DuPont Corporate Remediation Group
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March 28, 2011

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

Dear Ms. Sosa:

NECCO PARK FOURTH QUARTER 2010 DATA PACKAGE

Enclosed are three copies of the *Fourth Quarter 2010 (4Q10) Data Package* for the 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 DNAPL monitoring summary for 4Q10.

Pumping system uptime for 4Q10 was 93.8 percent. Total volume of groundwater treated was 3,195,727 gallons. No DNAPL was observed at any of the monitoring locations in 4Q10.

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/jsp
Enc.

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

SOURCE AREA HYDRAULIC CONTROL
FOURTH QUARTER 2010
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 & 26th Street
Niagara Falls, NY 14302

Prepared By:

PARSONS

40 LaRiviere Dr., Suite 350
Buffalo, New York 14202
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March 2011

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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 2010 (4Q10) for groundwater remediation measures at the DuPont Necco Park Site (Necco Park) in Niagara Falls, New York. Submission of this data package meets reporting requirements defined in the Agency approved Long Term Groundwater Monitoring Plan (LTGMP) and the Sampling, Analysis, and Monitoring Plan (SAMP) (CRG, 2005).

This data package is the twenty-second subsequent to the 2005 startup of the Necco Park Hydraulic Control System (HCS) and includes a summary of operations for the pumping wells and Groundwater Treatment Facility (GWTF). Included are figures (Figures 1, 4, and 7 through 11) depicting groundwater elevation contours for seven groundwater flow zones 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 and A-Zone and vertical gradients between the AT and A-Zone and A- and B-Zone are also included.

Figures 2 and 5 present the vertical gradient (ft/ft) for selected well pairs between the AT 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 AT and A-Zones wells) or the center of open rock zone (for B-Zone wells).

Figures 3 and 6 present potentiometric contours of net drawdown in selected wells between April 5, 2005 (immediately prior to HCS startup) and the groundwater elevation in each well on November 11, 2010.

1.2 OPERATIONAL SUMMARY

A summary of average HCS uptime, total gallons of groundwater treated, and gallons of dense non-aqueous phase liquid (DNAPL) removed for 4Q10 is as follows:

	HCS Uptime (%)	Groundwater Treated (gallons)	DNAPL Removed (gallons)
October	100	1,230,864	0
November	94.3	1,017,068	0
December	87.0	947,795	0
4Q10 Total	**93.8**	**3,195,727**	**0**

‘

System downtime is categorized into two groups: individual recovery well downtimes, and HCS system downtimes. Individual recovery well downtimes which exceeded a 24-hour time period during 4Q10 are summarized in Table 1.

There were two unscheduled recovery well downtime events during the fourth quarter: (1) pump repairs at RW-5 which took two days, and (2) failure and repair of the pH sensor at RW-11 in December. The pH sensor failure in December resulted in RW-11 being off for 24 hours, and a Notice of Violation (NOV) regarding the discharge permit with the City of Niagara Falls Water Board (NFWB). The NOV was the result of discharge water that was lower than the permitted pH range. The NFWB was notified in a timely manner. Repairs to the system included equipment and software upgrades to prevent future occurrence, as well as replacement of the failed probe. No unscheduled downtime occurred during October and November 2010.

There were two scheduled well downtime events for the fourth quarter: (1) treatment system maintenance resulting in the shutdown of RW-8 and RW-9 on November 3, and (2) shut down of all wells from December 18 through 20 for hardware and software upgrades to the Experion® Processing Knowledge System (PKS).

A historical operational summary by quarter since HCS operations began is provided in Table 2. There were approximately 20 hours of unscheduled HCS downtime in December due to failure of RW-11 pH sensor (discussed above). No other unscheduled HCS downtime occurred during the fourth quarter. There were two scheduled HCS downtime events during the fourth quarter: (1) cleaning and inspecting the emissions stack in November (53 hours), and (2) upgrades to the Experion® PKS and acid line tie in (80 hours).

Monthly DNAPL monitoring was completed on October 28, November 11, and December 21. Trace DNAPL was noted in RW-5 and 204C in November and December while DNAPL was not observed in any wells in October. No DNAPL was recovered during the quarter.

1.3 GWTF PROCESS SAMPLING

In accordance with the Sampling and Analysis Plan (SAMP), GWTF influent samples (B/C and D/E/F-Zone) and a combined effluent sample were collected in 4Q10. Samples were collected by TestAmerica Laboratories of Amherst, NY on November 11, 2010 and shipped to 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 POTW discharge permit for the site, the Necco GWTF discharge is sampled and reported quarterly to the Niagara Falls Water Board. The Necco Park 4Q10 wastewater samples were collected on November 11, 2010. There were no permit limit exceedances in 4Q10. The Necco POTW discharge permit was renewed in May 2009 and remains valid through May 1, 2014.

SECTION 2

REFERENCES

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

TABLES

Table 1
Individual Well Shutdown Summary 4Q10
DuPont Necco Park

	Well ID	Date(s)	Length of Shutdown (hours)	Reason for Shutdown	Remarks
October	None	N/A	N/A	N/A	
November	RW-4, RW-5, RW-8, RW-9, and RW-11	November 2- 3	53	Mandatory maintenance on treatment system	Scheduled
November	RW-8 and RW-9	November 3	24	Mandatory maintenance on treatment system	Scheduled
December	RW-5	December 1 and 2	48	Pump repairs.	Unscheduled
December	RW-4, RW-5, RW-8, RW-9, and RW-11	December 18, 19, and 20	72	Upgrades to Experion® PLK, acid line tie-in.	Scheduled
December	RW-11	December 28	24	PH sensor failure and repair. NFWB Notice of Violation for low pH discharge water.	Unscheduled

Table 2
Historical HCS Operational Summary - 4Q10
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
TOTALS	**---**	**---**	**76,064,646**	**1,010**
AVERAGE	**91.5**	**93.6**	**---**	**---**

FIGURES

DUPONT NECCO PARK

119AT
572.24

129AT
572.11

184AT
570.09

185AT
569.95

186AT
569.81

187AT
570.11

188AT
570.51

180AT
570.49

189AT
570.51

190AT
570.48

191AT
570.47

192AT
569.64

193AT
573.84

194AT
571.89

571.5
571
570.5
570.5
571.5
573
572.5
572
571.5
571
570.5
570

CECOS SECURE CELLS

Scale: Feet

0 50 100 150 200

Contour Interval = 0.5 feet

Elevation datum feet AMSL

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Buffalo, NY 14202

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Checked by	EAF
Approved by	DDT
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
November 11, 2010

P:/000DuPont Temporary/Necco/GW_contours/2010-11-11 NEC Contour Tool/2010-11-11 - AT PZ F1

DUPONT NECCO PARK

119AT/A
0.00

129AT/A
-0.01

184AT/A
0.01

185AT/A
0.19

186AT/A
-0.41

187AT/A
-0.48

188AT/A
-0.66

189AT/A
-0.56

190AT/A
-0.30

191AT/A
-0.04

192AT/A
0.03

193AT/A
-0.21

194AT/A
-0.16

CECOS SECURE CELLS

Scale: Feet

0 50 100 150 200

Negative value indicates downward vertical gradient

Elevation datum feet AMSL

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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
November 11, 2010

