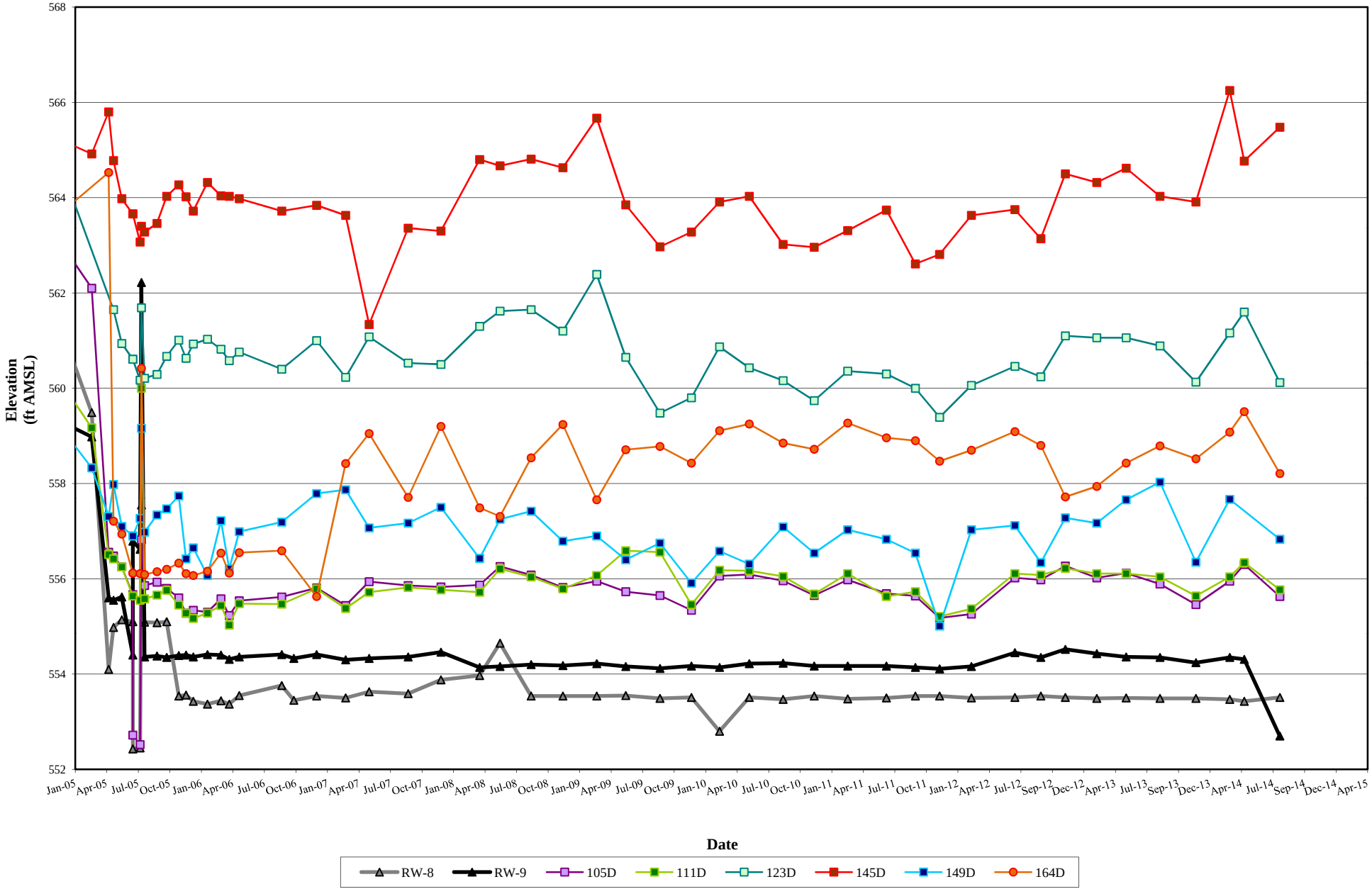
**LEGEND**

- 3B — Well ID
- Monitoring Well
- Pumping Well
- Potentiometric Contour
- Structure
- Road
- Source Area Extent

