



DuPont Corporate Remediation Group
Buffalo Avenue & 26th Street
Building 35 3rd Floor
Niagara Falls, NY 14302
(716) 278-5100

October 31, 2008

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 THIRD QUARTER 2008 DATA PACKAGE

Enclosed are three copies of the *Third Quarter 2008 (3Q08) 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 removal summary for 3Q08 and a summary of activities associated with the replacement of recovery well RW-10.

Pumping system uptime for 3Q08 was 77.2 percent. The lower than usual uptime is primarily attributed to pumping tests associated with installation of new recovery well RW-11 that required temporary shut down of the B/C-Zone recovery wells. Total volume of groundwater treated was 3,112,202 gallons. Approximately 124 gallons of DNAPL was removed in 3Q08.

Please contact me at (716) 278-5496 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".

Paul F. Mazierski
Project Director

PFM/mac

Enc.

T:\\\\Necco Park\\7537 Long Term GW Mon\\Reports\\Quarterly Data Packets\\2008\\3Q\\necco 3Q08 data pkg cvr ltr.doc

cc: J. Kaczor/Earth Tech
M. Hinton/NYSDEC
G. Shanahan/NYSDEC

SOURCE AREA HYDRAULIC CONTROL
SYSTEM
THIRD QUARTER 2008 GROUNDWATER
MONITORING DATA PACKAGE
DUPONT NECCO PARK

Date: October 31, 2008

DuPont Project No. 7537
URSD Project No. 18985339



CORPORATE REMEDIATION GROUP
*An Alliance between
DuPont and URS Diamond*

Barley Mill Plaza, Building 19
Wilmington, Delaware 19805

Buffalo Avenue & 26th Street
Niagara Falls, NY 14302

TABLE OF CONTENTS

1.0	Data Package Summary	1
1.1	Operational Summary	1
1.2	GWTF Process Sampling.....	2
1.3	POTW Compliance.....	2
2.0	Recovery Well RW-10 Replacement.....	2
2.0	References.....	3

TABLES

Table 1	Individual Recovery Well Shutdown Summary - 3Q08
Table 2	Historical HCS Operational Summary

FIGURES

Figure 1	Potentiometric Surface Contour Map: AT-Zone, August 13, 2008
Figure 2	Vertical Gradient: AT-Zone to A-Zone, August 13, 2008
Figure 3	Drawdown Contour Map: AT-Zone, August 13, 2008
Figure 4	Potentiometric Surface Contour Map: A-Zone August 13, 2008
Figure 5	Vertical Gradient Map: A-Zone to B-Zone, August 13, 2008
Figure 6	Drawdown Contour Map: A-Zone, August 13, 2008
Figure 7	Potentiometric Surface Contour Map: B-Zone, August 13, 2008
Figure 8	Potentiometric Surface Contour Map: C-Zone, August 13, 2008
Figure 9	Potentiometric Surface Contour Map: D-Zone, August 13, 2008
Figure 10	Potentiometric Surface Contour Map: E-Zone, August 13, 2008
Figure 11	Potentiometric Surface Contour Map: F-Zone, August 13, 2008

APPENDICES

Appendix A	Groundwater Elevation Data – Third Quarter 2008
Appendix B	GWTF Process Sampling Results –Third Quarter 2008
Appendix C	Recovery Well Sampling Results – 2008

ATTACHMENTS

Attachment 1	Electronic Copy of Groundwater Elevation Data – Third Quarter 2008
--------------	--

1.0 DATA PACKAGE SUMMARY

This data package presents a summary of operating and monitoring data collected during the third quarter of 2008 (3Q08) 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 Long Term Groundwater Monitoring Plan (LTGMP) and the Sampling, Analysis, and Monitoring Plan (SAMP) (CRG, 2005). A summary of the installation of new B/C-Zone recovery well RW-11 is also provided in this data package. The well was installed to replace recovery well RW-10 which has exhibited diminished hydraulic efficiency.

This data package is the thirteenth issued 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 depicting monthly 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 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 exhibit potentiometric contours of net drawdown in selected wells between April 5, 2005 (immediately prior to system startup) and the current groundwater elevation in each well.

1.1 Operational Summary

A summary of HCS uptime, total gallons of groundwater treated, and gallons of DNAPL removed for 3Q08 is as follows:

	HCS Uptime (%)	Groundwater Treated (Gallons)	DNAPL Removed (Gallons)
July	93.3	965,385	52
August	63.2	1,065,266	29
September	75.0	1,081,551	43
3Q08 Total	77.2	3,112,202	124

Individual recovery well downtime which exceeded a 24-hour time period during 3Q08 is summarized in Table 1. Most of the downtime occurred in August and September and is attributed primarily to hydraulic testing of newly installed recovery well RW-11.

Equipment malfunction or failures at recovery wells RW-4 and RW-5 make up the remainder of downtime experienced during 3Q08, additional well maintenance measures to improve yield at well RW-5 will be completed in November 2008. A historical operational summary by quarter since HCS operations began is provided in Table 2.

All DNAPL removed in 3Q08 was derived from pumping well RW-5. Monthly DNAPL monitoring was completed on July 30th, August 13th, and September 5th. RW-5 was the only location where DNAPL was observed in 3Q08. DNAPL removal was conducted twice in July and September and once in August on the following dates:

DNAPL Removal		
July	17 th	30 th
August	13 th	
September	5 th	18 th

1.2 GWTF Process Sampling

In accordance with the SAMP, GWTF influent samples (B/C and D/E/F-Zone) and a combined effluent sample were collected in 3Q08. In addition, the HCS recovery wells were also sampled during 3Q08. The recovery wells are sampled annually in accordance with the SAMP. The samples were collected by TestAmerica Laboratories of Amherst, NY on August 13th and shipped to TestAmerica Laboratories in North Canton, Ohio for analysis. Sample results for the process and recovery well sampling are provided in Appendix B and Appendix C, respectively.

1.3 POTW Compliance

As required by our discharge permit, the Necco GWTF discharge is sampled and reported quarterly to the Niagara Falls Water Board. The Necco Park 3Q08 wastewater samples were collected on June 10, 2008. The 3Q08 results for hexachlorobutadiene exceeded the daily maximum limit and hexachloroethane exceeded the calculated annual average limit. In compliance with SIU Permit #64, DuPont has re-sampled for these compounds, and results will be issued to NFWB during 4Q08.