P:/000DuPont Temporary/Necco/GW_contours/2010-11-11 NEC Contour Tool

DUPONT NECCO PARK

119AT
4.33

129AT
4.48

184AT
5.84

185AT
6.09

186AT
6.51

187AT
6.50

188AT
7.19

180AT
7.33

189AT
7.54

190AT
7.54

191AT
7.55

192AT
3.97

193AT
5.88

194AT
4.31

5

6

7

CECOS SECURE CELLS

Scale: Feet

0 50 100 150 200

Contour Interval = 0.5 feet

Elevation datum feet AMSL

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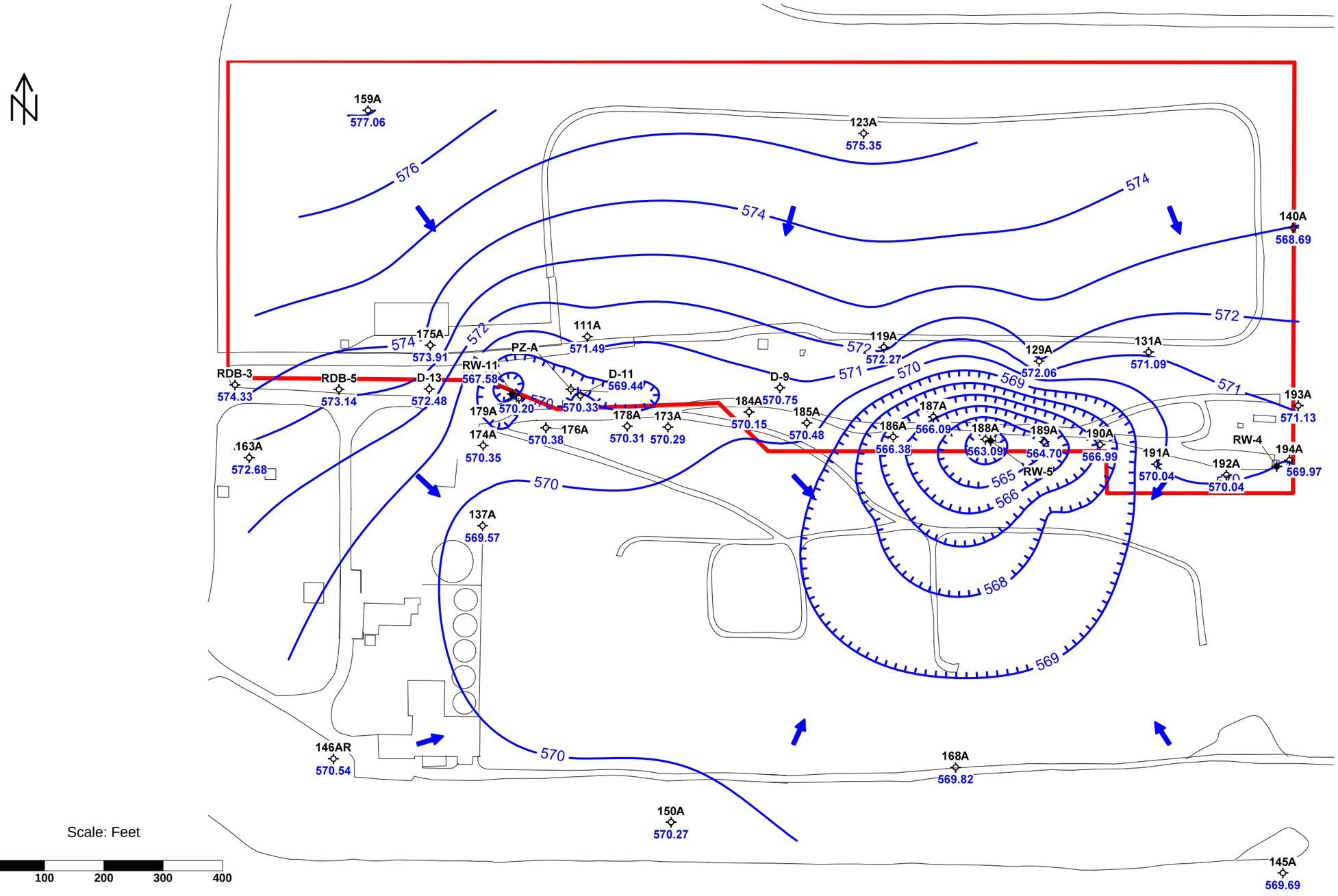
LEGEND

- 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 November 11, 2010

P:/000DuPont Temporary/Necco/GW_contours/2010-11-11 NEC Contour Tool



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

Note: Wells 117A, 139A, 140A were not used in the contouring.

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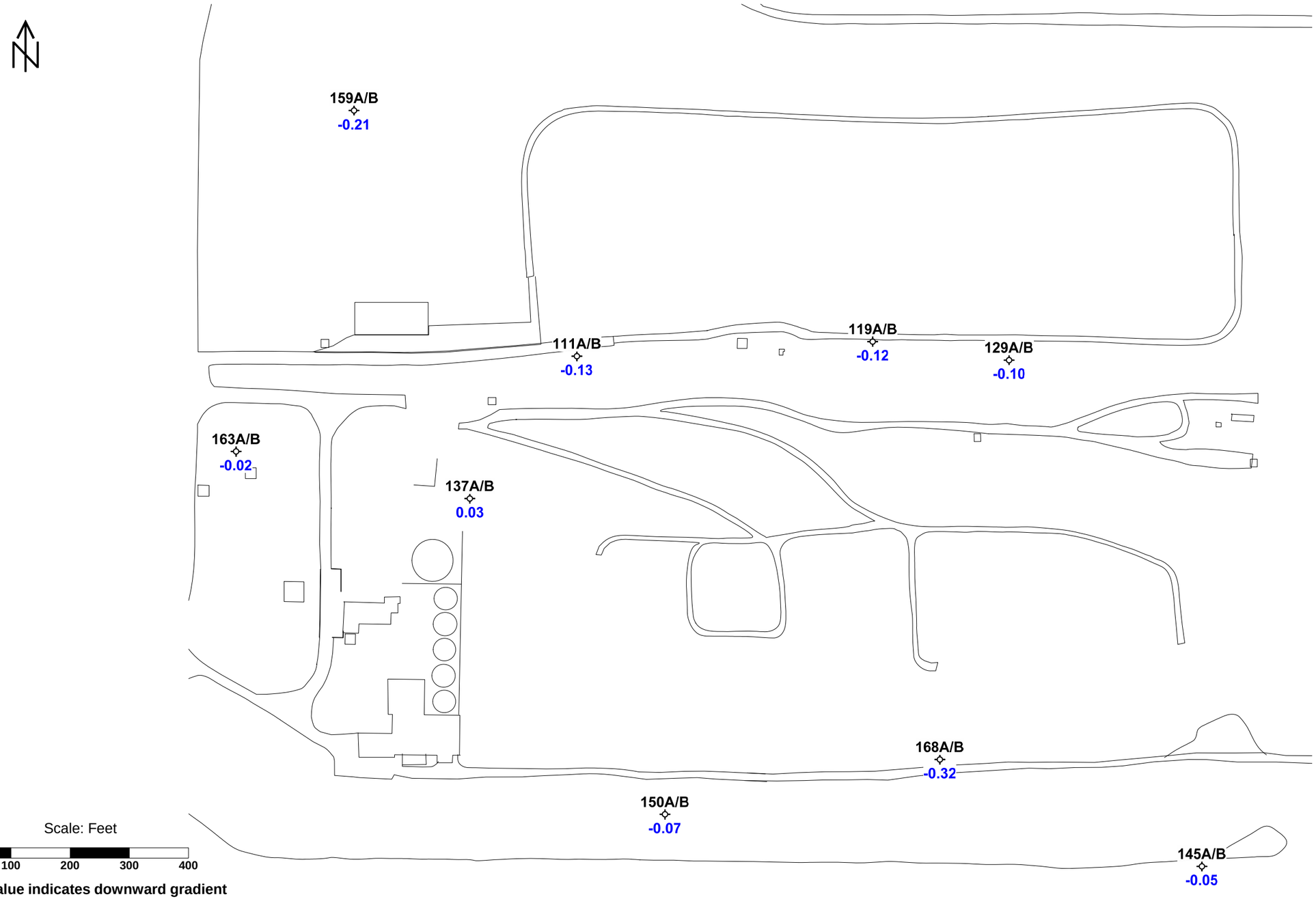
Project Manager:DDT	Date: 01-11-11
Job number: 445231.05040	