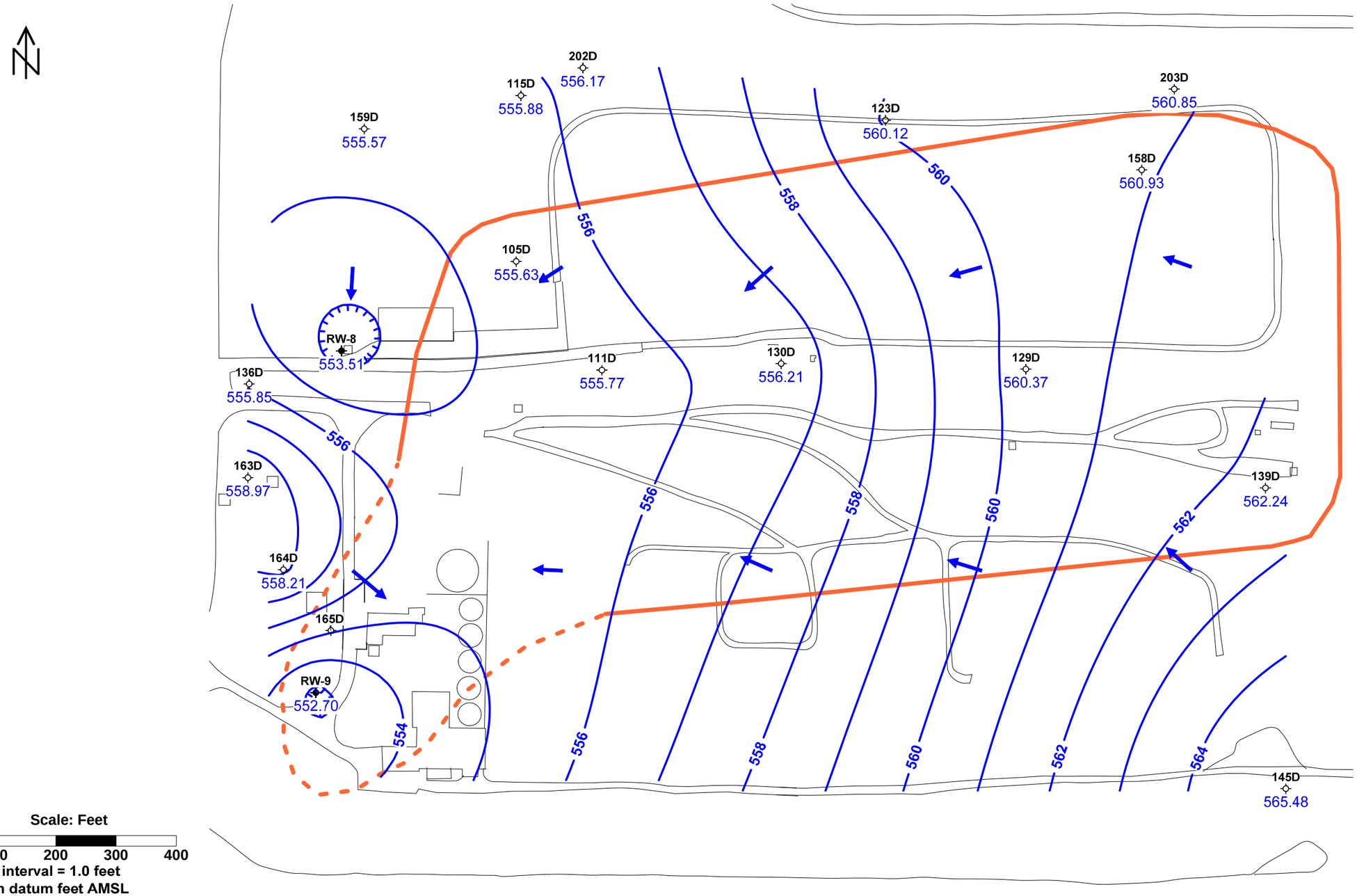
# Figure 7
# Potentiometric Surface Map
# DuPont Necco Park: C-Zone
# July 21, 2014

//nybuf03fs01/DuPontS/Necco/HydroGeo/Hydro/GW_contours/2014-07-21 NEC Contour Tool/2014-07-21 - PZ C - F7.srf

**Figure 8**
**Select D-Zone Monitoring Wells**
**Groundwater Elevations 2005 through 3rd Quarter 2014**
**DuPont Necco Park**




Necco 2014 D Zone Water Elev Trends.xlsx




Scale: Feet

0 100 200 300 400

Contour interval = 1.0 feet

Elevation datum feet AMSL

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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| | |
|---|---|
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| Checked by: JWS | Date: 08-29-14 |
| Project Manager: EAF | Date: 08-29-14 |
| | |
| Job number: 448576.02050 | |

