DuPont Corporate Remediation Group
Buffalo Avenue & 26th Street
Building 35 3rd Floor
Niagara Falls, NY 14302
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August 23, 2011

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 SECOND QUARTER 2011 DATA PACKAGE

Enclosed are three copies of the *Second Quarter 2011 (2Q11) 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, and figures showing potentiometric surface contours, vertical gradients, and drawdown contours. The data package also includes a 2Q11 monitoring summary for dense non-aqueous phase liquid (DNAPL).

Pumping system uptime for 2Q11 was 89.3 percent. The total volume of groundwater treated was 3,370,066 gallons. DNAPL was observed at Recovery Well-5 (RW-5) in each month of 2Q11. A total of 48 gallons of DNAPL was removed during 2Q11.

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/ddt
Enc.

cc: M. Hinton/NYSDEC
D. Taylor/Parsons
Carol Luttrell/DuPont

SOURCE AREA HYDRAULIC CONTROL SYSTEM
SECOND QUARTER 2011
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

40 La Riviere Drive, Suite 350
Buffalo, New York 14202
Phone: (716) 541-0760

August 2011

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ATTACHMENT 1

Electronic Copy of Groundwater Elevation Data - Second Quarter 2011

SECTION 1

DATA PACKAGE SUMMARY

1.1 INTRODUCTION

This data package presents a summary of operating and monitoring data collected during the second quarter of 2011 (2Q11) 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) (DuPont Corporate Remediation Group 2005).

This data package is the 24th submitted since the 2005 startup of the Necco Park Hydraulic Control System (HCS) and includes a summary of operations for the pumping wells and the Groundwater Treatment Facility (GWTF). Included are figures depicting groundwater elevation contours for seven groundwater flow zones (Figures 1, 4, and 7 through 11) and groundwater elevation data (Appendix A). An electronic copy of the groundwater elevation data is provided as Attachment 1. Figures illustrating drawdown for the AT-Zone and A-Zone and vertical gradients between the AT-Zone and A-Zone and A-Zone and B-Zone are also included (Figures 2, 3, 5, and 6).

Figures 2 and 5 present the vertical gradient (in feet per foot [ft/ft]) for selected well pairs between the AT-Zone and A-Zone and the A-Zone and B-Zones, respectively. Vertical gradients are calculated by subtracting the elevation of the upper zone from the elevation of the lower zone and dividing the result by the difference in the elevation of the center of the well screen (for the AT-Zone and A-Zone wells) or the center of the open rock zone (for B-Zone wells).

Figures 3 and 6 present potentiometric contours of the net drawdown in selected wells between April 5, 2005 (immediately prior to HCS startup) and the groundwater elevation in each well on June 8, 2011.

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 2Q11:

	HCS Uptime (%)	Groundwater Treated (gallons)	DNAPL Removed (gallons)
April	96.6%	1,299,322	12
May	88.5%	1,110,044	20
June	83.0%	960,700	16
2Q11 Total	**89.3%**	**3,370,066**	**48**

System downtime is categorized into two groups: individual recovery well downtime and complete HCS system downtime. Table 1 summarizes any individual recovery well downtime that exceeded a 48-hour period during 2Q11.

The following three unscheduled recovery well downtime events occurred during 2Q11:

1. Unscheduled downtime due to pump motor failure at RW-11 in April with a 2-day downtime
2. Unscheduled downtime due to a control system limit condition for the acid addition valve causing the pump to be shut down at RW-11 in May with a 2-day downtime
3. Unscheduled downtime due to failed piping elbow in the containment vault causing RW-4, RW-5, and RW-11 to be shutdown in June with a 7-day downtime

There were approximately 36 hours of unscheduled HCS downtime in May due to a power failure. No was no scheduled HCS downtime during 2Q11.

Table 2 provides an historical operations summary by quarter since HCS operations began.

Monthly DNAPL monitoring was completed on April 14, May 11, and June 8, 2011. DNAPL was observed in RW-5 each month during the quarter, and 12, 20, and 16 gallons of DNAPL were removed in April, May, and June, respectively. Additionally, trace DNAPL was noted each of the three months in well 204C and in June in well 139C. Forty-eight gallons of DNAPL were recovered during 2Q11.

1.3 GWTF PROCESS SAMPLING

In accordance with the SAMP, GWTF influent samples (from B/C-Zone and D/E/F-Zone) and a combined effluent sample were collected in 2Q11. Samples were collected by TestAmerica Laboratories of Amherst, New York, on June 3, 2011, 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) discharge permit for the site, the Necco GWTF discharge is sampled and reported quarterly to the Niagara Falls Water Board. The Necco Park 2Q11 wastewater samples were collected on April 13, 2011. There were no permit limit exceedances for the quarter. The Necco POTW discharge permit was renewed in May 2009 and remains valid through May 1, 2014.

SECTION 2

REFERENCES

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

TABLES

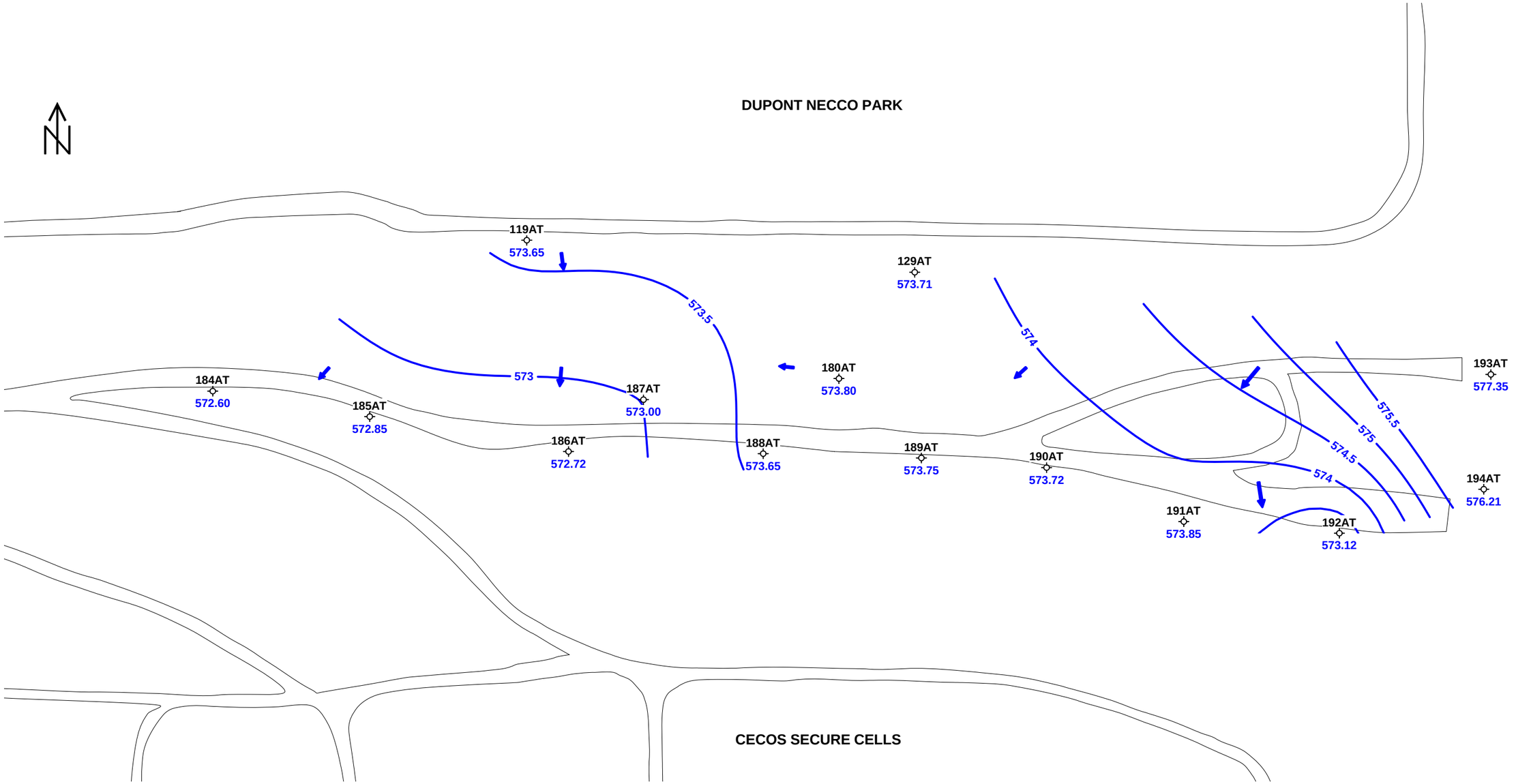
Table 1
Individual Well Shutdown Summary 2Q11
DuPont Necco Park