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
November 11, 2010

P:/000DuPont Temporary/Necco/GW_contours/2010-11-11 NEC Contour Tool



Negative value indicates downward gradient

Elevation datum feet AMSL

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Created by: JWS	Date: 01-06-10
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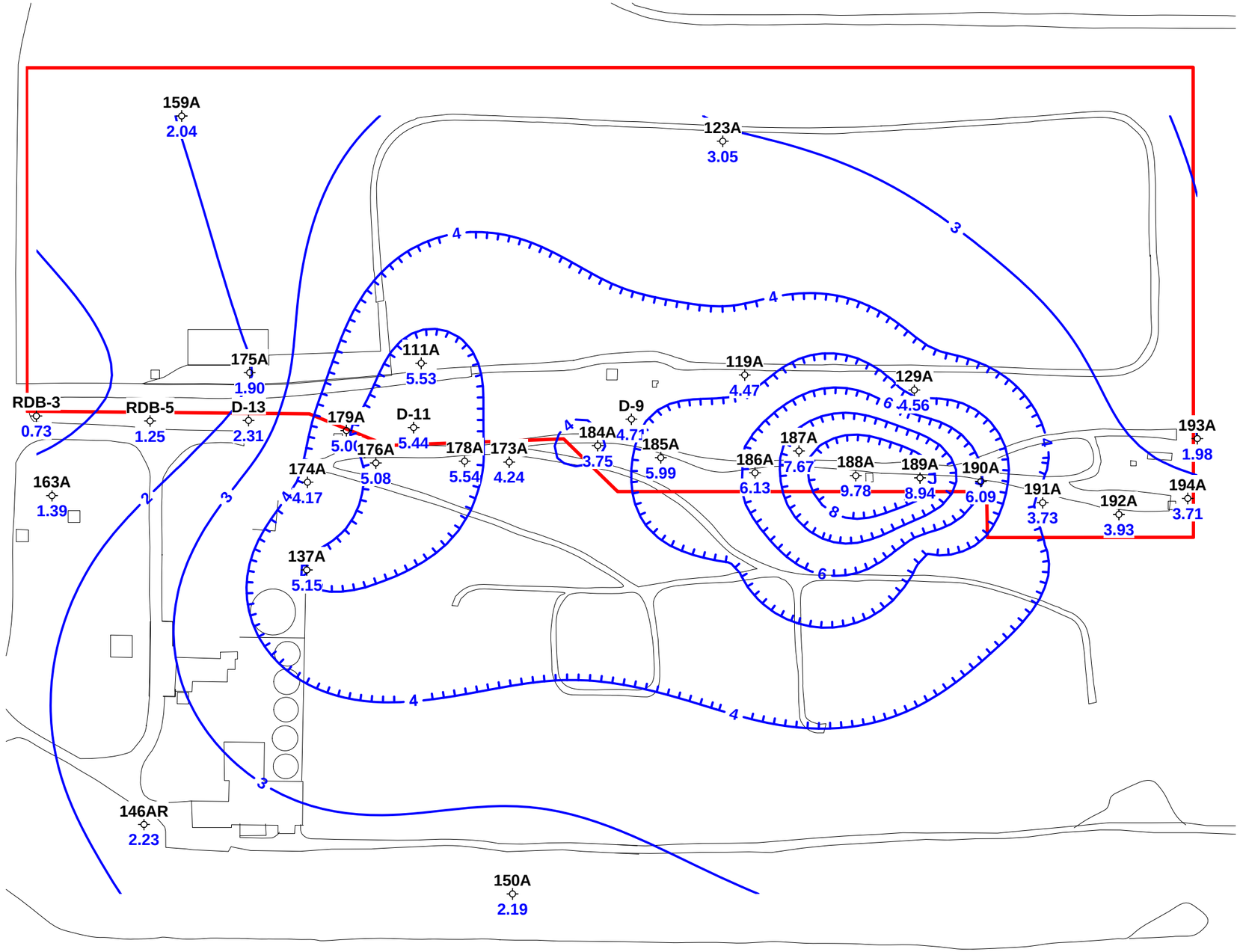
Project Manager: DDT	Date: 01-11-11
Job number: 445231.02021	