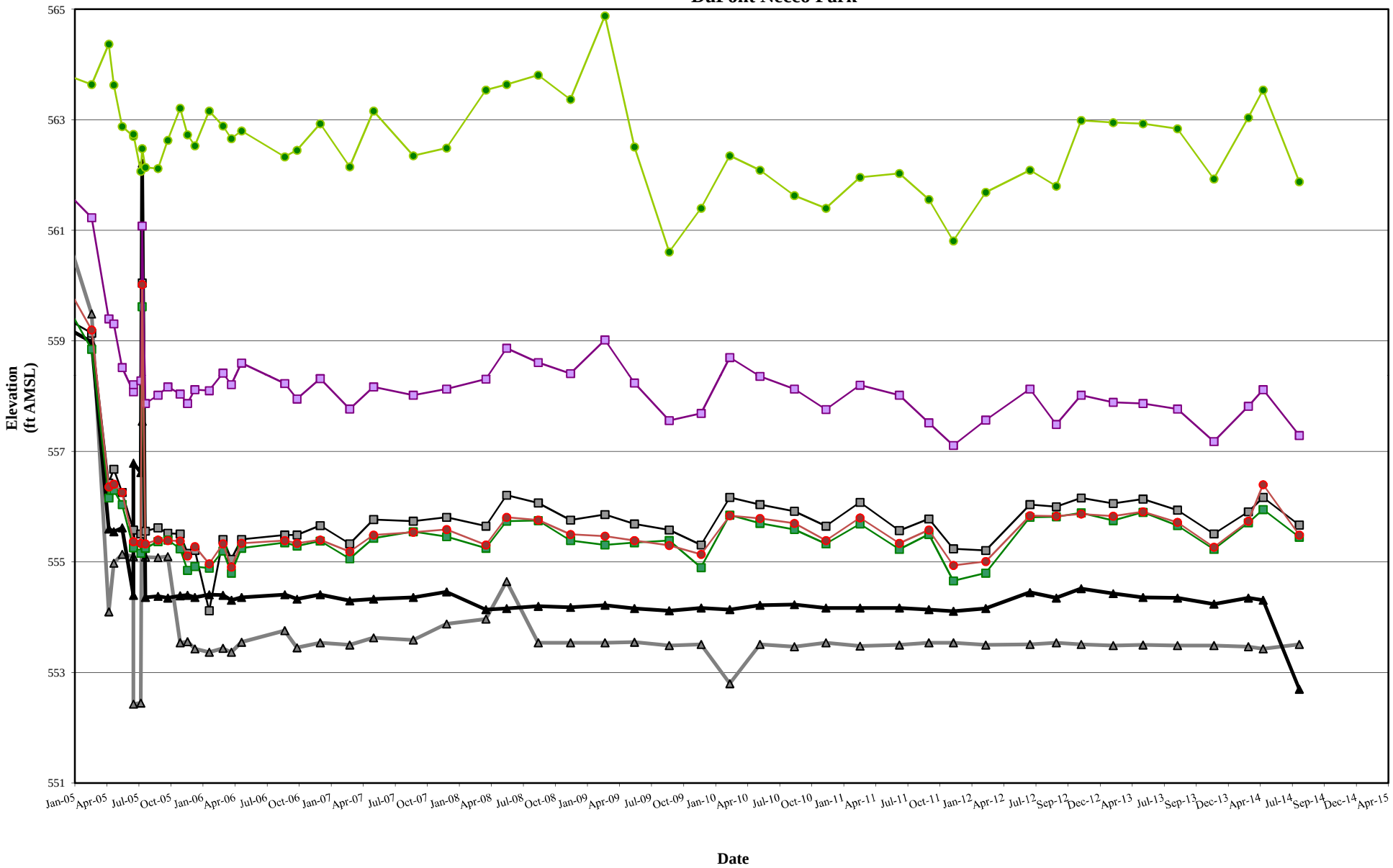
**LEGEND**

- 3B — Well ID
- Monitoring Well
- Pumping Well
- Potentiometric Contour
- Structure
- Road
- Source Area Extent

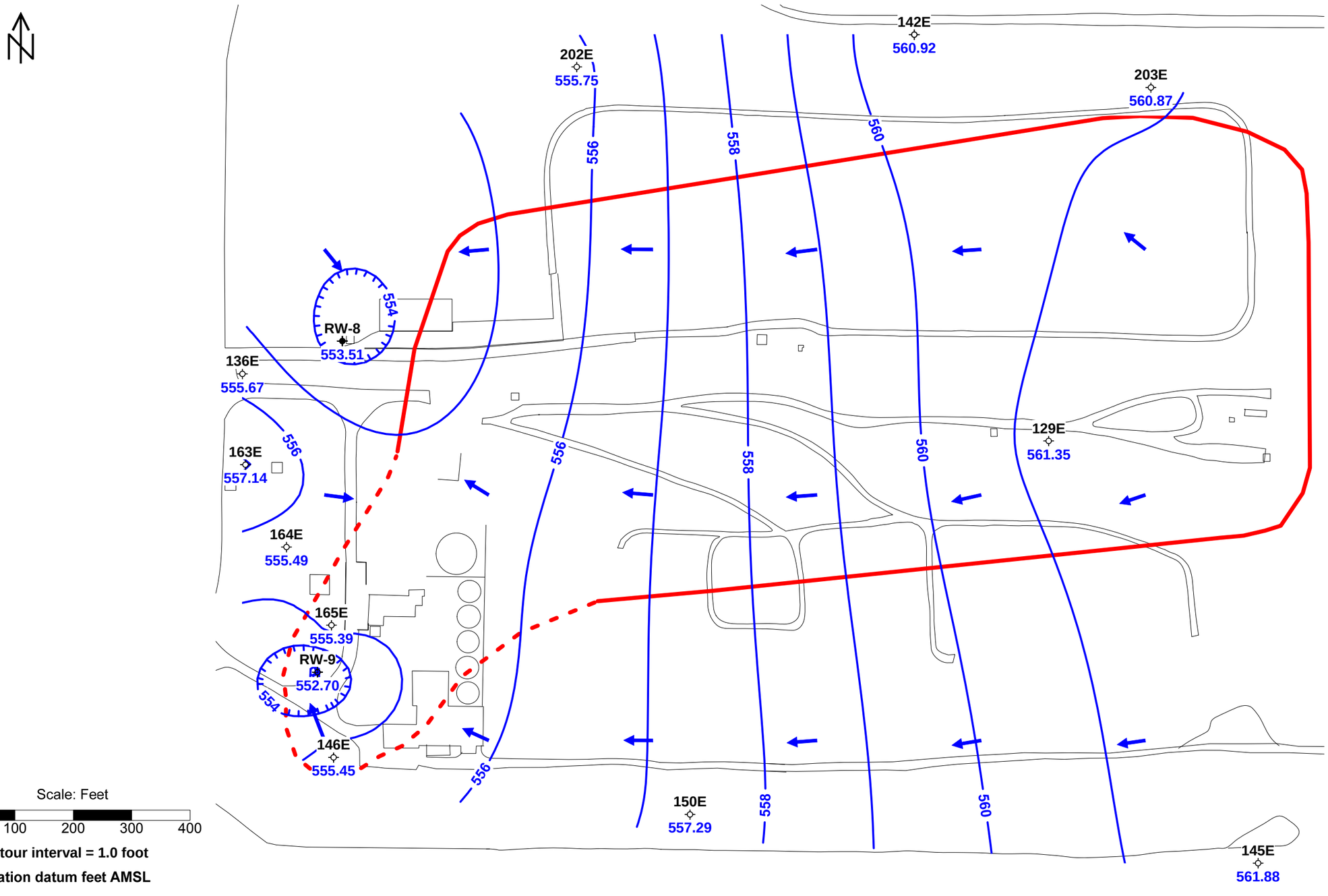
# Figure 9
# Potentiometric Surface Map
# DuPont Necco Park: D-Zone
# July 21, 2014