2.0 Recovery Well RW-10 Replacement

In response to decreased hydraulic efficiency of recovery well RW-10, the well was replaced in July. Replacement well RW-11 was installed in accordance with the March 14, 2008 *Recovery Well RW-10 Replacement Work Plan*. Pumping test results indicate improved hydraulic control in the B/C-Zone in the western portion of the site. A detailed summary of the well replacement and testing will be provided in the 2008 Annual Report. Steps are being taken to incorporate well RW-11 into the GWTF. The well will be fully operational by the end of 4Q08.

2.0 REFERENCES

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

TABLES

Table 1
Individual Recovery Well Shutdown Summary - 3Q08
DuPont Necco Park

	<u>Well ID</u>	<u>Date</u>	<u>Length of Shutdown</u> (hours)	<u>Reason for Shutdown</u>	<u>Remarks</u>
JULY	RW-4	7/26-7/28	70	Level control alarm shut down pump.	Level control problem corrected, pump restarted.
	RW-5	7/20-7/21 7/29-7/31	118.2	Low flow alarm shut down pump. Also pump impeller jammed.	Pump repaired, restarted.
	RW-10	7/31	24	Pump failed.	Well out of service, new replacement RW-11 installed for RW-10.
AUGUST	RW-4	8/11, 8/19-8/26	192	Level control failure, and shutdown for a pump test on RW-11.	Pump restarted after equipment repaired and after RW-11 pump test.
	RW-5	8/20-8/29	292	Shutdown for a pump test on RW-11.	Pump restarted after RW-11 pump test.
	RW-10	8/1-8/31	744	Complete well shutdown	Well RW-11 installed and pump test conducted.
SEPTEMBER	RW-4	9/7-9/8	48	Level control failure.	Level control problem corrected, pump restarted.
	RW-5	9/16-9/17	48	Pump failure.	Pump repaired and restarted.
	RW-10	9/1-9/30	720	Complete well shutdown	Well RW-11 installed and pump test conducted.

Table 2
Historical HCS Operational Summary - 3Q08
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
TOTALS	---	---	42,529,038	876
AVERAGE	93.3	94.4	---	---

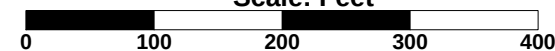
FIGURES



DUPONT NECCO PARK

CECOS SECURE CELLS

Scale: Feet



- 3B Well ID
-  Monitoring Well
-  Pumping Well

LEGEND

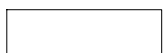
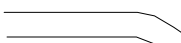
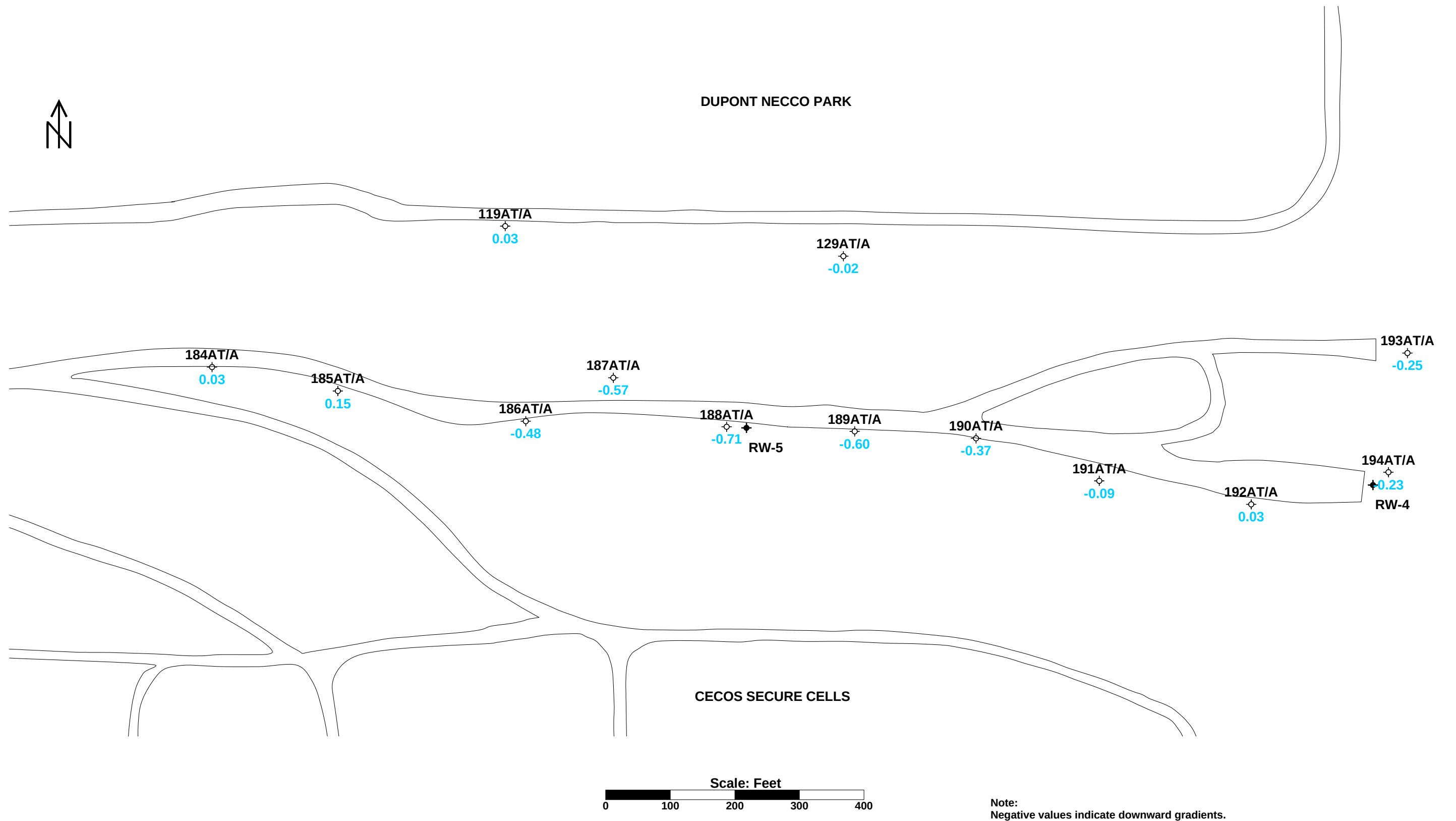
-  Potentiometric Contour
-  Structure
-  Road