LEGEND

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

Figure 5
Vertical Gradient: A-Zone to B-Zone
DuPont Necco Park
November 11, 2010

P:/000DuPont Temporary/Necco/GW_contours/11-11-10 NEC Contour Tool



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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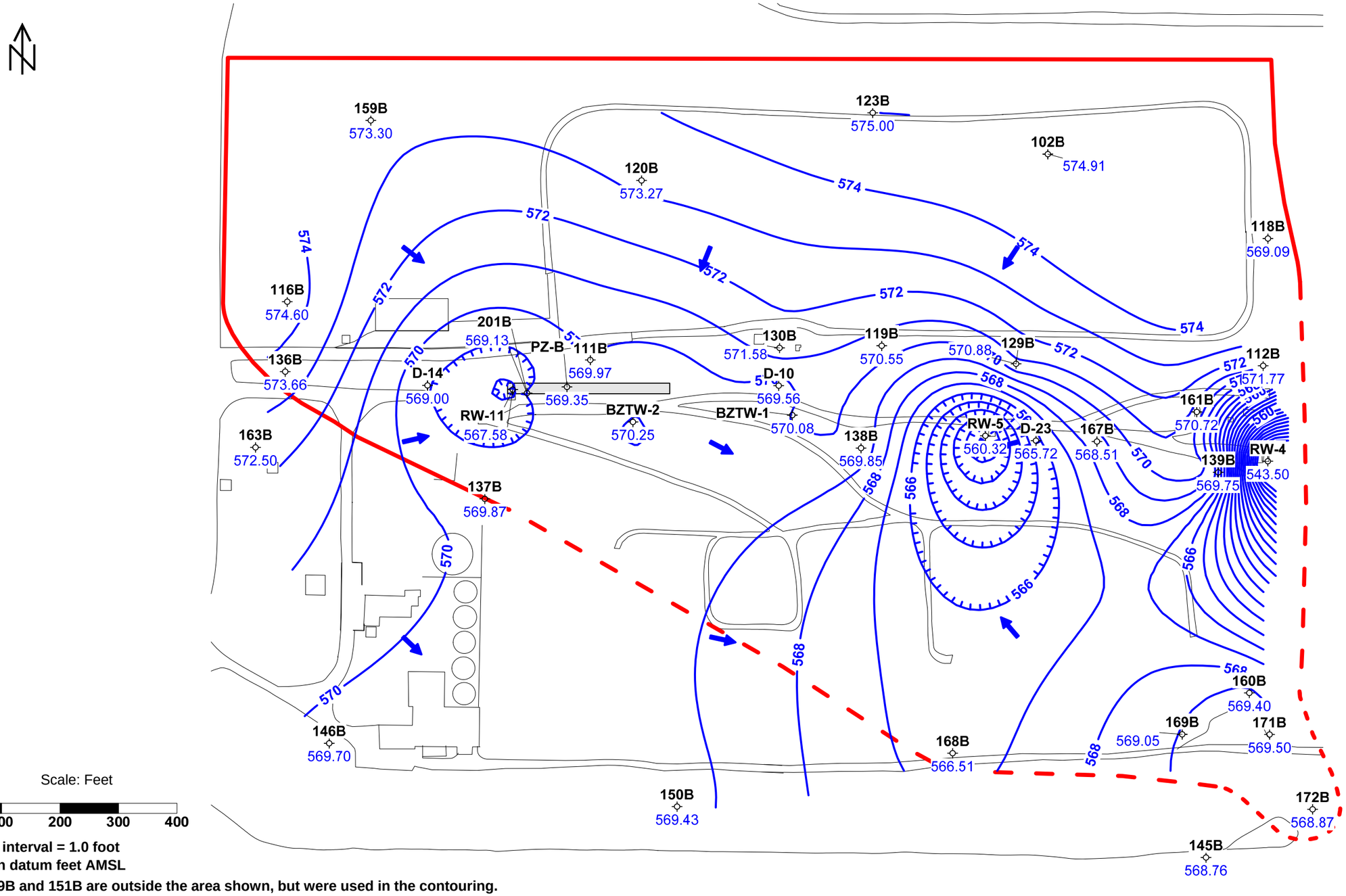
Project Manager:DDT	Date: 01-11-11
Job number: 445230.02022	

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 November 11, 2010

P:/000DuPont Temporary/Necco/GW_contours/2010-08-13 NEC Contour Tool



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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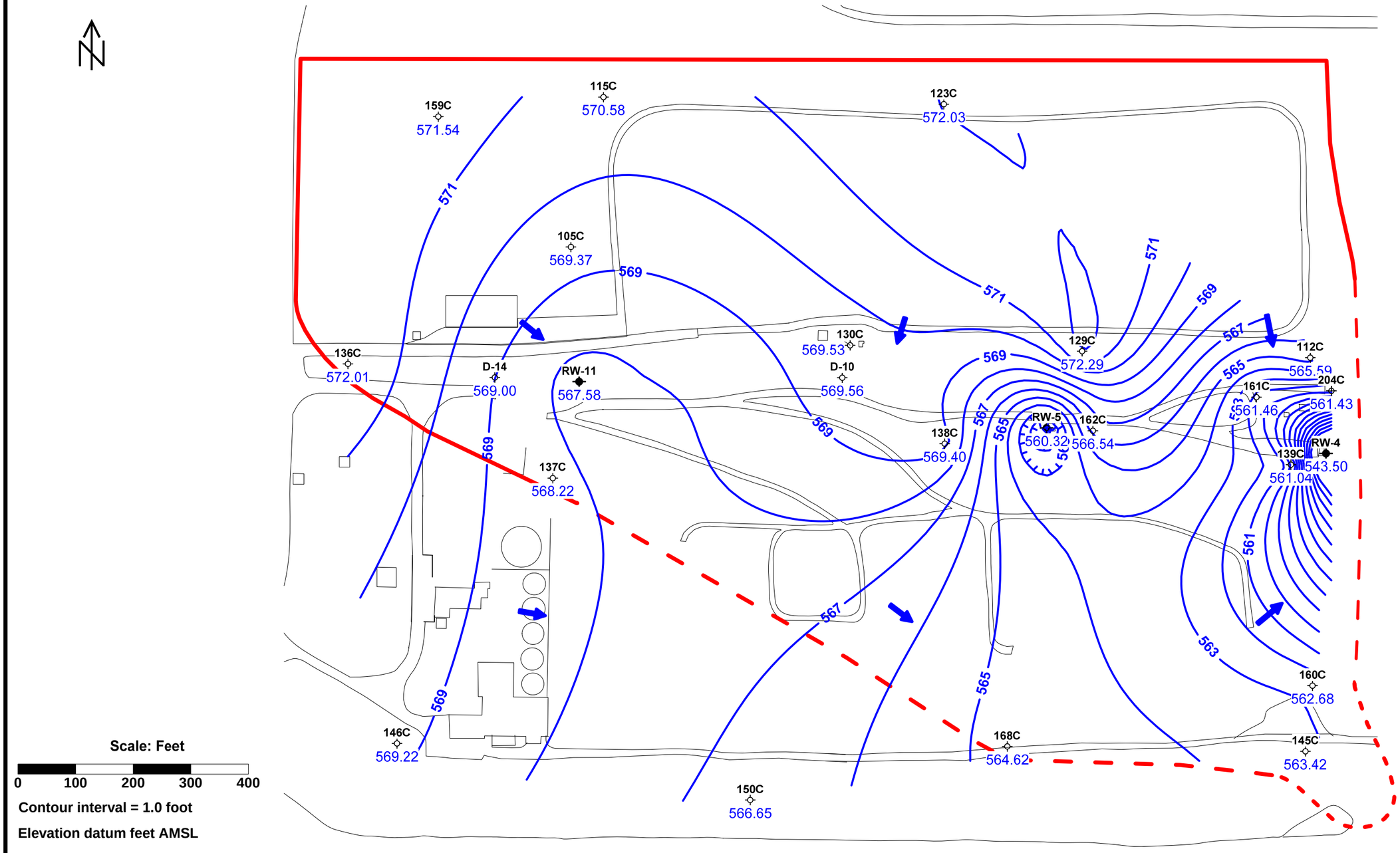
Project Manager: DDT	Date: 01-11-11
Job number: 445230.05041	