//nybuf03fs01/DuPont$/Necco/HydroGeo/Hydro/GW_contours/2014-07-21 NEC Contour Tool/2014-07-21 - PZ D - F9.srf

**Figure 10**
**Select E-Zone Monitoring Wells**
**Groundwater Elevations 2005 Through 3rd Quarter 2014**
**DuPont Necco Park**




Necco 2014 E Zone Water Elev Trends.xlsx




Scale: Feet

0 100 200 300 400

**Contour interval = 1.0 foot**

**Elevation datum feet AMSL**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| | |
|---|---|
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| Project Manager: EAF | Date: 08-29-14 |
| | |
| Job number: 448576.02050 | |

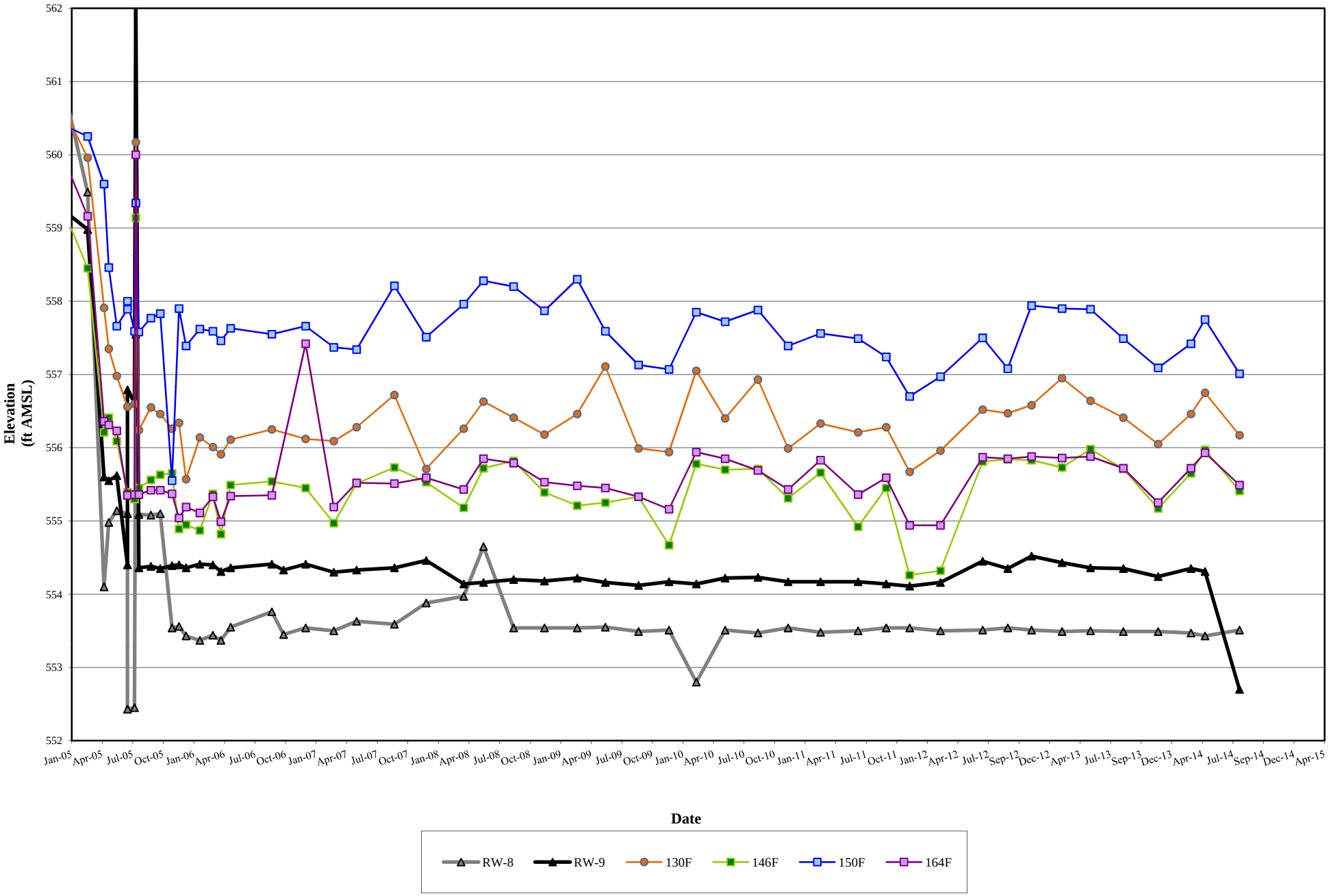
**LEGEND**

| | | | |
|---|---|---|---|
| 3B | Well ID | Potentiometric Contour | Source Area Extent |
| | Monitoring Well | Structure | |
| | Pumping Well | Road | |