	Well ID	Date(s)	Length of Shutdown (hours)	Reason for Shutdown	Remarks
April	RW-11	April 15 through 18	60	Idividual well shutdown due to pump motor failure.	Unscheduled
May	RW-11	May 6 through 9	57	Idividual well shutdown due to programed controller limit for acid valve open a greater percentage and time out of limits.	Unscheduled
June	ALL	May 31	36	Power failure	Unscheduled
	RW-4, RW-5, and RW-11	June 16 through June 23	172	Failed elbow in the containment vault.	Unscheduled

Table 2
Historical HCS Operational Summary - 2Q11
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
TOTALS	**---**	**---**	**83,114,669**	**1,128**
AVERAGE	**91.6**	**93.7**	**---**	**---**

FIGURES



Scale: Feet

0 50 100 150 200

Contour Interval = 0.5 feet

Elevation datum feet AMSL

PARSONS

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Buffalo, NY 14202

Created by	JWS
Checked by	EAF
Approved by	
Project Manager	DDT
Job number: 445357.02022	

LEGEND

- **3B** — **Well ID**
- **Monitoring Well**
- **Pumping Well**
- **Potentiometric Contour**
- **Structure**
- **Road**

Figure 1
Potentiometric Surface Map
DuPont Necco Park: AT-Zone
June 08, 2011

U:/Necco/HydroGeo/Hydro/GW_contours/2011-06-08 NEC Contour Tool/2011-06-08 - AT PZ - F1.srf

DUPONT NECCO PARK

119AT/A
0.03

129AT/A
0.03

184AT/A
0.05

185AT/A
0.09

186AT/A
-0.43

187AT/A
-0.42

188AT/A
-0.62

189AT/A
-0.58

190AT/A
-0.39

191AT/A
-0.16

192AT/A
-0.08

193AT/A
-0.32

194AT/A
-0.33

CECOS SECURE CELLS

Scale: Feet

0 50 100 150 200

Negative value indicates downward vertical gradient

Elevation datum feet AMSL

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Checked by:	EAF
Project Manager:	DDT
Job number: 445357.02022	

LEGEND

- 3B — Well ID
- Monitoring Well
- Pumping Well
- Structure
- Road

Figure 2
Vertical Gradient: AT-Zone to A-Zone
DuPont Necco Park
June 08, 2011

U:/Necco/HydroGeo/Hydro/GW_contours/2011-06-08 NEC Contour Tool/2011-06-08 - ATAvgrad - F2.srf

DUPONT NECCO PARK

119AT
2.92

129AT
2.88

184AT
3.33

185AT
3.19

187AT
3.61

180AT
4.02

193AT
2.37

186AT
3.60

188AT
4.05

189AT
4.30

190AT
4.30

194AT
-0.01

191AT
4.17

192AT
0.49

3.5
4.0
3.0
2.0
4.0

CECOS SECURE CELLS

Scale: Feet

0 50 100 150 200

Contour Interval = 0.5 feet

Elevation datum feet AMSL

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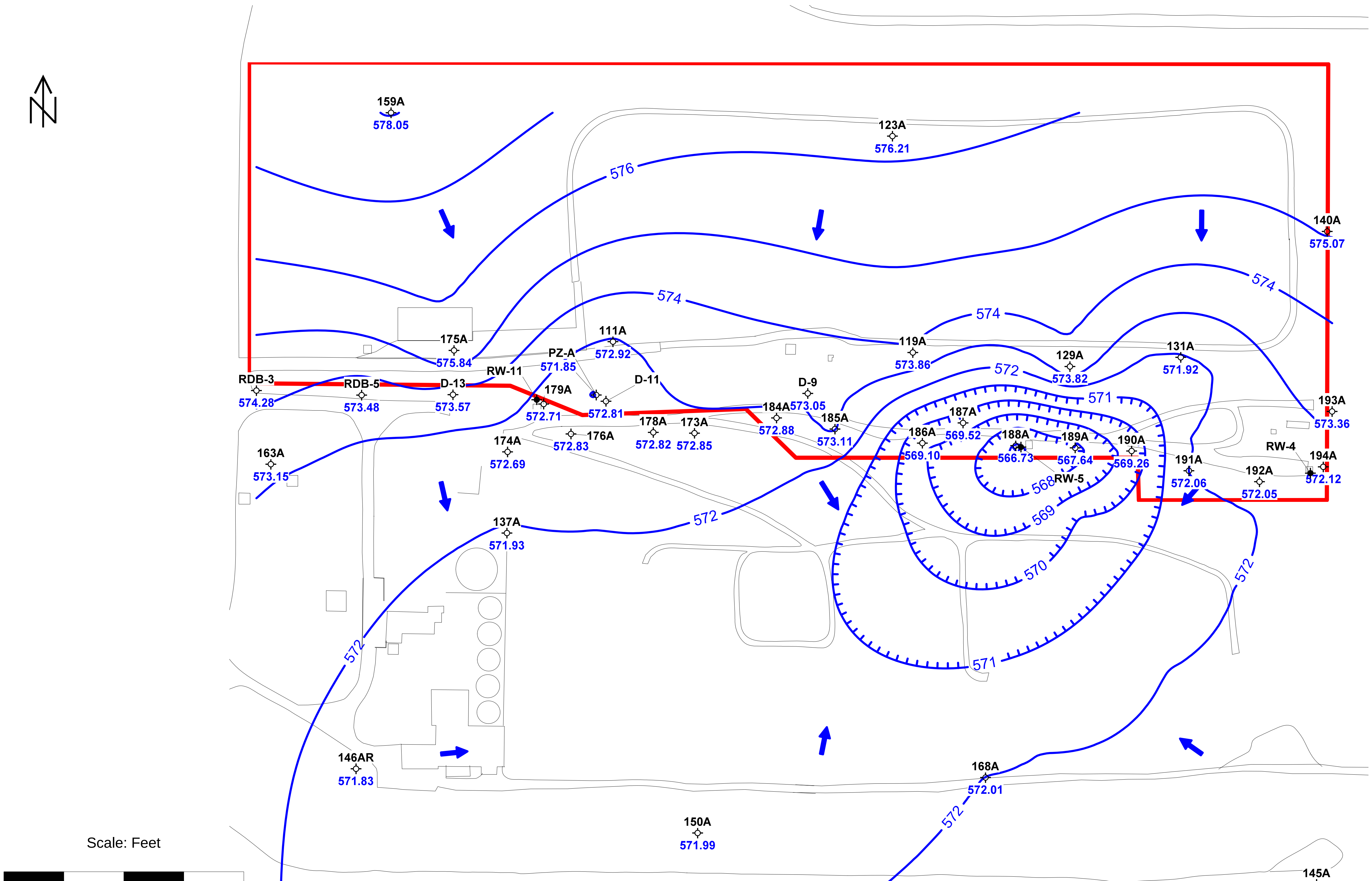
Project Manager:	DDT
Job number: 445357.02022	

LEGEND

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

Figure 3
Drawdown Contour Map
DuPont Necco Park: AT-Zone
April 5, 2005 (Static) to June 08, 2011

U:/Necco/HydroGeo/Hydro/GW_contours/2011-02-16 NEC Contour Tool/2011-02-16 - AT DD F3.srf



Scale: Feet

0 100 200 300 400

Contour Interval = 1 foot **Elevation datum feet AMSL**

Note: Wells 117A and 139A were not used in the contouring.