LEGEND

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

Figure 7
Potentiometric Surface Map
DuPont Necco Park: B-Zone
November 11, 2010

P:/000DuPont Temporary/Necco/GW_contours/2010-11-11 NEC Contour Tool



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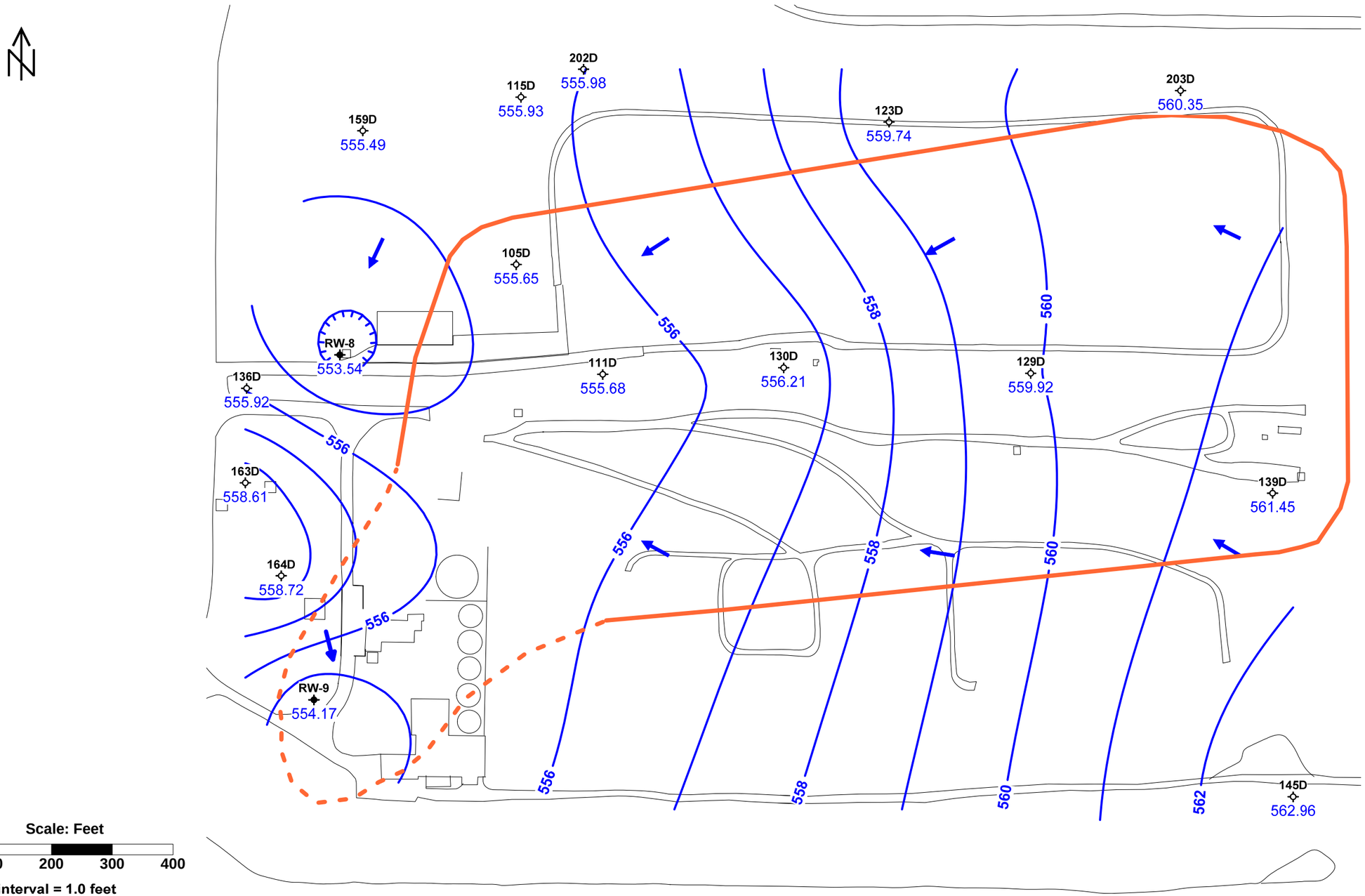
Created by: JWS	Date: 01-07-11
Checked by: EAF	Date: 07-01-10
Approved by: DDT	Date: 01-11-11
Project Manager: DDT	Date: 08-04-10
Job number: 445230.02022	

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
November 11, 2010

P:/000DuPont Temporary/Necco/GW_contours/2010-11-11 NEC Contour Tool



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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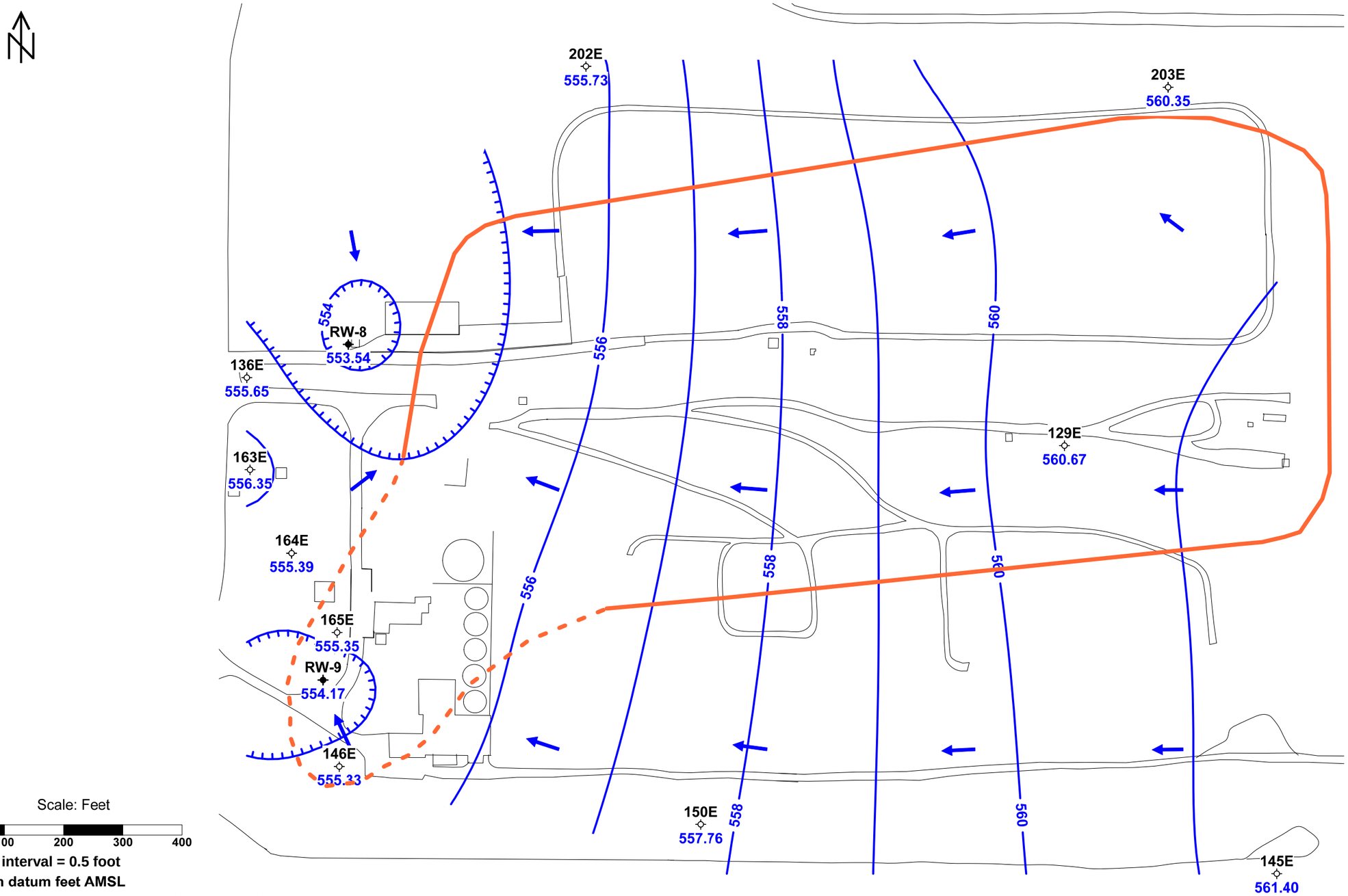
Project Manager: DDT	Date: 01-11-11
Job number: 445237.02022	