Figure 1
Potentiometric Surface Map
DuPont Necco Park: AT-Zone
August 13, 2008

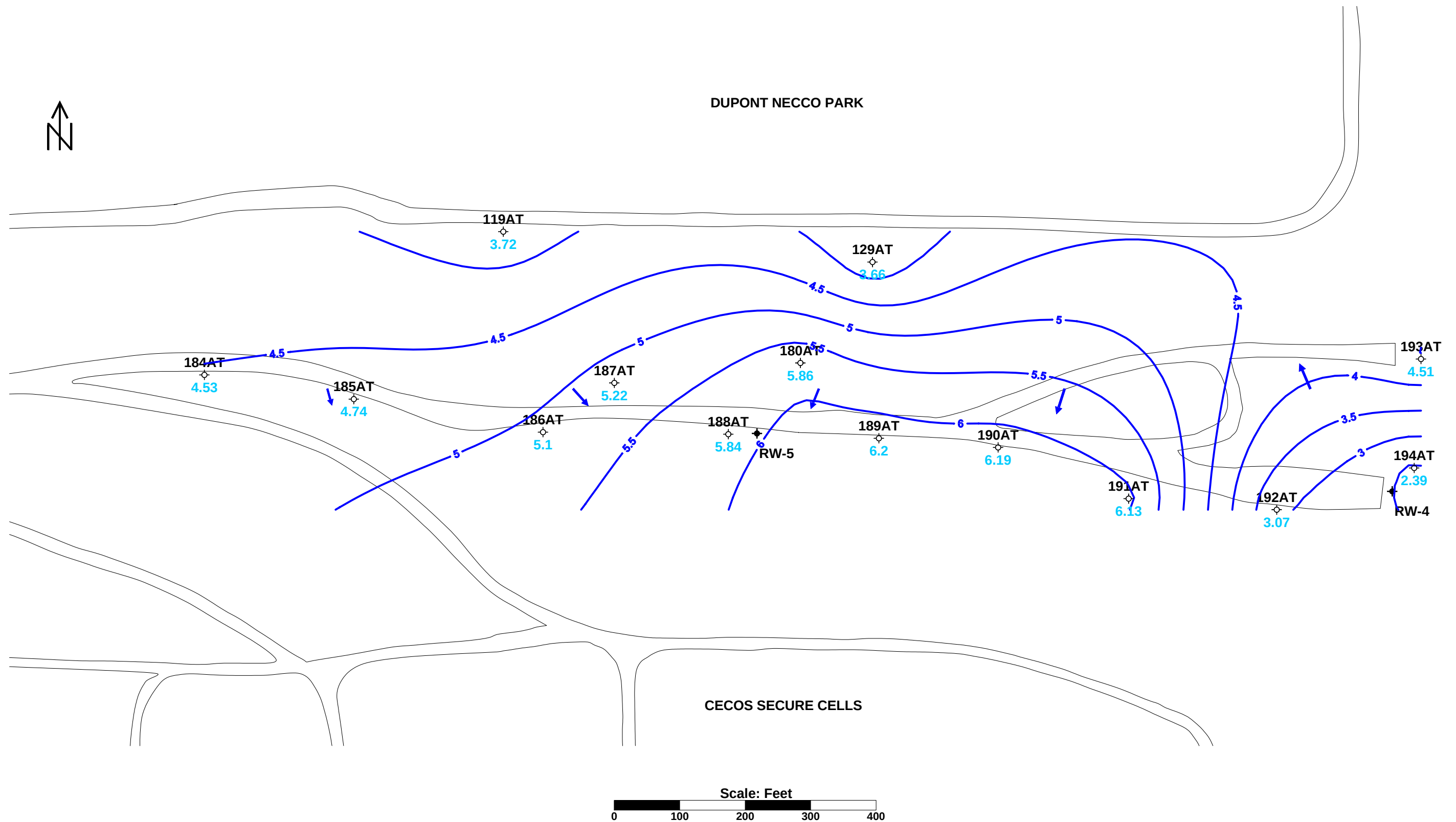


LEGEND

- 3B Well ID
- Monitoring Well
- Pumping Well

- Potentiometric Contour
- Structure
- Road

Figure 2
Vertical Gradient: AT-Zone to A-Zone
DuPont Necco Park
August 13, 2008



Corporate Remediation Group

*An Alliance between
DuPont and URS Diamond*

Buffalo Avenue & 26th Street
Niagara Falls, NY 14302

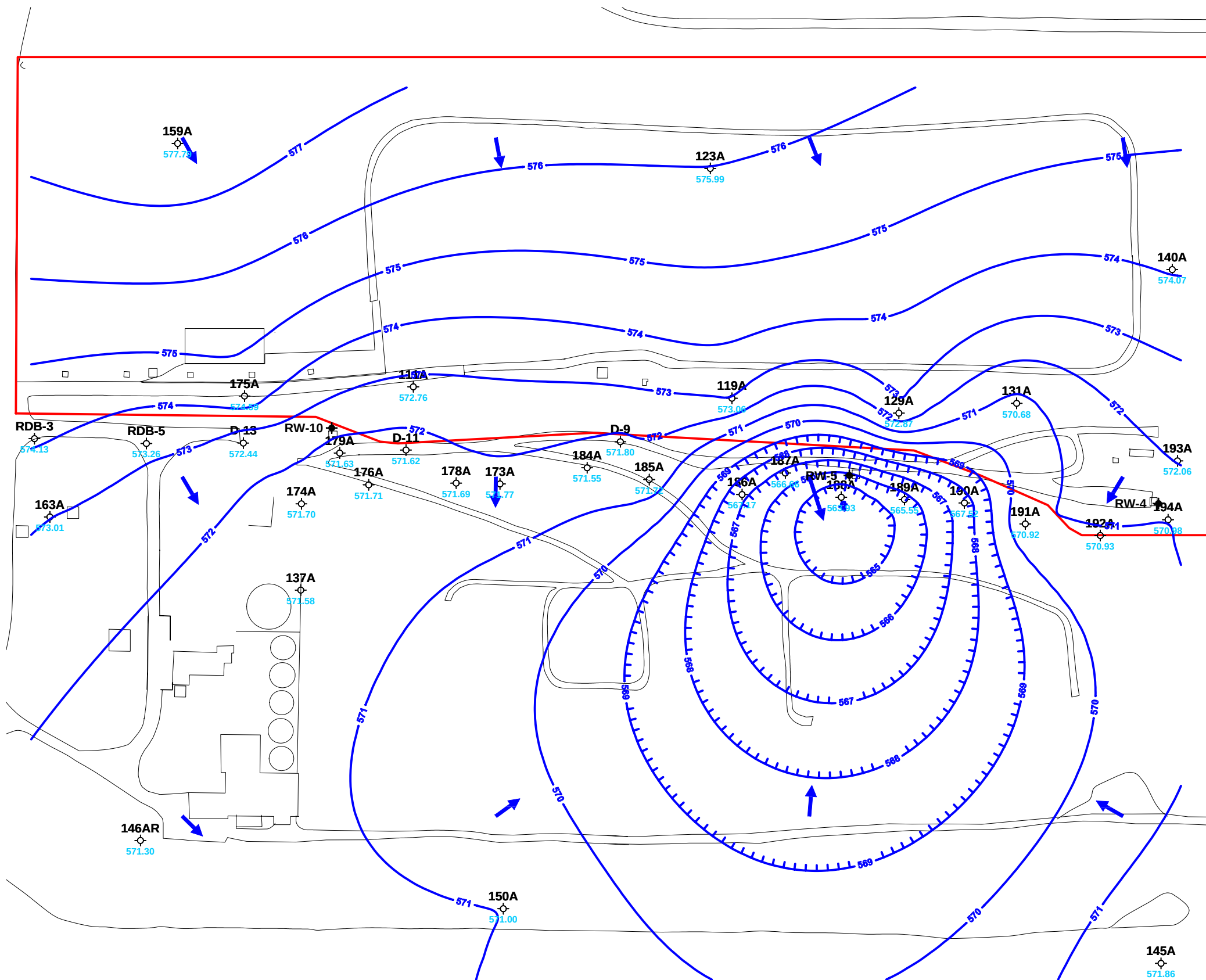


LEGEND

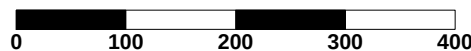
- 3B Well ID
- Monitoring Well
- Pumping Well

- Potentiometric Contour
- Structure
- Road

Figure 3