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Created by: JWS	Date: 08-03-11
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Project Manager: DDT	Date: date
Job number: 445357.02022	

LEGEND

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

Figure 4
Potentiometric Surface Map
DuPont Necco Park: A-Zone
June 08, 2011

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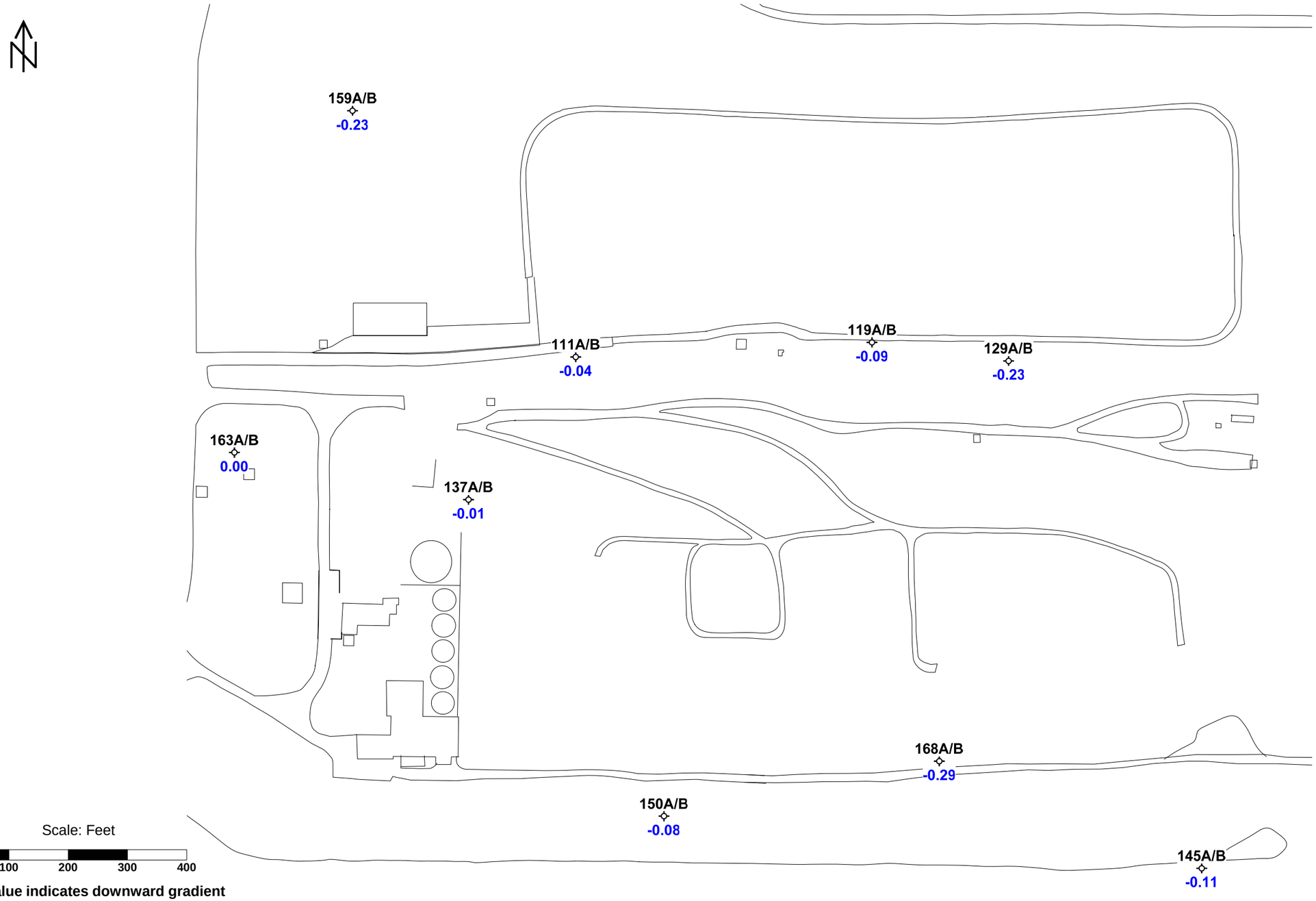

Scale: Feet

0 100 200 300 400

Negative value indicates downward gradient

Elevation datum feet AMSL

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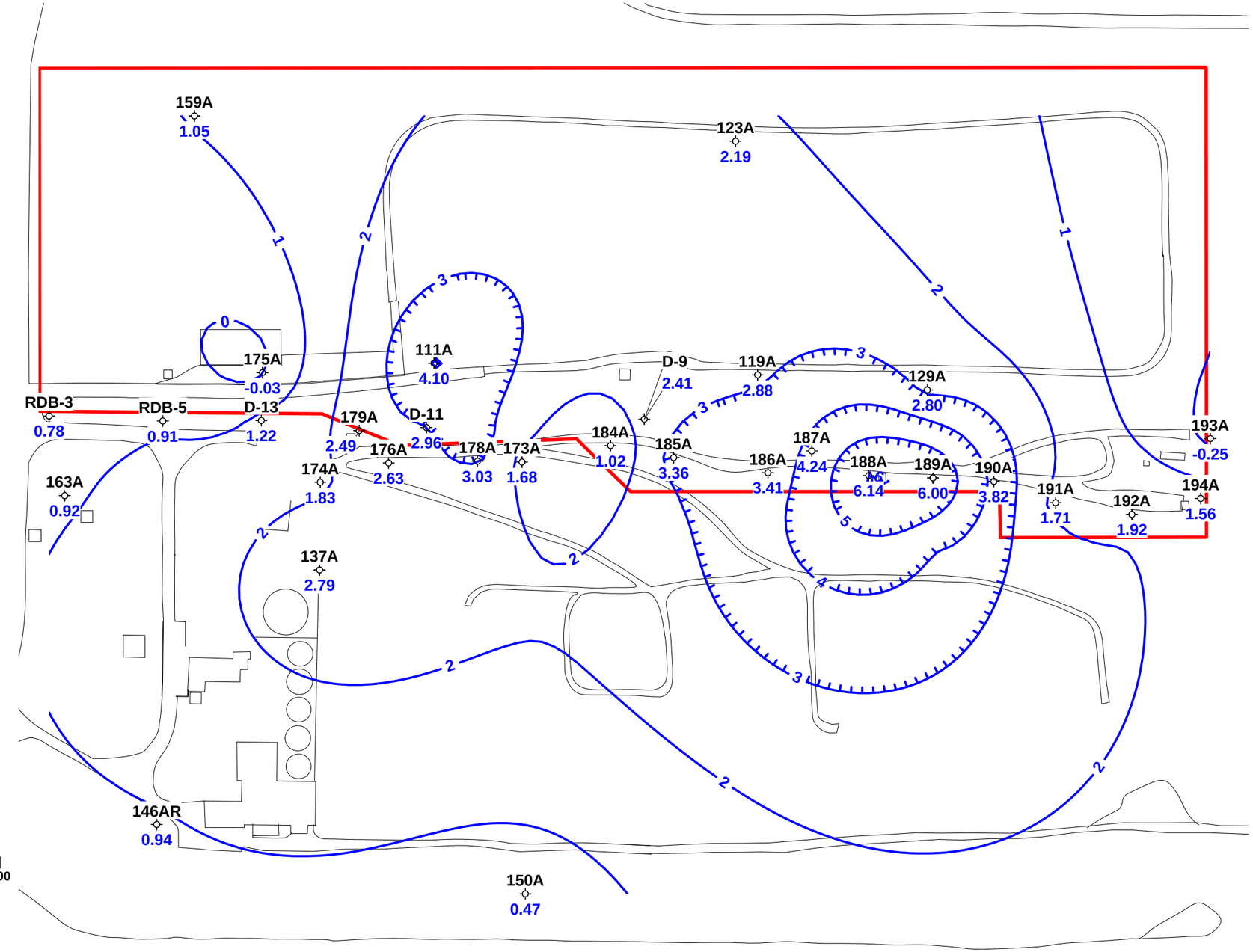
Project Manager: DDT	Date: date
Job number: 445357.02022	