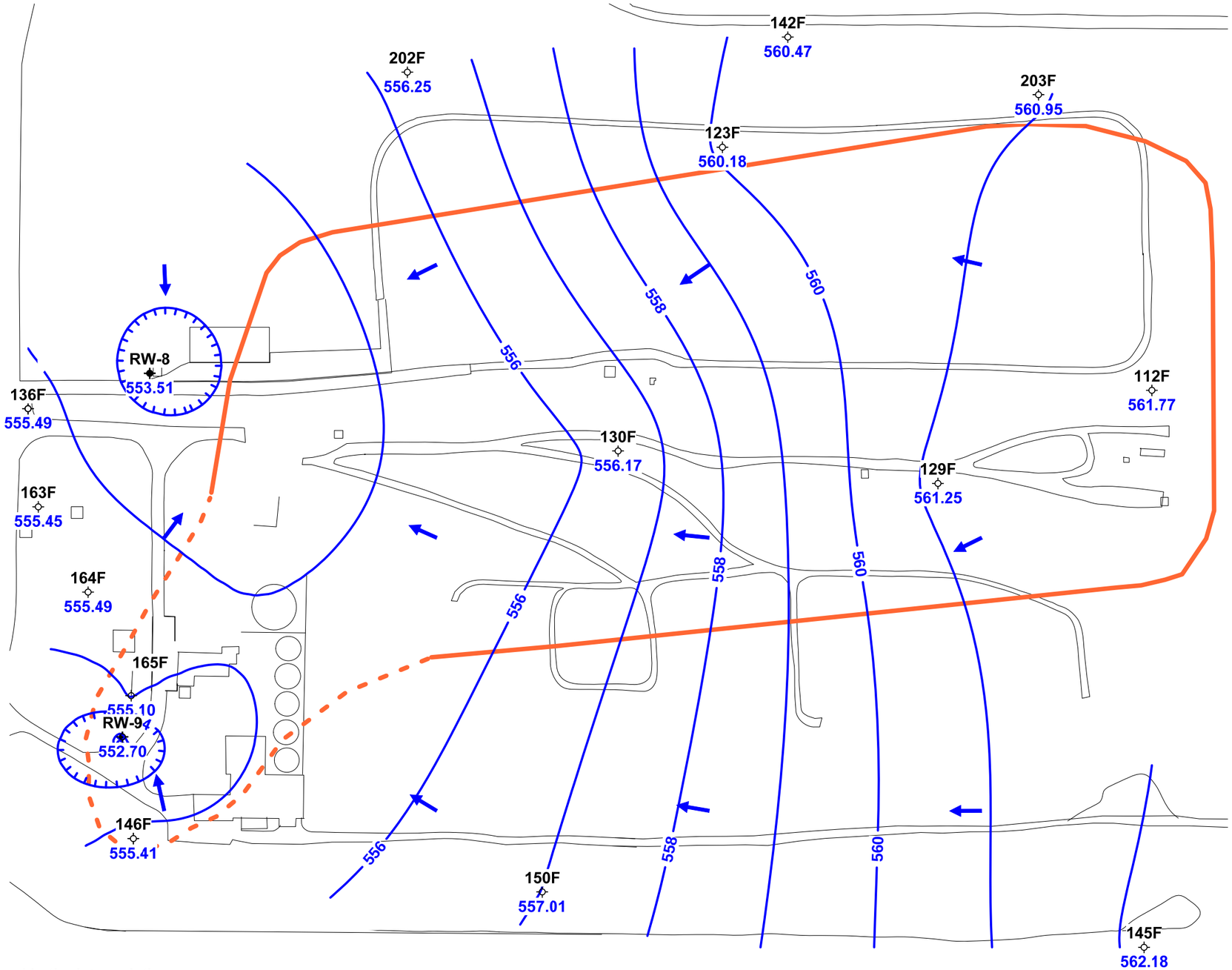
**Figure 11**
**Potentiometric Surface Map**
**DuPont Necco Park: E-Zone**
**July 21, 2014**

//nybuf03fs01/Dupont$/Necco/HydroGeo/Hydro/GW_contours/2014-07-21 NEC Contour Tool/2014-07-21 - PZ E - F11.srf

**Figure 12**
**Select F-Zone Monitoring Wells**
**Groundwater Elevations 2005 Through 3rd Quarter 2014**
**DuPont Necco Park**




Necco 2014 F Zone Water Elev Trends.xlsx




Scale: Feet

0 100 200 300 400

**Contour interval = 0.5 foot**

**Elevation datum feet AMSL**

**148F located downgradient was not used in the interpolation.**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|---|---|
| Created by: RBP | Date: 08-27-14 |
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| Project Manager: EAF | Date: 08-29-14 |
| | |
| Job number: 448576.02050 | |

## LEGEND

- 3B — Well ID
- Monitoring Well
- Pumping Well
- Potentiometric Contour
- Structure
- Road
- Source Area Extent

# Figure 13
# Potentiometric Surface Map
# DuPont Necco Park: F-Zone
# July 21, 2014

//nybuf03fs01/Dupont$/Necco/HydroGeo/Hydro/GW_contours/2014-07-21 NEC Contour Tool/2014-07-21 - PZ F - F13.srf