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
November 11, 2010

P:/000DuPont Temporary/Necco/GW_contours/2010-11-11 NEC Contour Tool



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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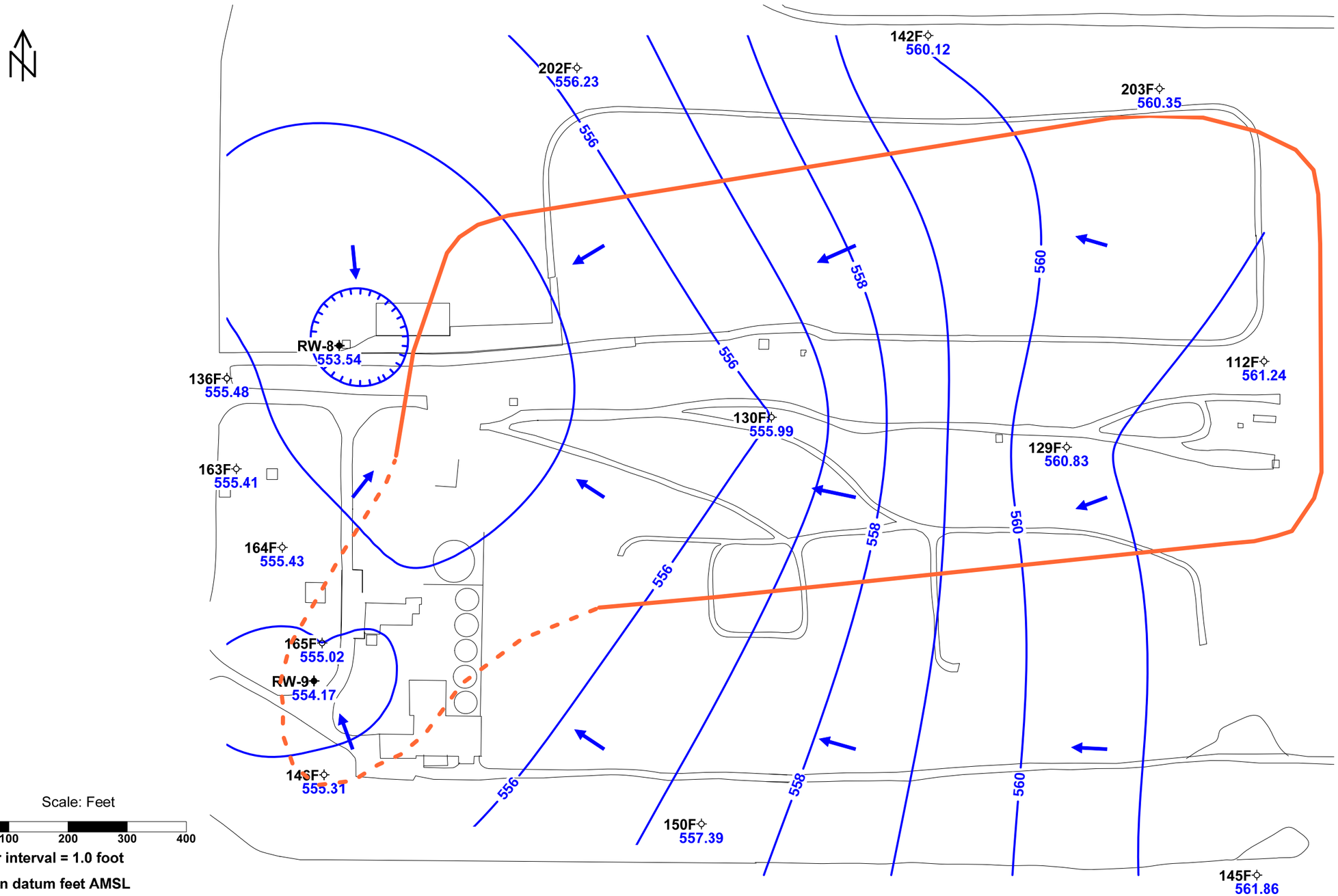
Created by: JWS	Date:	01-07-10
Checked by: EAF	Date:	01-11-11
Approved by: DDT	Date:	01-11-11
Project Manager: DDT	Date:	01-11-11
Job number: 445237.02022		

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
November 11, 2010

P:/000DuPont Temporary/Necco/GW_contours/2010-11-11 NEC Contour Tool



Scale: Feet

0 100 200 300 400

Contour interval = 1.0 foot

Elevation datum feet AMSL

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

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Checked by: EAF	Date: 01-11-11
Approved by: DDT	Date: 01-11-11
Project Manager: DDT	Date: 01-11-11
Job number: 445231.02022	

LEGEND

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

Figure 11
Potentiometric Surface Map
DuPont Necco Park: F-Zone
November 11, 2010

P:/000DuPont Temporary/Necco/GW_contours/2010-11-11 NEC Contour Tool

APPENDIX A

GROUNDWATER ELEVATION DATA
FOURTH QUARTER 2010

APPENDIX A
NECCO PARK WATER LEVELS
FOURTH QUARTER 2010

SAMPLE POINT	DATE	DEPTH TO WATER	CASING ELEVATION	GW ELEVATION	TIME
53	11/11/10	11.27	578.20	566.93	1220
102B	11/11/10	24.10	599.01	574.91	1233
105C	11/11/10	25.91	595.28	569.37	1240
105D	11/11/10	39.12	594.77	555.65	1239
111A	11/11/10	15.40	586.89	571.49	1154
111B	11/11/10	14.97	584.94	569.97	1155
111D	11/11/10	28.62	584.30	555.68	1156
112B	11/11/10	10.13	581.90	571.77	1222
112C	11/11/10	17.34	582.93	565.59	1221
112F	11/11/10	22.05	583.29	561.24	1230
115C	11/11/10	25.35	595.93	570.58	1232
115D	11/11/10	40.69	596.62	555.93	1233
116B	11/11/10	15.45	590.05	574.60	1142
117A	11/11/10	7.95	580.52	572.57	1226
118B	11/11/10	14.81	583.90	569.09	1223
119A	11/11/10	14.07	586.34	572.27	1205
119AT	11/11/10	14.38	586.62	572.24	1204
119B	11/11/10	16.22	586.77	570.55	1206
120B	11/11/10	25.91	599.18	573.27	1240
123A	11/11/10	22.58	597.93	575.35	1240
123B	11/11/10	20.98	595.98	575.00	1239
123C	11/11/10	23.39	595.42	572.03	1230
123D	11/11/10	36.77	596.51	559.74	1237
123F	11/11/10	38.81	598.57	559.76	1236
129A	11/11/10	12.74	584.80	572.06	1212
129AT	11/11/10	12.83	584.94	572.11	1211
129B	11/11/10	14.36	585.24	570.88	1210
129C	11/11/10	13.39	585.68	572.29	1209
129D	11/11/10	26.11	586.03	559.92	1208
129E	11/11/10	20.21	580.88	560.67	1154
129F	11/11/10	20.53	581.36	560.83	1155
130B	11/11/10	14.05	585.63	571.58	1200
130C	11/11/10	15.98	585.51	569.53	1201
130D	11/11/10	28.75	584.96	556.21	1202
130F	11/11/10	25.50	581.49	555.99	1134
130G	11/11/10	24.91	580.79	555.88	1133
131A	11/11/10	14.34	585.43	571.09	1215
136B	11/11/10	8.03	581.69	573.66	1122
136C	11/11/10	9.61	581.62	572.01	1121