LEGEND

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

Figure 5
Vertical Gradient: A-Zone to B-Zone
DuPont Necco Park
June 08, 2011

U:/Necco/HydroGeo/Hydro/GW_contours/2011-06-08 NEC Contour Tool/2011-06-08 - ABvgrad - F5.srf



Scale: Feet

0 100 200 300 400

Contour interval = 1.0 feet

Elevation datum feet AMSL

Note:140A was not used in the contour method.

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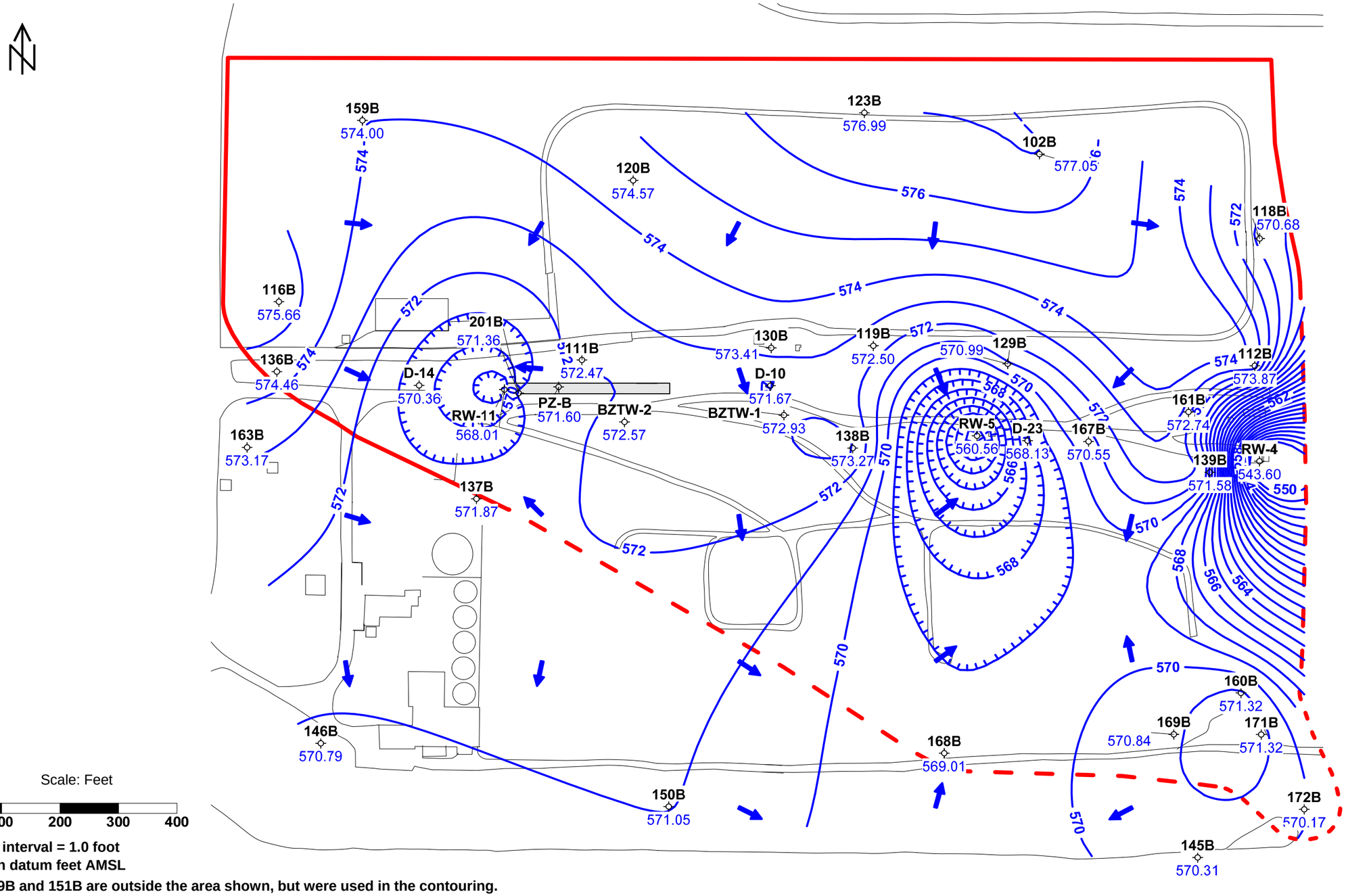
Project Manager: DDT	Date:
Job number: 445357.02022	

LEGEND

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

Figure 6
Drawdown Contour Map
DuPont Necco Park: A-Zone
April 5, 2005 (Static) to June 06, 2011

U:/Necco/HydroGeo/Hydro/GW_contours/2011-06-08 NEC Contour Tool/2011-06-08 - A DD F6.srf



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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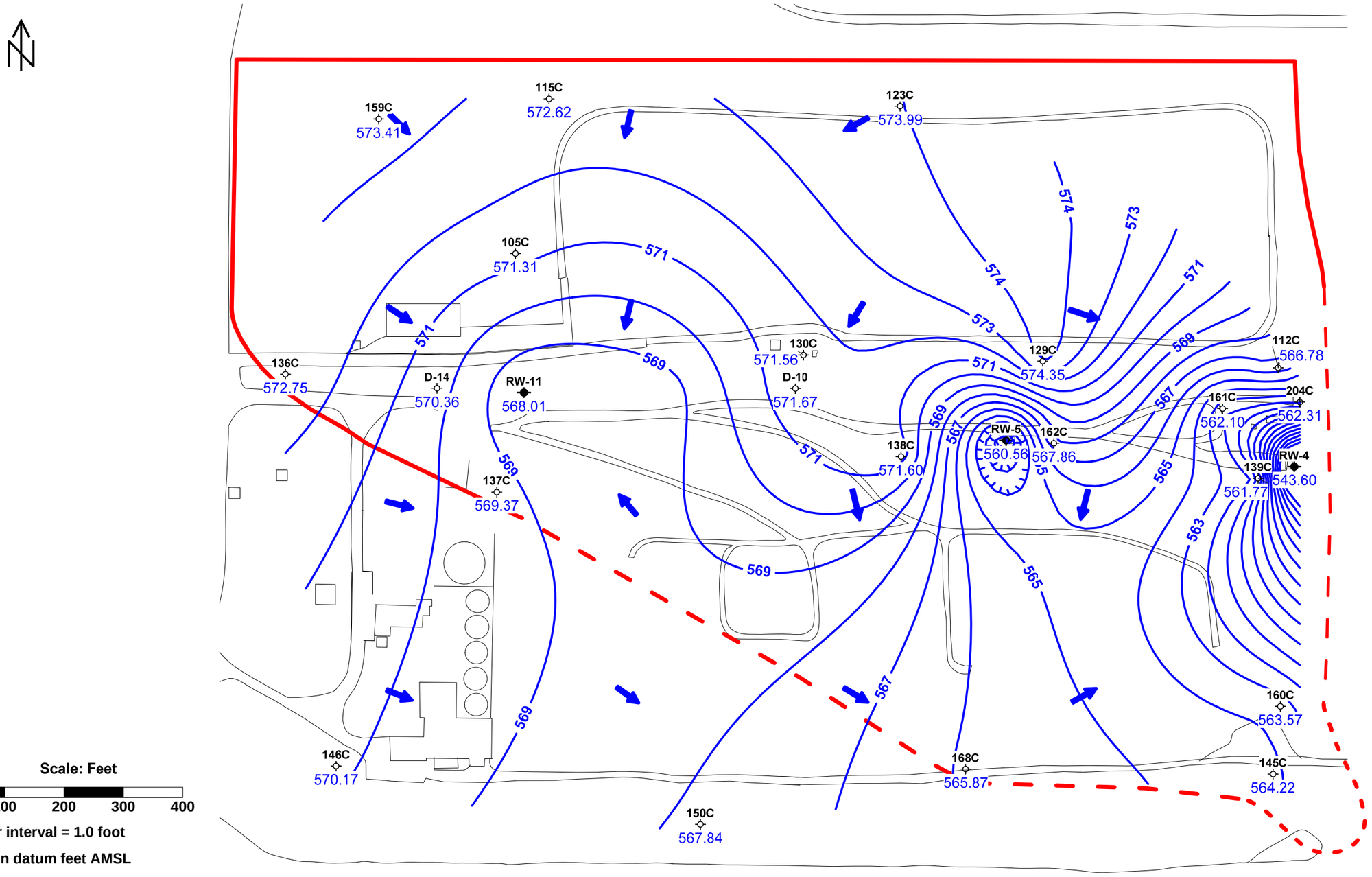
Project Manager: DDT	Date: date
Job number: 445357.02022	