# APPENDIX A

# GROUNDWATER ELEVATION DATA
# THIRD QUARTER 2014

# APPENDIX A
# GROUNDWATER ELEVATION DATA 3Q14

| Sample Point | Date | Depth to Water | Casing Elevation | GW Elevation | Time |
|---|---|---|---|---|---|
| 136F | 7/21/14 | 24.84 | 580.33 | 555.49 | 1103 |
| 136G | 7/21/14 | 18.62 | 579.76 | 561.14 | 1104 |
| 136E | 7/21/14 | 23.92 | 579.59 | 555.67 | 1105 |
| 136D | 7/21/14 | 23.83 | 579.68 | 555.85 | 1106 |
| 136C | 7/21/14 | 10.29 | 581.62 | 571.33 | 1107 |
| 136B | 7/21/14 | 8.02 | 581.69 | 573.67 | 1108 |
| 116B | 7/21/14 | 15.35 | 590.05 | 574.7 | 1127 |
| RW-8 | 7/21/14 | 32.01 | 585.52 | 553.51 | 1129 |
| RDB-5 | 7/21/14 | 5.68 | 578.57 | 572.89 | 1112 |
| BZTW-4 | 7/21/14 | 4.98 | 578.18 | 573.2 | 1113 |
| 163A | 7/21/14 | 5.53 | 578.14 | 572.61 | 1124 |
| 163B | 7/21/14 | 5.44 | 577.94 | 572.5 | 1123 |
| 163D | 7/21/14 | 19.85 | 578.82 | 558.97 | 1122 |
| 163E | 7/21/14 | 21.92 | 579.06 | 557.14 | 1121 |
| 163F | 7/21/14 | 23.31 | 578.76 | 555.45 | 1120 |
| 164D | 7/21/14 | 19.21 | 577.42 | 558.21 | 1118 |
| 164E | 7/21/14 | 21.83 | 577.32 | 555.49 | 1117 |
| 164F | 7/21/14 | 21.78 | 577.27 | 555.49 | 1116 |
| 111A | 7/21/14 | 14.39 | 586.89 | 572.5 | 1133 |
| 111B | 7/21/14 | 14.60 | 584.94 | 570.34 | 1134 |
| 111D | 7/21/14 | 28.53 | 584.3 | 555.77 | 1135 |
| 130B | 7/21/14 | 12.82 | 585.63 | 572.81 | 1137 |
| 130C | 7/21/14 | 20.20 | 585.51 | 565.31 | 1138 |
| 130D | 7/21/14 | 28.75 | 584.96 | 556.21 | 1139 |
| 119A | 7/21/14 | 12.54 | 586.34 | 573.8 | 1141 |
| 119B | 7/21/14 | 14.40 | 586.77 | 572.37 | 1142 |
| 129A | 7/21/14 | 11.13 | 584.8 | 573.67 | 1147 |
| 129B | 7/21/14 | 14.11 | 585.24 | 571.13 | 1146 |
| 129C | 7/21/14 | 11.19 | 585.68 | 574.49 | 1145 |
| 129D | 7/21/14 | 25.66 | 586.03 | 560.37 | 1144 |
| 131A | 7/21/14 | 15.17 | 585.43 | 570.26 | 1149 |
| 112B | 7/21/14 | 10.44 | 581.9 | 571.46 | 1150 |
| 112C | 7/21/14 | 17.49 | 582.93 | 565.44 | 1151 |
| 118B | 7/21/14 | 14.65 | 583.9 | 569.25 | 1155 |
| 158D | 7/21/14 | 37.27 | 598.2 | 560.93 | 1200 |
| 102B | 7/21/14 | 22.53 | 599.01 | 576.48 | 1202 |
| 123A | 7/21/14 | 21.67 | 597.93 | 576.26 | 1205 |
| 123B | 7/21/14 | 19.59 | 595.98 | 576.39 | 1206 |
| 123C | 7/21/14 | 25.37 | 595.42 | 570.05 | 1207 |
| 123D | 7/21/14 | 36.39 | 596.51 | 560.12 | 1208 |
| 123F | 7/21/14 | 38.39 | 598.57 | 560.18 | 1209 |
| 120B | 7/21/14 | 26.08 | 599.18 | 573.1 | 1213 |
| RDB-3 | 7/21/14 | 5.62 | 579.31 | 573.69 | 1109 |
| 112F | 7/21/14 | 21.52 | 583.29 | 561.77 | 1152 |
| 175A | 7/21/14 | 12.24 | 586.81 | 574.57 | 1131 |
| 140A | 7/21/14 | 7.02 | 581.55 | 574.53 | 1156 |
| 142E | 7/21/14 | 25.08 | 586 | 560.92 | 1220 |
| 142F | 7/21/14 | 25.22 | 585.69 | 560.47 | 1221 |
| 136F | 7/21/14 | 24.83 | 580.33 | 555.5 | 1225 |
| 136G | 7/21/14 | 18.37 | 579.76 | 561.39 | 1226 |