Drawdown Contour Map
DuPont Necco Park: AT-Zone
April 5, 2005 (Static) to August 13, 2008



Scale: Feet



Corporate Remediation Group

*An Alliance between
DuPont and URS Diamond*

Buffalo Avenue & 26th Street
Niagara Falls, NY 14302



LEGEND

3B

Well ID



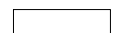
Monitoring Well



Pumping Well



Potentiometric Contour



Structure

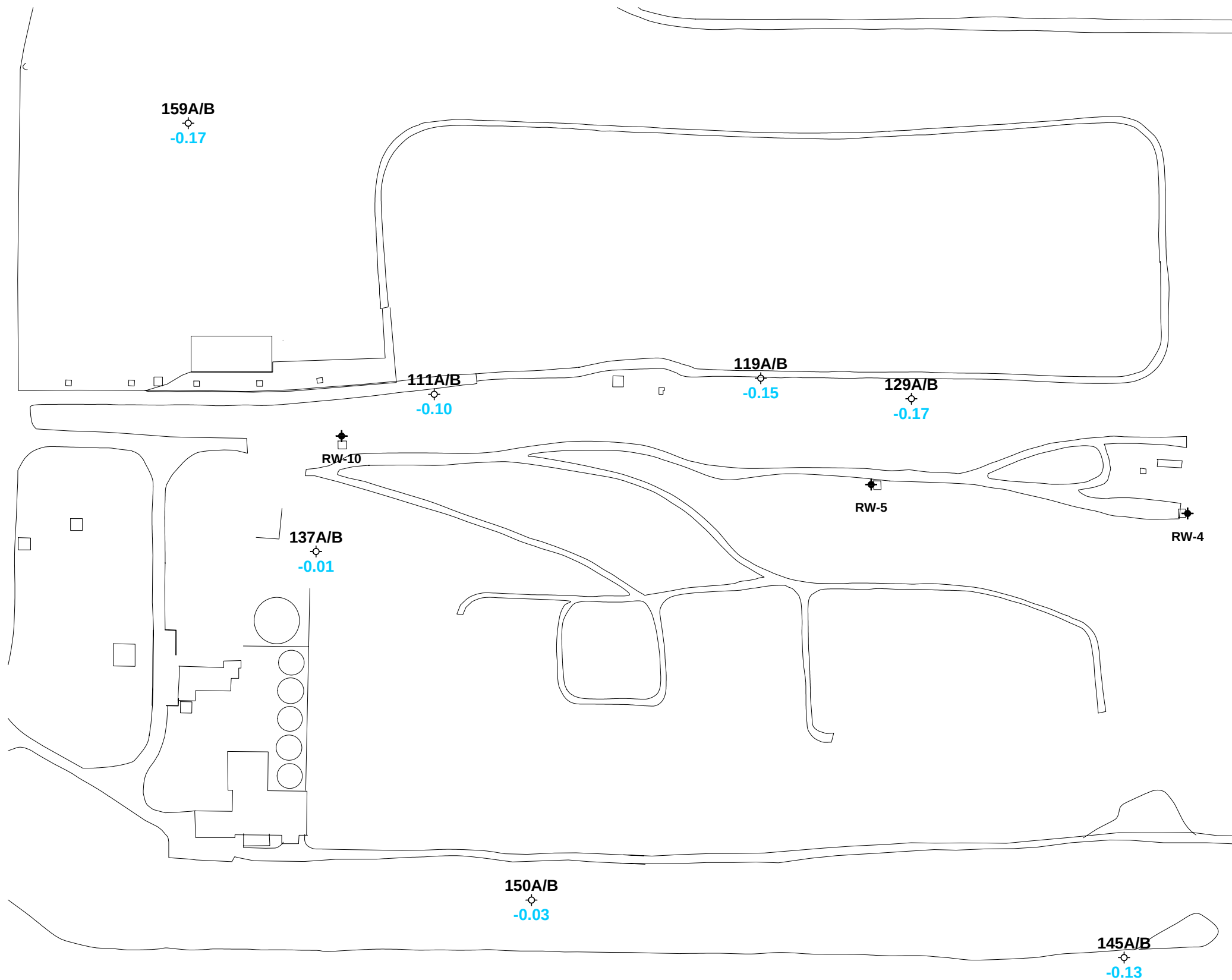


Road

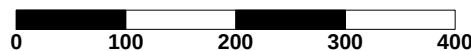


Source Area Delineation

Figure 4
Potentiometric Surface Map
DuPont Necco Park: A-Zone
August 13, 2008



Scale: Feet



Note: Negative values indicate downward gradients.