LEGEND

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

Figure 7
Potentiometric Surface Map
DuPont Necco Park: B-Zone
June 08, 2011

U:/Necco/HydroGeo/Hydro/GW_contours/2011-06-08 NEC Contour Tool/2011-06-08 - PZ B - F7.srf



Scale: Feet

0 100 200 300 400

Contour interval = 1.0 foot

Elevation datum feet AMSL

Well 112C was not used in the contouring due to suspect casing.

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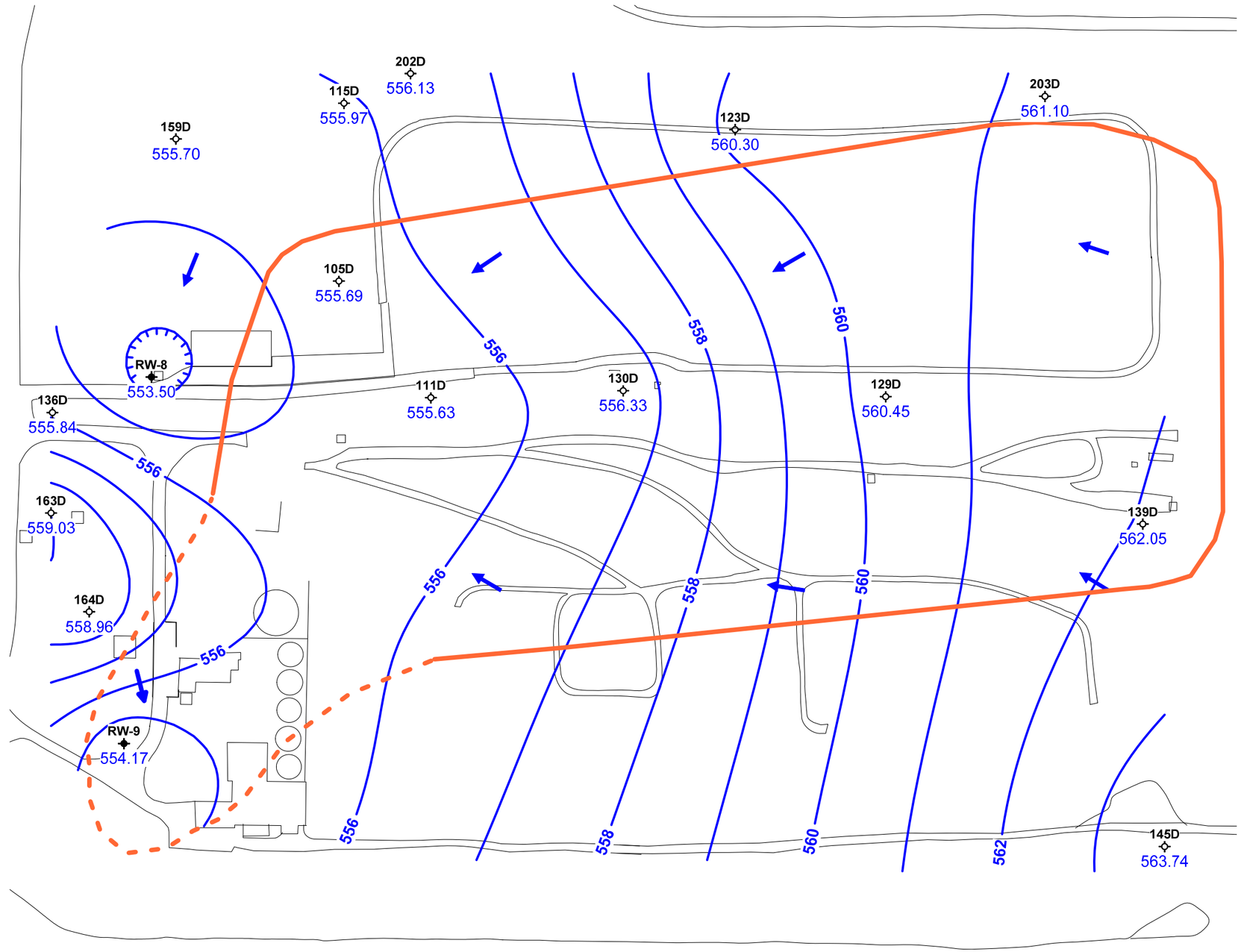
Project Manager: DDT	Date:
Job number: 445357.02022	

LEGEND

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

Figure 8
Potentiometric Surface Map
DuPont Necco Park: C-Zone
June 08, 2011

U:/Necco/HydroGeo/Hydro/GW_contours/2011-06-08 NEC Contour Tool/2011-06-08 - PZ C - F8.srf



Scale: Feet

0 100 200 300 400

Contour interval = 1.0 feet

Elevation datum feet AMSL

Well 149, located outside the map area, was used in the contour interpolation.

Well 137D, 148D, 158D, and 165D, were not used in the interpolation.

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Created by: JWS	Date: 08-03-11
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Project Manager: DDT	Date:
Job number: 445357.02022	