# APPENDIX A
# GROUNDWATER ELEVATION DATA 3Q14

| Sample Point | Date | Depth to Water | Casing Elevation | GW Elevation | Time |
|---|---|---|---|---|---|
| 105C | 7/21/14 | 28.20 | 595.28 | 567.08 | 1207 |
| 105D | 7/21/14 | 39.14 | 594.77 | 555.63 | 1208 |
| 115C | 7/21/14 | 28.35 | 595.93 | 567.58 | 1212 |
| 115D | 7/21/14 | 40.74 | 596.62 | 555.88 | 1213 |
| 159A | 7/21/14 | 18.68 | 596.16 | 577.48 | 1217 |
| 159B | 7/21/14 | 24.06 | 596.37 | 572.31 | 1218 |
| 159C | 7/21/14 | 26.74 | 597.36 | 570.62 | 1219 |
| 159D | 7/21/14 | 42.10 | 597.67 | 555.57 | 1220 |
| 165D | 7/21/14 | 12.92 | 577.52 | 564.6 | 1226 |
| 165E | 7/21/14 | 22.17 | 577.56 | 555.39 | 1227 |
| 165F | 7/21/14 | 22.62 | 577.72 | 555.1 | 1228 |
| RW-9 | 7/21/14 | 22.43 | 575.13 | 552.7 | 1230 |
| 146AR | 7/21/14 | 6.59 | 576.92 | 570.33 | 1157 |
| 146B | 7/21/14 | 7.22 | 576.9 | 569.68 | 1158 |
| 146C | 7/21/14 | 7.32 | 576.35 | 569.03 | 1159 |
| 146E | 7/21/14 | 20.63 | 576.08 | 555.45 | 1200 |
| 146F | 7/21/14 | 20.63 | 576.04 | 555.41 | 1201 |
| 168A | 7/21/14 | 8.12 | 578.72 | 570.6 | 1135 |
| 168B | 7/21/14 | 10.41 | 578.9 | 568.49 | 1136 |
| 168C | 7/21/14 | 14.59 | 579.21 | 564.62 | 1137 |
| 169B | 7/21/14 | 11.25 | 580.43 | 569.18 | 1140 |
| 170B | 7/21/14 | 11.77 | 579.1 | 567.33 | 1141 |
| 160B | 7/21/14 | 14.02 | 582.75 | 568.73 | 1142 |
| 160C | 7/21/14 | 19.68 | 582.72 | 563.04 | 1143 |
| 171B | 7/21/14 | 10.83 | 579.54 | 568.71 | 1144 |
| 145C | 7/21/14 | 9.86 | 575.9 | 566.04 | 1147 |
| 145D | 7/21/14 | 10.57 | 576.05 | 565.48 | 1148 |
| 150A | 7/21/14 | 5.33 | 575.86 | 570.53 | 1100 |
| 150B | 7/21/14 | 6.43 | 575.99 | 569.56 | 1101 |
| 150C | 7/21/14 | 9.45 | 576.13 | 566.68 | 1102 |
| 150E | 7/21/14 | 18.86 | 576.15 | 557.29 | 1103 |
| 150F | 7/21/14 | 18.97 | 575.98 | 557.01 | 1104 |
| 145A | 7/21/14 | 5.14 | 575.84 | 570.7 | 1109 |
| 145B | 7/21/14 | 7.07 | 575.48 | 568.41 | 1110 |
| 145E | 7/21/14 | 14.10 | 575.98 | 561.88 | 1111 |
| 145F | 7/21/14 | 13.87 | 576.05 | 562.18 | 1112 |
| 172B | 7/21/14 | 8.50 | 576.95 | 568.45 | 1115 |
| 148D | 7/21/14 | 9.30 | 579.38 | 570.08 | 1120 |
| 148F | 7/21/14 | 21.25 | 576.21 | 554.96 | 1121 |
| 151B | 7/21/14 | 7.21 | 573.36 | 566.15 | 1125 |
| 151C | 7/21/14 | 5.09 | 573.18 | 568.09 | 1126 |
| 149B | 7/21/14 | 3.87 | 572.87 | 569 | 1130 |
| 149C | 7/21/14 | 5.94 | 573.26 | 567.32 | 1131 |
| 149D | 7/21/14 | 16.03 | 572.86 | 556.83 | 1132 |
| PZ-A | 7/21/14 | 10.18 | 579.06 | 568.88 | 1120 |
| PZ-B | 7/21/14 | 10.63 | 579.47 | 568.84 | 1119 |
| RW-11 | 7/21/14 | 15.21 | 578.78 | 563.57 | 1114 |
| TRW-7 | 7/21/14 | 7.39 | 577.89 | 570.5 | 1106 |
| 174A | 7/21/14 | 6.58 | 577.62 | 571.04 | 1107 |
| 176A | 7/21/14 | 8.92 | 580.03 | 571.11 | 1117 |