Corporate Remediation Group

*An Alliance between
DuPont and URS Diamond*

Buffalo Avenue & 26th Street
Niagara Falls, NY 14302



LEGEND

3B

Well ID



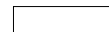
Monitoring Well



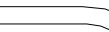
Pumping Well



Potentiometric Contour

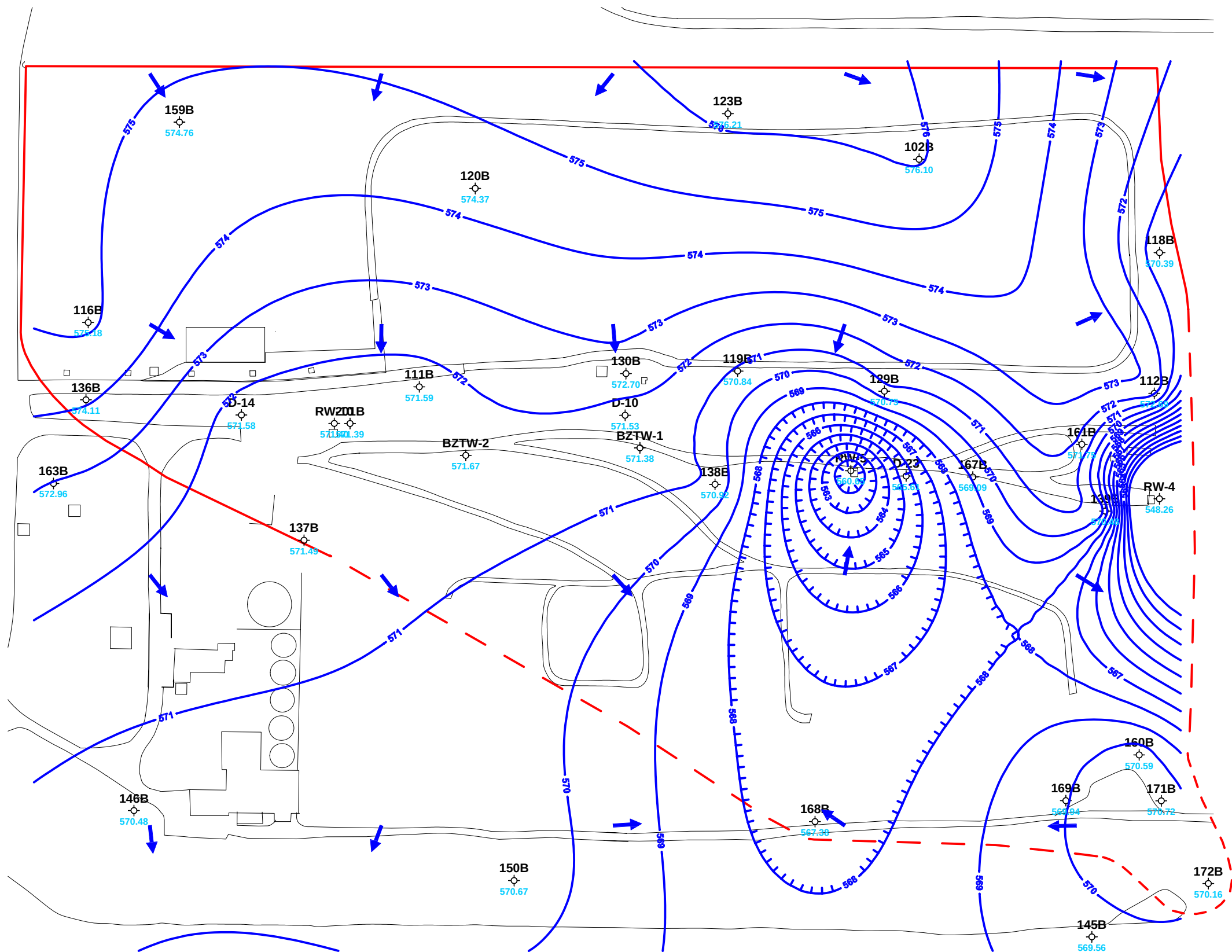


Structure

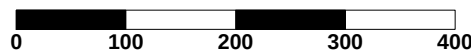


Road

Figure 5
Vertical Gradient: A-Zone to B-Zone
DuPont Necco Park
August 13, 2008



Scale: Feet



Corporate Remediation Group

*An Alliance between
DuPont and URS Diamond*

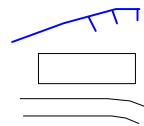
Buffalo Avenue & 26th Street
Niagara Falls, NY 14302