LEGEND

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

Figure 9
Potentiometric Surface Map
DuPont Necco Park: D-Zone
June 08, 2011

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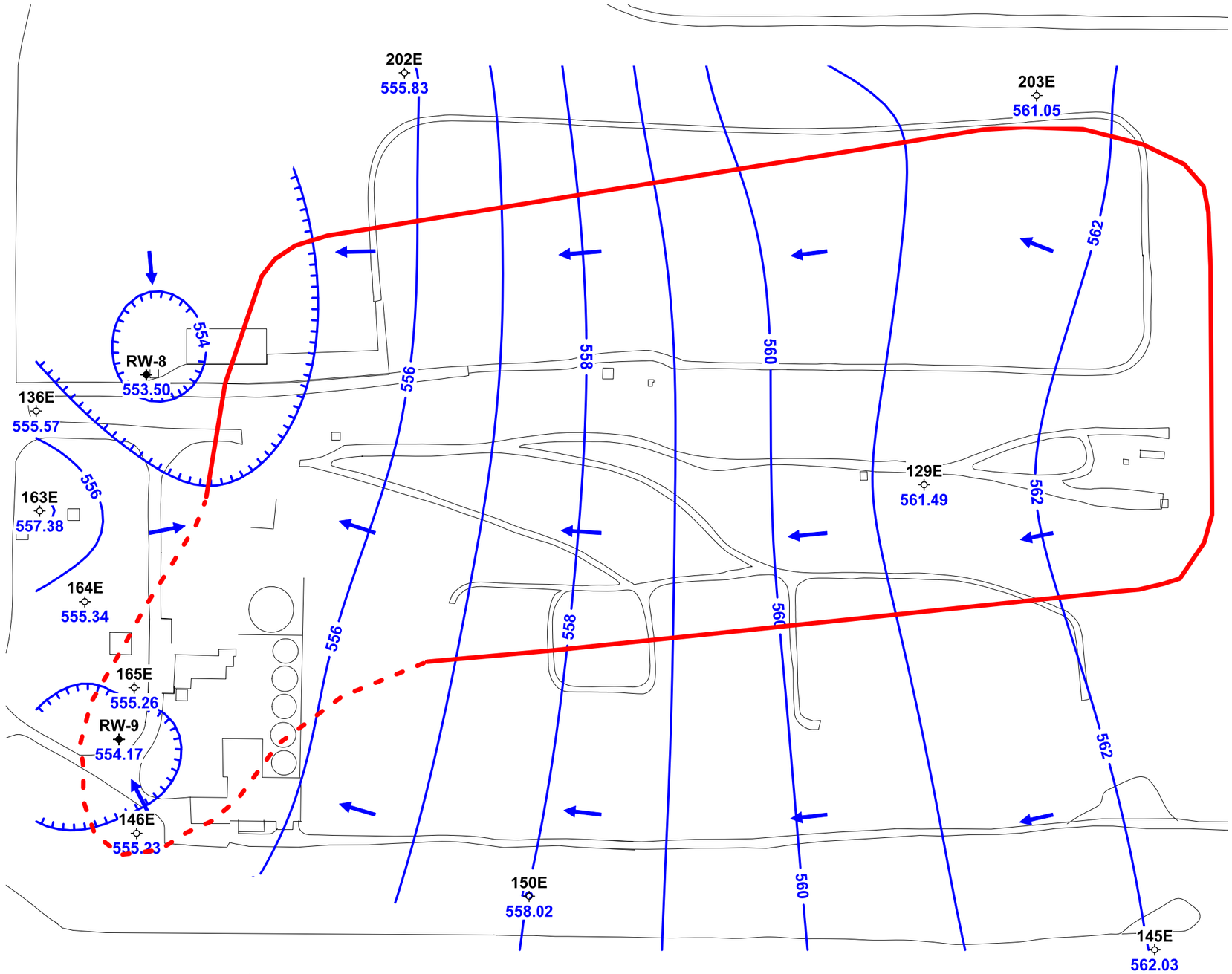

Scale: Feet

0 100 200 300 400

Contour interval = 0.5 foot

Elevation datum feet AMSL

Well 142E was not used in the contouring due to anomalous measurement

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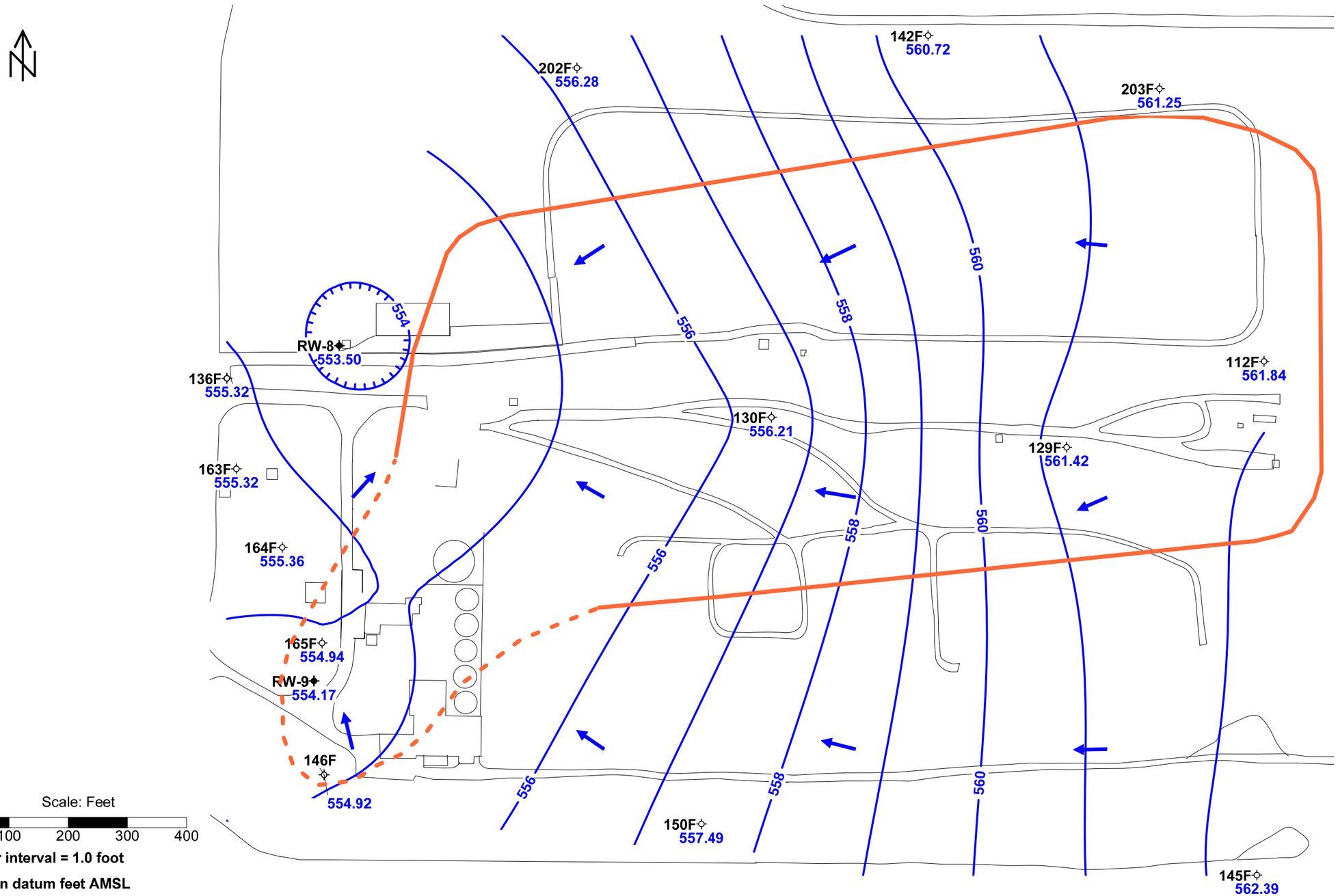
Project Manager: DDT	Date:
Job number: 445357.02022	

LEGEND

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

Figure 10
Potentiometric Surface Map
DuPont Necco Park: E-Zone
June 08, 2011

U:/Necco/HydroGeo/Hydro/GW_contours/2011-02-16 NEC Contour Tool/2011-02-16 - PZ E - F10.srf



Contour interval = 1.0 foot

Elevation datum feet AMSL

Wells 123F and 148F were not used in the interpolation

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Created by: JWS	Date: 08-03-11
Checked by: EAF	Date: 08-10-11
Project Manager: DDT	Date:
	Date:
Job number: 445357.02022	

LEGEND

3B	Well ID	Potentiometric Contour	Source Area Extent
☼	Monitoring Well	Structure	
✦	Pumping Well	Road	