# APPENDIX A
# GROUNDWATER ELEVATION DATA 3Q14

| Sample Point | Date | Depth to Water | Casing Elevation | GW Elevation | Time |
|---|---|---|---|---|---|
| 179A | 7/21/14 | 8.18 | 579.01 | 570.83 | 1115 |
| D-11 | 7/21/14 | 7.08 | 578.07 | 570.99 | 1213 |
| BZTW-2 | 7/21/14 | 8.68 | 579.38 | 570.7 | 1124 |
| 178A | 7/21/14 | 8.93 | 579.92 | 570.99 | 1125 |
| 173A | 7/21/14 | 9.71 | 580.71 | 571 | 1122 |
| TRW-6 | 7/21/14 | 9.58 | 580.21 | 570.63 | 1123 |
| 184A | 7/21/14 | 8.89 | 579.88 | 570.99 | 1127 |
| 130F | 7/21/14 | 25.32 | 581.49 | 556.17 | 1128 |
| D-10 | 7/21/14 | 14.86 | 580.02 | 565.16 | 1130 |
| D-9 | 7/21/14 | 8.32 | 580.15 | 571.83 | 1129 |
| BZTW-1 | 7/21/14 | 8.70 | 579.67 | 570.97 | 1131 |
| 185A | 7/21/14 | 9.71 | 580.84 | 571.13 | 1132 |
| 186A | 7/21/14 | 11.31 | 579.76 | 568.45 | 1137 |
| 138C | 7/21/14 | 21.62 | 587.06 | 565.44 | 1136 |
| 138B | 7/21/14 | 13.11 | 583.98 | 570.87 | 1135 |
| 187A | 7/21/14 | 11.11 | 579.94 | 568.83 | 1210 |
| 188A | 7/21/14 | 14.51 | 580.91 | 566.4 | 1140 |
| 189A | 7/21/14 | 12.16 | 579.82 | 567.66 | 1145 |
| RW-5 | 7/21/14 | 18.00 | 578.88 | 560.88 | 1141 |
| 162C | 7/21/14 | 17.09 | 581 | 563.91 | 1144 |
| 129F | 7/21/14 | 20.11 | 581.36 | 561.25 | 1148 |
| 129E | 7/21/14 | 19.53 | 580.88 | 561.35 | 1147 |
| D-23 | 7/21/14 | 12.92 | 580.61 | 567.69 | 1146 |
| 190A | 7/21/14 | 12.23 | 580.58 | 568.35 | 1150 |
| 167B | 7/21/14 | 11.76 | 580.93 | 569.17 | 1151 |
| 191AR | 7/21/14 | 10.88 | 581.51 | 570.63 | 1153 |
| 192A | 7/21/14 | 14.38 | 584.08 | 569.7 | 1155 |
| 194A | 7/21/14 | 14.67 | 584.35 | 569.68 | 1200 |
| 161C | 7/21/14 | 21.04 | 582.64 | 561.6 | 1207 |
| 161B | 7/21/14 | 12.41 | 582.84 | 570.43 | 1208 |
| 139D | 7/21/14 | 23.25 | 585.49 | 562.24 | 1158 |
| 139C | 7/21/14 | 23.41 | 585.27 | 561.86 | 1157 |
| 139B | 7/21/14 | 16.89 | 585.39 | 568.5 | 1156 |
| RW-4 | 7/21/14 | 24.00 | 581.52 | 557.52 | 1202 |
| D-13 | 7/21/14 | 7.61 | 579.07 | 571.46 | 1103 |
| D-14 | 7/21/14 | 11.92 | 579.01 | 567.09 | 1104 |
| 137A | 7/21/14 | 8.09 | 578.47 | 570.38 | 1112 |
| 137B | 7/21/14 | 8.10 | 578.31 | 570.21 | 1110 |
| 137C | 7/21/14 | 11.81 | 578.39 | 566.58 | 1109 |
| 137D | 7/21/14 | 14.00 | 579.09 | 565.09 | 1111 |
| 201B | 7/21/14 | 10.32 | 579.25 | 568.93 | 1116 |
| 202D | 7/21/14 | 36.56 | 592.73 | 556.17 | 1220 |
| 202E | 7/21/14 | 36.98 | 592.73 | 555.75 | 1221 |
| 202F | 7/21/14 | 36.48 | 592.73 | 556.25 | 1222 |
| 203D | 7/21/14 | 33.00 | 593.85 | 560.85 | 1215 |
| 203E | 7/21/14 | 32.98 | 593.85 | 560.87 | 1216 |
| 203F | 7/21/14 | 32.90 | 593.85 | 560.95 | 1217 |
| 204C | 7/21/14 | 19.71 | 581.77 | 562.06 | 1205 |

# APPENDIX B

# GWTF PROCESS SAMPLING RESULTS
# THIRD QUARTER 2014

# Appendix B
# Summary of Analytical Results
# DuPont Necco Park
# Third Quarter 2014

| Method | CAS # | Parameter Name | Location<br>Sample Date<br>Units | BC-INFLUENT<br>7/21/14<br>FS | DEF-INFLUENT<br>7/21/14<br>FS | COMB-EFFLUENT<br>7/21/14<br>FS | TB<br>7/21/14<br>TB |
|---|---|---|---|---|---|---|---|
| | | **Field Parameters** | | | | | |
| NS | EVS0118 | COLOR | NONE | slight | cloudy | none | NA |
| NS | EVS0125 | ODOR | NONE | slight | none | slight | NA |
| NS | EVS0128 | ORP | MV | -68 | -207 | -142 | NA |
| NS | EVS0127 | PH | STD UNITS | 5.32 | 6.66 | 7.32 | NA |
| NS | EVS0044 | SPECIFIC CONDUCTANCE | UMHOS/CM | 7239 | 3561 | 3323 | NA |
| NS | EVS0113 | TEMPERATURE | DEGREES C | 14.2 | 14.6 | 14.8 | NA |
| NS | EVS0130 | TURBIDITY QUANTITATIVE | NTU | 53.1 | 50.9 | 10.69 | NA |
| | | **Volatile Organics** | | | | | |
| 8260C | 79345 | 1,1,2,2-Tetrachloroethane | UG/L | 2900 | 1400 | 610 | <0.18 |
| 8260C | 79005 | 1,1,2-Trichloroethane | UG/L | 3400 | 2300 | 400 | <0.27 |
| 8260C | 75354 | 1,1-Dichloroethene | UG/L | 810 | 300 J | <3.8 | <0.19 |
| 8260C | 107062 | 1,2-Dichloroethane | UG/L | 490 J | 180 J | 28 | <0.22 |
| 8260C | 56235 | Carbon Tetrachloride | UG/L | 1300 | 1100 | <2.6 | <0.13 |
| 8260C | 67663 | Chloroform | UG/L | 14000 | 3600 | 190 | <0.16 |
| 8260C | 156592 | cis-1,2 Dichloroethene | UG/L | 11000 | 10000 | 160 | <0.17 |
| 8260C | 75092 | Methylene Chloride | UG/L | 2700 | 4400 | 94 | <0.33 |
| 8260C | 127184 | Tetrachloroethene | UG/L | 4500 | 1000 | 32 | <0.29 |
| 8260C | 156605 | trans-1,2-Dichloroethene | UG/L | 650 | 700 | <3.8 | <0.19 |
| 8260C | 79016 | Trichloroethene | UG/L | 15000 | 5800 | 76 | <0.17 |
| 8260C | 75014 | Vinyl Chloride | UG/L | 2800 | 1900 | <4.4 | <0.22 |
| | | | | 59550 | 32680 | 1590 | 0 |

< Not detected at stated reporting limit
N/A Not sampled for parameter
J Estimated concentration

# ATTACHMENT 1

# NECCO PARK
# 3Q14 WATER LEVELS

# (ELECTRONIC FORMAT ONLY)