LEGEND

3B
149B
569.16
◆

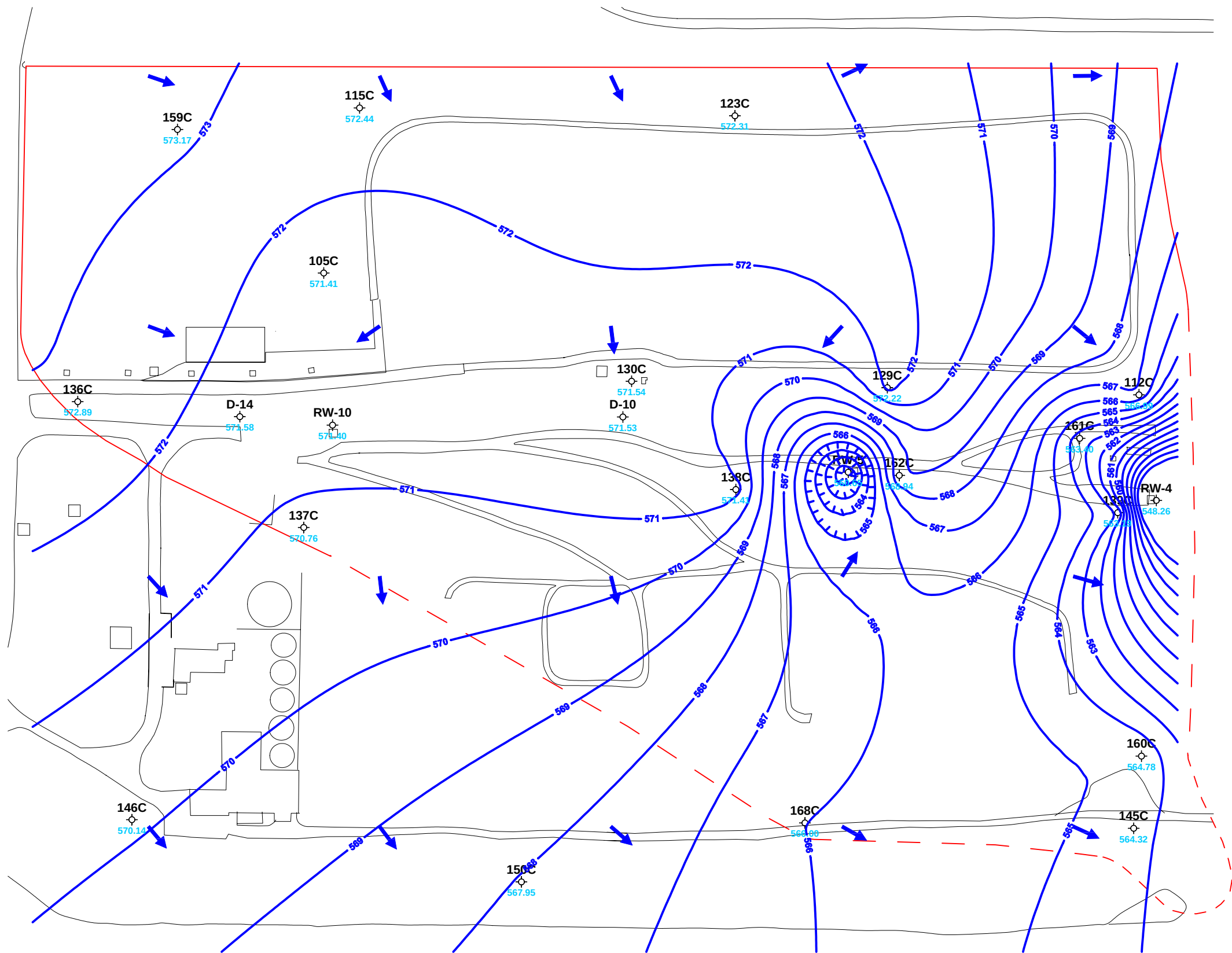
Well ID
Monitoring Well
Pumping Well



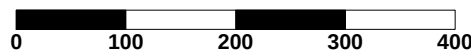
Potentiometric Contour
Structure
Road

— Source Area Delineation

Figure 7
Potentiometric Surface Map
DuPont Necco Park: B-Zone
August 13, 2008



Scale: Feet



Corporate Remediation Group

*An Alliance between
DuPont and URS Diamond*

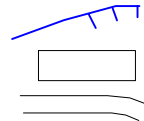
Buffalo Avenue & 26th Street
Niagara Falls, NY 14302