Figure 11
Potentiometric Surface Map
DuPont Necco Park: F-Zone
June 08, 2011

U:/Necco/HydroGeo/Hydro/GW_contours/2011-06-08 NEC Contour Tool/2011-06-08 - PZ F - F11.srf

APPENDIX A

GROUNDWATER ELEVATION DATA
SECOND QUARTER 2011

APPENDIX A
NECCO PARK WATERLEVELS
JUNE 8, 2011

SAMPLE POINT	DATE	DEPTH TO WATER	CASING ELEVATION	GW ELEVATION	TIME
136F	06/08/11	25.01	580.33	555.32	1047
136G	06/08/11	20.63	579.76	559.13	1048
136E	06/08/11	24.02	579.59	555.57	1049
136D	06/08/11	23.84	579.68	555.84	1050
136C	06/08/11	8.87	581.62	572.75	1051
136B	06/08/11	7.23	581.69	574.46	1052
116B	06/08/11	14.39	590.05	575.66	1112
RW-8	06/08/11	32.02	585.52	553.50	1113
RDB-5	06/08/11	5.09	578.57	573.48	1055
BZTW-4	06/08/11	4.19	578.18	573.99	1056
PZ 200-AT	06/08/11	6.23	586.46	580.23	1233
PZ 199-AT	06/08/11	4.98	584.92	579.94	1229
PZ 198-AT	06/08/11	3.93	583.93	580.00	1227
PZ 197-AT	06/08/11	4.57	584.57	580.00	1225
PZ 196-AT	06/08/11	5.71	585.71	580.00	1223
PZ 195-AT	06/08/11	4.72	584.80	580.08	1219
163A	06/08/11	4.99	578.14	573.15	1108
163B	06/08/11	4.77	577.94	573.17	1107
163D	06/08/11	19.79	578.82	559.03	1106
163E	06/08/11	21.68	579.06	557.38	1105
163F	06/08/11	23.44	578.76	555.32	1104
164D	06/08/11	18.46	577.42	558.96	1102
164E	06/08/11	21.98	577.32	555.34	1101
164F	06/08/11	21.91	577.27	555.36	1100
111A	06/08/11	13.97	586.89	572.92	1119
111B	06/08/11	12.47	584.94	572.47	1118
111D	06/08/11	28.67	584.30	555.63	1117
130B	06/08/11	12.22	585.63	573.41	1121
130C	06/08/11	13.95	585.51	571.56	1122
130D	06/08/11	28.63	584.96	556.33	1123
119A	06/08/11	12.48	586.34	573.86	1126
119AT	06/08/11	12.97	586.62	573.65	1125
119B	06/08/11	14.27	586.77	572.50	1127
129A	06/08/11	10.98	584.80	573.82	1134
129AT	06/08/11	11.23	584.94	573.71	1133
129B	06/08/11	14.25	585.24	570.99	1132
129C	06/08/11	11.33	585.68	574.35	1131
129D	06/08/11	25.58	586.03	560.45	1130
131A	06/08/11	13.51	585.43	571.92	1136
112B	06/08/11	8.03	581.90	573.87	1140
112C	06/08/11	16.15	582.93	566.78	1141
118B	06/08/11	13.22	583.90	570.68	1145
117A	06/08/11	5.09	580.52	575.43	1151
158D	06/08/11	36.93	598.20	561.27	1300
102B	06/08/11	21.96	599.01	577.05	1202

APPENDIX A
NECCO PARK WATERLEVELS
JUNE 8, 2011

SAMPLE POINT	DATE	DEPTH TO WATER	CASING ELEVATION	GW ELEVATION	TIME
123A	06/08/11	21.72	597.93	576.21	1205
123B	06/08/11	18.99	595.98	576.99	1207
123C	06/08/11	21.43	595.42	573.99	1208
123D	06/08/11	36.21	596.51	560.30	1209
123F	06/08/11	38.31	598.57	560.26	1206
120B	06/08/11	24.61	599.18	574.57	1213
136F	06/08/11	25.03	580.33	555.30	1236
136G	06/08/11	20.65	579.76	559.11	1237
RDB-3	06/08/11	5.03	579.31	574.28	1053
112F	06/08/11	21.45	583.29	561.84	1139
141G	06/08/11	28.13	582.53	554.40	1153
175A	06/08/11	10.97	586.81	575.84	1115
140A	06/08/11	6.36	581.43	575.07	1146
142E	06/08/11	24.99	586.00	561.01	1220
142F	06/08/11	24.97	585.69	560.72	1221
141C	06/08/11	15.18	580.05	564.87	1154
105C	06/08/11	23.97	595.28	571.31	1225
105D	06/08/11	39.08	594.77	555.69	1226
115C	06/08/11	23.31	595.93	572.62	1230
115D	06/08/11	40.65	596.62	555.97	1235
143G	06/08/11	36.82	591.34	554.52	1239
159A	06/08/11	18.11	596.16	578.05	1243
159B	06/08/11	22.37	596.37	574.00	1244
159C	06/08/11	23.95	597.36	573.41	1245
159D	06/08/11	41.97	597.67	555.70	1246
165D	06/08/11	11.41	577.52	566.11	1123
165E	06/08/11	22.30	577.56	555.26	1122
165F	06/08/11	22.78	577.72	554.94	1121
RW-9	06/08/11	20.96	575.13	554.17	1120
146AR	06/08/11	5.09	576.92	571.83	1116
146B	06/08/11	6.11	576.90	570.79	1117
146C	06/08/11	6.18	576.35	570.17	1118
146E	06/08/11	20.85	576.08	555.23	1119
146F	06/08/11	21.12	576.04	554.92	1120
168A	06/08/11	6.71	578.72	572.01	1100
168B	06/08/11	9.89	578.90	569.01	1101
168C	06/08/11	13.34	579.21	565.87	1102
169B	06/08/11	9.59	580.43	570.84	1105
170B	06/08/11	10.98	579.10	568.12	1106
160B	06/08/11	11.43	582.75	571.32	1107
160C	06/08/11	19.15	582.72	563.57	1108
171B	06/08/11	8.22	579.54	571.32	1109
145C	06/08/11	11.68	575.90	564.22	1111
145D	06/08/11	12.31	576.05	563.74	1113
150A	06/08/11	3.87	575.86	571.99	1127

APPENDIX A
NECCO PARK WATERLEVELS
JUNE 8, 2011

SAMPLE POINT	DATE	DEPTH TO WATER	CASING ELEVATION	GW ELEVATION	TIME
150B	06/08/11	4.94	575.99	571.05	1128
150C	06/08/11	8.29	576.13	567.84	1129
150E	06/08/11	18.13	576.15	558.02	1130
150F	06/08/11	18.49	575.98	557.49	1131
145A	06/08/11	3.54	575.84	572.30	1137
145B	06/08/11	5.17	575.48	570.31	1143
145E	06/08/11	13.95	575.98	562.03	1140
145F	06/08/11	13.66	576.05	562.39	1142
172B	06/08/11	6.78	576.95	570.17	1135
148D	06/08/11	7.35	579.38	572.03	1159
148F	06/08/11	23.17	576.21	553.04	1201
151B	06/08/11	6.32	573.36	567.04	1150
151C	06/08/11	6.81	573.18	566.37	1151
149B	06/08/11	3.25	572.87	569.62	1210
149C	06/08/11	5.29	573.26	567.97	1211
149D	06/08/11	16.03	572.86	556.83	1213
PZ-A	06/08/11	7.21	579.06	571.85	1110
PZ-B	06/08/11	7.87	579.47	571.60	1109
RW-11	06/08/11	10.77	578.78	568.01	1105
TRW-7	06/08/11	5.55	577.89	572.34	1057
174A	06/08/11	4.93	577.62	572.69	1056
176A	06/08/11	7.20	580.03	572.83	1108
179A	06/08/11	6.30	579.01	572.71	1106
D-11	06/08/11	5.26	578.07	572.81	1117
BZTW-2	06/08/11	6.81	579.38	572.57	1114
178A	06/08/11	7.10	579.92	572.82	1113
173A	06/08/11	7.86	580.71	572.85	1115
TRW-6	06/08/11	7.50	580.21	572.71	1116
184AT	06/08/11	7.09	579.69	572.60	1122
184A	06/08/11	7.00	579.88	572.88	1123
130G	06/08/11	26.13	580.79	554.66	1124
130F	06/08/11	25.28	581.49	556.21	1125
D-10	06/08/11	8.35	580.02	571.67	1127
D-9	06/08/11	7.10	580.15	573.05	1126
BZTW-1	06/08/11	6.74	579.67	572.93	1128
185AT	06/08/11	7.84	580.69	572.85	1131
185A	06/08/11	7.73	580.84	573.11	1130
186AT	06/08/11	7.38	580.10	572.72	1136
186A	06/08/11	10.66	579.76	569.10	1135
138C	06/08/11	15.46	587.06	571.60	1134
138B	06/08/11	10.71	583.98	573.27	1133
187AT	06/08/11	6.30	579.30	573.00	1139
187A	06/08/11	10.42	579.94	569.52	1138
188AT	06/08/11	6.94	580.59	573.65	1141
188A	06/08/11	14.18	580.91	566.73	1140