APPENDIX A
NECCO PARK WATER LEVELS
FOURTH QUARTER 2010

SAMPLE POINT	DATE	DEPTH TO WATER	CASING ELEVATION	GW ELEVATION	TIME
136D	11/11/10	23.76	579.68	555.92	1120
136E	11/11/10	23.94	579.59	555.65	1119
136F	11/11/10	24.85	580.33	555.48	1117
136G	11/11/10	19.92	579.76	559.84	1118
137A	11/11/10	8.90	578.47	569.57	1117
137B	11/11/10	8.44	578.31	569.87	1114
137C	11/11/10	10.17	578.39	568.22	1115
137D	11/11/10	12.97	579.09	566.12	1116
138B	11/11/10	14.13	583.98	569.85	1140
138C	11/11/10	17.66	587.06	569.40	1141
139A	11/11/10	14.01	585.14	571.13	1201
139B	11/11/10	15.64	585.39	569.75	1204
139C	11/11/10	24.23	585.27	561.04	1205
139D	11/11/10	24.04	585.49	561.45	1206
140A	11/11/10	12.74	581.43	568.69	1224
141C	11/11/10	16.56	580.05	563.49	1228
141G	11/11/10	26.91	582.53	555.62	1227
142E	11/11/10	25.73	586.00	560.27	1248
142F	11/11/10	25.57	585.69	560.12	1249
143G	11/11/10	35.72	591.34	555.62	1238
145A	11/11/10	6.15	575.84	569.69	1212
145B	11/11/10	6.72	575.48	568.76	1215
145C	11/11/10	12.48	575.90	563.42	1242
145D	11/11/10	13.09	576.05	562.96	1244
145E	11/11/10	14.58	575.98	561.40	1213
145F	11/11/10	14.19	576.05	561.86	1214
146AR	11/11/10	6.38	576.92	570.54	1220
146B	11/11/10	7.20	576.90	569.70	1221
146C	11/11/10	7.13	576.35	569.22	1222
146E	11/11/10	20.75	576.08	555.33	1223
146F	11/11/10	20.73	576.04	555.31	1224
148D	11/11/10	9.43	579.38	569.95	1137
148F	11/11/10	21.69	576.21	554.52	1138
149B	11/11/10	4.27	572.87	568.60	1149
149C	11/11/10	6.23	573.26	567.03	1151
149D	11/11/10	16.32	572.86	556.54	1154
150A	11/11/10	5.59	575.86	570.27	1200

APPENDIX A
NECCO PARK WATER LEVELS
FOURTH QUARTER 2010

SAMPLE POINT	DATE	DEPTH TO WATER	CASING ELEVATION	GW ELEVATION	TIME
150B	11/11/10	6.56	575.99	569.43	1201
150C	11/11/10	9.48	576.13	566.65	1202
150E	11/11/10	18.39	576.15	557.76	1203
150F	11/11/10	18.59	575.98	557.39	1204
151B	11/11/10	7.23	573.36	566.13	1128
151C	11/11/10	7.61	573.18	565.57	1130
158D	11/11/10	37.43	598.20	560.77	1232
159A	11/11/10	19.10	596.16	577.06	1234
159B	11/11/10	23.07	596.37	573.30	1235
159C	11/11/10	25.82	597.36	571.54	1236
159D	11/11/10	42.18	597.67	555.49	1237
160B	11/11/10	13.35	582.75	569.40	1238
160C	11/11/10	20.04	582.72	562.68	1239
161B	11/11/10	12.12	582.84	570.72	1207
161C	11/11/10	21.18	582.64	561.46	1208
162C	11/11/10	14.46	581.00	566.54	1150
163A	11/11/10	5.46	578.14	572.68	1137
163B	11/11/10	5.44	577.94	572.50	1136
163D	11/11/10	20.21	578.82	558.61	1135
163E	11/11/10	22.71	579.06	556.35	1134
163F	11/11/10	23.35	578.76	555.41	1133
164D	11/11/10	18.70	577.42	558.72	1128
164E	11/11/10	21.93	577.32	555.39	1129
164F	11/11/10	21.84	577.27	555.43	1130
165D	11/11/10	12.27	577.52	565.25	1249
165E	11/11/10	22.21	577.56	555.35	1250
165F	11/11/10	22.70	577.72	555.02	1251
167B	11/11/10	12.42	580.93	568.51	1158
168A	11/11/10	8.90	578.72	569.82	1228
168B	11/11/10	12.39	578.90	566.51	1229
168C	11/11/10	14.59	579.21	564.62	1230
169B	11/11/10	11.38	580.43	569.05	1235
170B	11/11/10	12.57	579.10	566.53	1237
171B	11/11/10	10.04	579.54	569.50	1240
172B	11/11/10	8.08	576.95	568.87	1207
173A	11/11/10	10.42	580.71	570.29	1129
174A	11/11/10	7.27	577.62	570.35	1113
175A	11/11/10	12.90	586.81	573.91	1150
176A	11/11/10	9.65	580.03	570.38	1122