LEGEND

3B
149C
568.18
◆

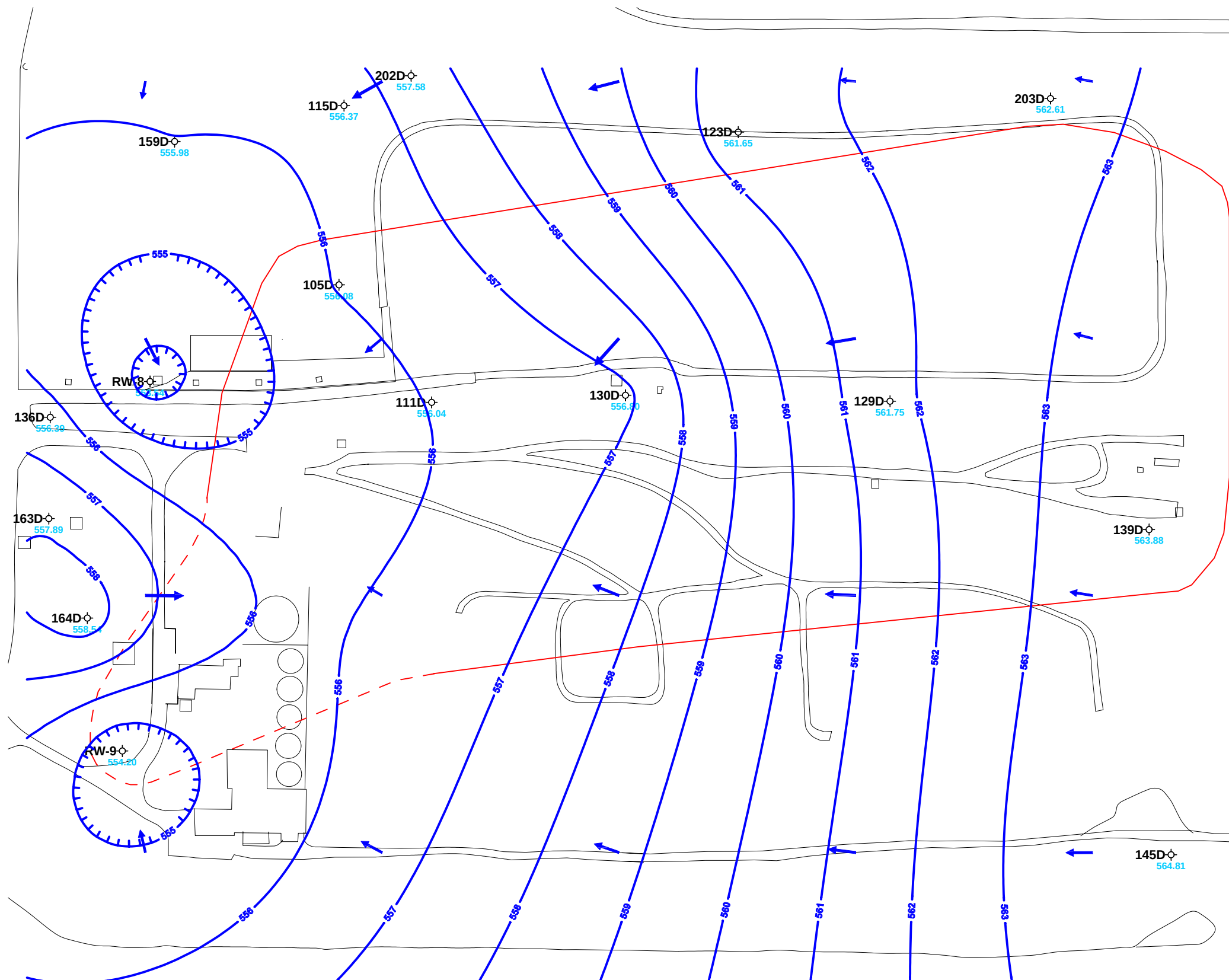
Well ID
Monitoring Well
Pumping Well



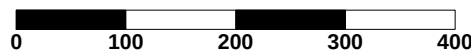
Potentiometric Contour
Structure
Road

— Source Area Delineation

Figure 8
Potentiometric Surface Map
DuPont Necco Park: C-Zone
August 13, 2008



Scale: Feet



Corporate Remediation Group

*An Alliance between
DuPont and URS Diamond*

Buffalo Avenue & 26th Street
Niagara Falls, NY 14302



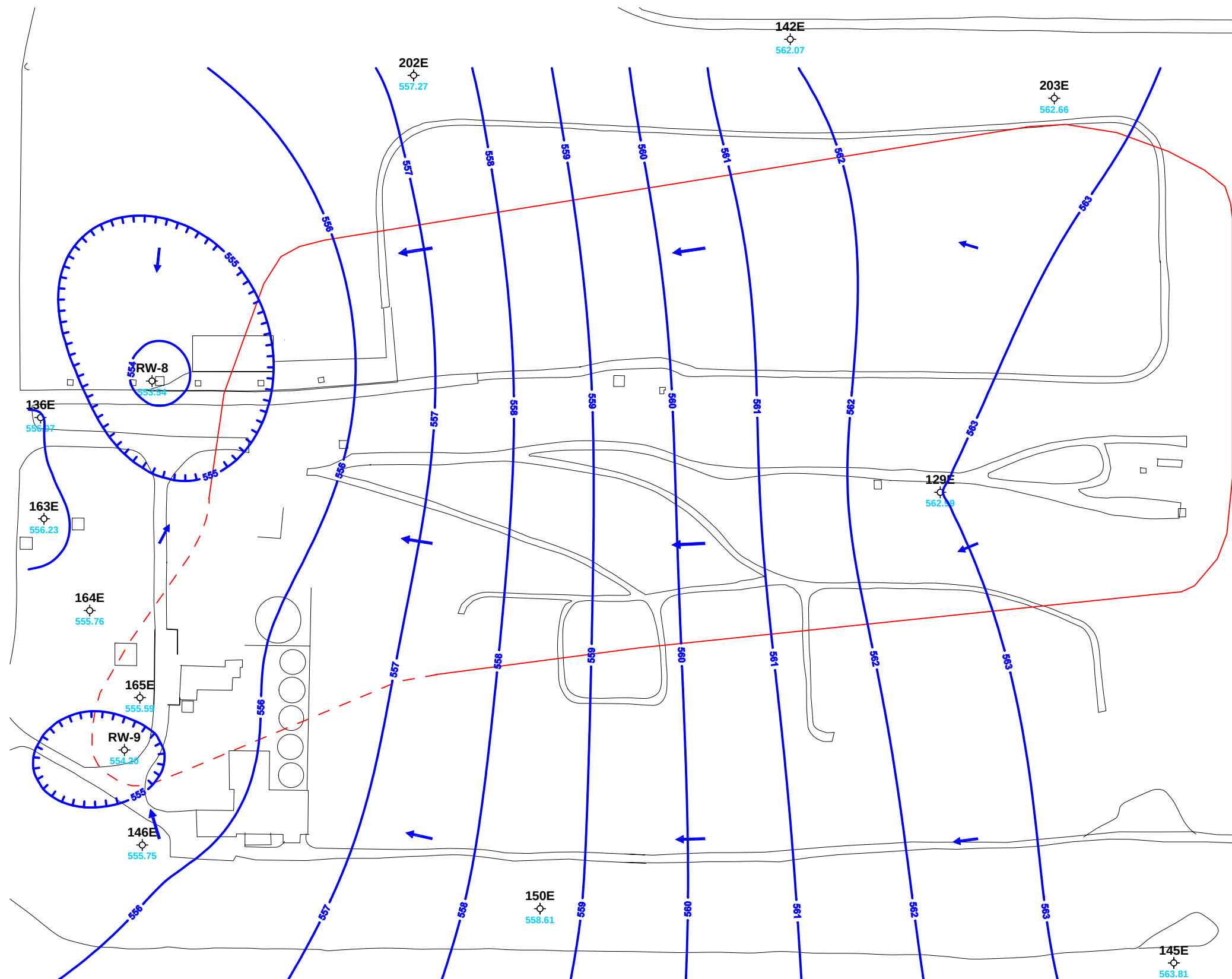
LEGEND

- 3B Well ID
Monitoring Well
Pumping Well

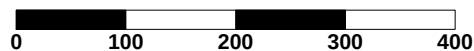
- Potentiometric Contour
Structure
Road

- Source Area Delineation

Figure 9
Potentiometric Surface Map
DuPont Necco Park: D-Zone
August 13, 2008



Scale: Feet



Corporate Remediation Group

*An Alliance between
DuPont and URS Diamond*

Buffalo Avenue & 26th Street
Niagara Falls, NY 14302



LEGEND

3B

Well ID



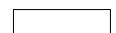
Monitoring Well



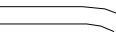
Pumping Well



Potentiometric Contour



Structure

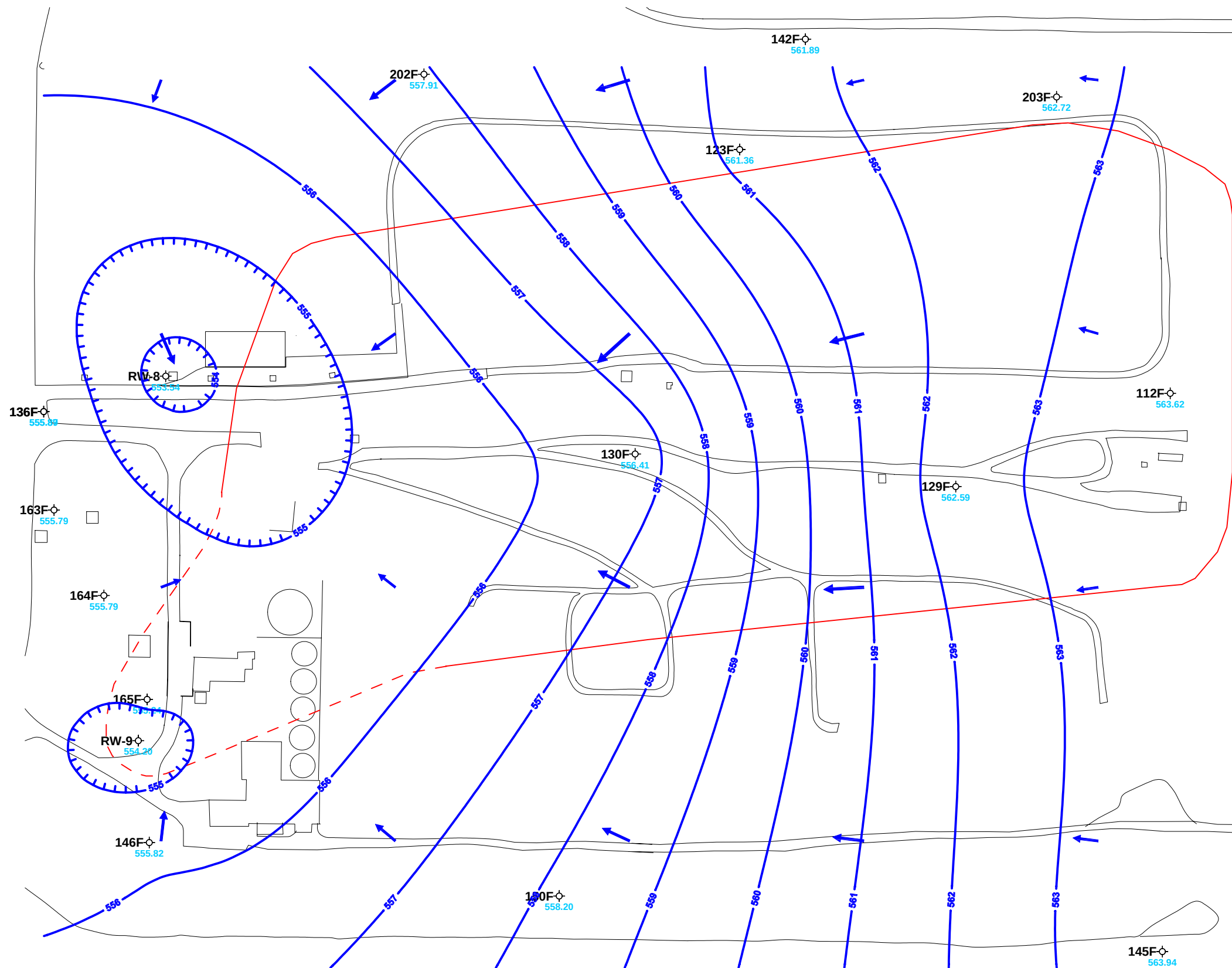


Road

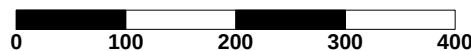


Source Area Delineation

Figure 10
Potentiometric Surface Map
DuPont Necco Park: E-Zone
August 13, 2008



Scale: Feet



Corporate Remediation Group

*An Alliance between
DuPont and URS Diamond*

Buffalo Avenue & 26th Street
Niagara Falls, NY 14302



LEGEND

3B

Well ID



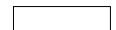
Monitoring Well