APPENDIX A
NECCO PARK WATERLEVELS
JUNE 8, 2011

SAMPLE POINT	DATE	DEPTH TO WATER	CASING ELEVATION	GW ELEVATION	TIME
53	06/08/11	3.64	578.20	574.56	1145
180AT	06/08/11	5.67	579.47	573.80	1144
189AT	06/08/11	6.65	580.40	573.75	1153
189A	06/08/11	12.18	579.82	567.64	1152
RW-5	06/08/11	18.32	578.88	560.56	1142
162C	06/08/11	13.14	581.00	567.86	1150
129F	06/08/11	19.94	581.36	561.42	1155
129E	06/08/11	19.39	580.88	561.49	1154
D-23	06/08/11	12.42	580.55	568.13	1151
190AT	06/08/11	7.20	580.92	573.72	1159
190A	06/08/11	11.32	580.58	569.26	1158
167B	06/08/11	10.38	580.93	570.55	1200
191AT	06/08/11	7.21	581.06	573.85	1202
191A	06/08/11	8.56	580.62	572.06	1201
192AT	06/08/11	11.34	584.46	573.12	1206
192A	06/08/11	12.03	584.08	572.05	1205
194AT	06/08/11	8.72	584.93	576.21	1220
194A	06/08/11	12.23	584.35	572.12	1219
161C	06/08/11	20.54	582.64	562.10	1218
161B	06/08/11	10.10	582.84	572.74	1217
193AT	06/08/11	5.74	583.09	577.35	1215
193A	06/08/11	10.77	584.13	573.36	1214
139D	06/08/11	23.44	585.49	562.05	1209
139C	06/08/11	23.50	585.27	561.77	1208
139B	06/08/11	13.81	585.39	571.58	1207
139A	06/08/11	13.93	585.14	571.21	1204
RW-4	06/08/11	37.92	581.52	543.60	1210
D-13	06/08/11	5.50	579.07	573.57	1053
D-14	06/08/11	8.65	579.01	570.36	1054
137A	06/08/11	6.54	578.47	571.93	1101
137B	06/08/11	6.44	578.31	571.87	1059
137C	06/08/11	9.02	578.39	569.37	1058
137D	06/08/11	11.93	579.09	567.16	1100
201B	06/08/11	7.89	579.25	571.36	1107
202D	06/08/11	36.60	592.73	556.13	1227
202E	06/08/11	36.90	592.73	555.83	1238
202F	06/08/11	36.45	592.73	556.28	1239
203D	06/08/11	32.75	593.85	561.10	1232
203E	06/08/11	32.80	593.85	561.05	1233
203F	06/08/11	32.60	593.85	561.25	1234
204C	06/08/11	19.46	581.77	562.31	1216

APPENDIX B

GWTF PROCESS SAMPLING RESULTS
SECOND QUARTER 2011

Appendix B
Analytical Results for 2Q11 Necco Park System Monitoring

LabAnalyte	Location Date Units	BC-INFLUENT 6/3/2011 FS	COMB-EFFLUENT 6/3/2011 FS	DEF-INFLUENT 6/3/2011 FS	FILTER-BLK 6/3/2011 FS	TBLK 6/3/2011 TB
Field Parameters						
COLOR QUALITATIVE (FIELD)	NS	grey/blue	grey/blue	grey	NS	NS
DISSOLVED OXYGEN (FIELD)	MG/L	NS	NS	NS	NS	NS
ODOR (FIELD)	NS	moderate	slight	moderate	NS	NS
PH (FIELD)	STD UNITS	5.76	6.91	6.9	NS	NS
REDOX (FIELD)	MV	-179	-15	-275	NS	NS
SPECIFIC CONDUCTANCE (FIELD)	UMHOS/CM	11,590	6055	4644	NS	NS
TEMPERATURE (FIELD)	DEGREES C	14.2	17.1	15.1	NS	NS
TURBIDITY QUANTITATIVE (FIELD)	NTU	122	101	97.8	NS	NS
Volatile Organics						
1,1,2,2-TETRACHLOROETHANE	UG/L	3600	920 J	1900	NS	<0.18
1,1,2-TRICHLOROETHANE	UG/L	2300	540	2900	NS	<0.27
1,1-DICHLOROETHENE	UG/L	320	<0.63	340	NS	<0.19
1,2-DICHLOROETHANE	UG/L	360	28	240	NS	<0.22
CARBON TETRACHLORIDE	UG/L	1100	1.2 J	1700	NS	<0.13
CHLOROFORM	UG/L	12000	110	4200	NS	<0.16
CIS-1,2-DICHLOROETHENE	UG/L	5600	150	13000	NS	<0.17
METHYLENE CHLORIDE	UG/L	1800	120	5900	NS	<0.33
TETRACHLOROETHENE	UG/L	4000	8.7	1900	NS	<0.29
TRANS-1,2-DICHLOROETHENE	UG/L	310	2.2 J	800	NS	<0.19
TRICHLOROETHENE	UG/L	11000	42	7500	NS	<0.17
VINYL CHLORIDE	UG/L	1400	<0.73	2400	NS	<0.22
Other Organics						
2,4,5-TRICHLOROPHENOL	UG/L	<5.7	280	300	NS	NS
2,4,6-TRICHLOROPHENOL	UG/L	<15	130 J	140 J	NS	NS
3 & 4 METHYLPHENOL	UG/L	<14	<7.1	15 J	NS	NS
HEXACHLOROBENZENE	UG/L	<1.9	<0.95	<1.9	NS	NS
HEXACHLOROBUTADIENE	UG/L	480	5.2 J	34 J	NS	NS
HEXACHLOROETHANE	UG/L	180 J	<7.6	<15	NS	NS
PENTACHLOROPHENOL	UG/L	69 J	420 J	460 J	NS	NS
PHENOL	UG/L	140 J	71 J	36 J	NS	NS
TIC 1	UG/L	3200 J	610 J	800 J	NS	NS
Inorganics						
BARIUM, DISSOLVED	UG/L	120000	400	79 J	NS	NS
BARIUM, TOTAL	UG/L	190000	27000	62 J	<0.67	NS
SULFATE	UG/L	1400	530000	1000000	NS	NS
CYANIDE, TOTAL	UG/L	2600	670	68	NS	NS

< = Non detect at stated reporting limit
NS = Not sampled for test parameter
J= Estimated concentration

ATTACHMENT 1

NECCO PARK
2Q11 WATER LEVELS

(ELECTRONIC FORMAT ONLY)