APPENDIX A
NECCO PARK WATER LEVELS
FOURTH QUARTER 2010

SAMPLE POINT	DATE	DEPTH TO WATER	CASING ELEVATION	GW ELEVATION	TIME
178A	11/11/10	9.61	579.92	570.31	1126
179A	11/11/10	8.81	579.01	570.20	1119
180AT	11/11/10	8.98	579.47	570.49	1149
184A	11/11/10	9.73	579.88	570.15	1132
184AT	11/11/10	9.60	579.69	570.09	1131
185A	11/11/10	10.36	580.84	570.48	1138
185AT	11/11/10	10.74	580.69	569.95	1139
186A	11/11/10	13.38	579.76	566.38	1143
186AT	11/11/10	10.29	580.10	569.81	1142
187A	11/11/10	13.85	579.94	566.09	1145
187AT	11/11/10	9.19	579.30	570.11	1144
188A	11/11/10	17.82	580.91	563.09	1147
188AT	11/11/10	10.08	580.59	570.51	1146
189A	11/11/10	15.12	579.82	564.70	1151
189AT	11/11/10	9.89	580.40	570.51	1153
190A	11/11/10	13.59	580.58	566.99	1156
190AT	11/11/10	10.44	580.92	570.48	1157
191A	11/11/10	10.58	580.62	570.04	1159
191AT	11/11/10	10.59	581.06	570.47	1200
192A	11/11/10	14.04	584.08	570.04	1202
192AT	11/11/10	14.82	584.46	569.64	1203
193A	11/11/10	13.00	584.13	571.13	1212
193AT	11/11/10	9.25	583.09	573.84	1211
194A	11/11/10	14.38	584.35	569.97	1214
194AT	11/11/10	13.04	584.93	571.89	1213
201B	11/11/10	10.12	579.25	569.13	1121
202D	11/11/10	36.75	592.73	555.98	1229
202E	11/11/10	37.00	592.73	555.73	1230
202F	11/11/10	36.50	592.73	556.23	1231
203D	11/11/10	33.50	593.85	560.35	1225
203E	11/11/10	33.50	593.85	560.35	1226
203F	11/11/10	33.50	593.85	560.35	1227
204C	11/11/10	20.34	581.77	561.43	1210
BZTW-1	11/11/10	9.59	579.67	570.08	1137
BZTW-2	11/11/10	9.13	579.38	570.25	1127
BZTW-4	11/11/10	5.02	578.18	573.16	1126
D-10	11/11/10	10.46	580.02	569.56	1136
D-11	11/11/10	7.74	578.07	570.33	1125
D-13	11/11/10	6.59	579.07	572.48	1111

APPENDIX A
NECCO PARK WATER LEVELS
FOURTH QUARTER 2010

SAMPLE POINT	DATE	DEPTH TO WATER	CASING ELEVATION	GW ELEVATION	TIME
D-14	11/11/10	10.01	579.01	569.00	1110
D-23	11/11/10	14.83	580.55	565.72	1152
D-9	11/11/10	9.40	580.15	570.75	1135
PZ 195-AT	11/11/10	8.33	584.80	576.47	1246
PZ 196-AT	11/11/10	9.29	585.71	576.42	1250
PZ 197-AT	11/11/10	8.15	584.57	576.42	1252
PZ 198-AT	11/11/10	7.52	583.93	576.41	1254
PZ 199-AT	11/11/10	8.56	584.92	576.36	1256
PZ 200-AT	11/11/10	9.77	586.46	576.69	1258
PZ-A	11/11/10	9.62	579.06	569.44	1124
PZ-B	11/11/10	10.12	579.47	569.35	1123
RDB-3	11/11/10	4.98	579.31	574.33	1123
RDB-5	11/11/10	5.43	578.57	573.14	1125
RW-11	11/11/10	11.20	578.78	567.58	1120
RW-4	11/11/10	38.02	581.52	543.50	1215
RW-5	11/11/10	18.56	578.88	560.32	1148
RW-8	11/11/10	31.98	585.52	553.54	1143
RW-9	11/11/10	20.96	575.13	554.17	1247
TRW-6	11/11/10	10.04	580.21	570.17	1130
TRW-7	11/11/10	7.73	577.89	570.16	1112

APPENDIX B

GWTF PROCESS SAMPLING RESULTS
FOURTH QUARTER 2010

APPENDIX B
GWTF PROCESS SAMPLING RESULTS
FOURTH QUARTER 2010 NECCO PARK

CAS No.	LabAnalyte	Location Date Units	BC-INFLUENT 11/11/10 FS	DEF-INFLUENT 11/11/10 FS	COMB-EFFLUENT 11/11/10 FS	FILTER-BLK 11/11/10 FS	TBLK 11/11/10 TB
	Field Parameters						
EVS0118	COLOR QUALITATIVE (FIELD)	NS	grey/blue	grey	grey/blue	NS	NS
EVS0125	ODOR (FIELD)	NS	moderate	moderate	slight	NS	NS
EVS0127	PH (FIELD)	STD UNITS	5.82	7.04	7.19	NS	NS
EVS0128	REDOX (FIELD)	mV	-111	-204	120	NS	NS
EVS0044	SPECIFIC CONDUCTANCE (FIELD)	UMHOS/CM	9950	3939	6063	NS	NS
EVS0113	TEMPERATURE (FIELD)	DEGREES C	14.1	12.5	14.1	NS	NS
EVS0130	TURBIDITY QUANTITATIVE (FIELD)	NTU	287	60.9	103	NS	NS
	Volatile Organics						
79345	1,1,2,2-TETRACHLOROETHANE	UG/L	3600	1500	660	NS	<0.18
79005	1,1,2-TRICHLOROETHANE	UG/L	3600	2600	450	NS	<0.27
75354	1,1-DICHLOROETHENE	UG/L	490	320	<3.8	NS	<0.19
107062	1,2-DICHLOROETHANE	UG/L	480	200	19 J	NS	<0.22
56235	CARBON TETRACHLORIDE	UG/L	1100	850	<2.6	NS	<0.13
67663	CHLOROFORM	UG/L	17000	3800	55	NS	<0.16
156592	CIS-1,2-DICHLOROETHENE	UG/L	6500	11000	77	NS	<0.17
75092	METHYLENE CHLORIDE	UG/L	3000	5100	92	NS	<0.33
127184	TETRACHLOROETHENE	UG/L	5500	1800	<5.8	NS	<0.29
156605	TRANS-1,2-DICHLOROETHENE	UG/L	460	740	<3.8	NS	<0.19
79016	TRICHLOROETHENE	UG/L	17000	7200	21	NS	<0.17
75014	VINYL CHLORIDE	UG/L	1700	2200	<4.4	NS	<0.22
	Other Organics						
95954	2,4,5-TRICHLOROPHENOL	UG/L	54 J	330	250	NS	NS
88062	2,4,6-TRICHLOROPHENOL	UG/L	16 J	160	130	NS	NS
EVS0197	3-METHYLPHENOL & 4-METHYLPHENOL	UG/L	140 J	23 J	45 J	NS	NS
118741	HEXACHLOROBENZENE	UG/L	<2	<1.2	<1	NS	NS
87683	HEXACHLOROBUTADIENE	UG/L	590	56 J	<2.7	NS	NS
67721	HEXACHLOROETHANE	UG/L	160 J	17 J	<8	NS	NS
87865	PENTACHLOROPHENOL	UG/L	140 J	750	550	NS	NS
108952	PHENOL	UG/L	230	53 J	86 J	NS	NS
TIC01	TIC 1	UG/L	2100 J	910 J	740 J	NS	NS
	Inorganics						
7440393	BARIUM, DISSOLVED	UG/L	185000	98 B	920 B	NS	NS
7440393	BARIUM, TOTAL	UG/L	313000	64 B	48900	<0.67	NS
14808798	SULFATE	UG/L	3100	808000	518000	NS	NS
57125	CYANIDE, TOTAL	UG/L	2400	64	620	NS	NS
Total Volatiles		UG/L	60430	37310	1394.4		

< = Non detect at stated reporting limit
NS= Not Sampled
J = estimated value, results falls between the MDL and the PQL (organics)
B = estimated value, results falls between the MDL and the PQL (inorganics
UG/L - micrograms per litre

ATTACHMENT 1

NECCO PARK
4Q10 WATER LEVELS

(ELECTRONIC FORMAT ONLY)