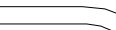
Pumping Well



Potentiometric Contour



Structure



Road



Source Area Delineation

Figure 11
Potentiometric Surface Map
DuPont Necco Park: F-Zone
August 13, 2008

APPENDICES

Appendix A

Groundwater Elevation Data

APPENDIX A
GROUNDWATER ELEVATION DATA
3Q08
DUPONT NECCO PARK

Location	Depth to Water	Casing Elevation	Groundwater Elevation	Date	Time	Comment
102B	22.91	599.01	576.10	8/13/2008	13:36	
105C	23.87	595.28	571.41	8/13/2008	12:51	
105D	38.69	594.77	556.08	8/13/2008	12:53	
111A	14.13	586.89	572.76	8/13/2008	13:06	
111B	13.35	584.94	571.59	8/13/2008	13:07	
111D	28.26	584.30	556.04	8/13/2008	13:08	
112B	9.21	581.90	572.69	8/13/2008	13:27	
112C	15.94	582.93	566.99	8/13/2008	13:20	
112F	19.67	583.29	563.62	8/13/2008	13:29	
115C	23.49	595.93	572.44	8/13/2008	12:56	
115D	40.25	596.62	556.37	8/13/2008	12:58	
116B	14.87	590.05	575.18	8/13/2008	13:00	
118B	13.51	583.90	570.39	8/13/2008	13:31	
119A	13.28	586.34	573.06	8/13/2008	13:15	
119AT	13.77	586.62	572.85	8/13/2008	13:16	
119B	15.93	586.77	570.84	8/13/2008	13:17	
120B	24.81	599.18	574.37	8/13/2008	13:44	
123A	21.94	597.93	575.99	8/13/2008	13:38	
123B	19.77	595.98	576.21	8/13/2008	13:39	
123C	23.11	595.42	572.31	8/13/2008	13:40	
123D	34.86	596.51	561.65	8/13/2008	13:41	
123F	37.21	598.57	561.36	8/13/2008	13:42	
129A	11.93	584.80	572.87	8/13/2008	13:23	
129AT	12.01	584.94	572.93	8/13/2008	13:22	
129B	14.49	585.24	570.75	8/13/2008	13:21	
129C	13.46	585.68	572.22	8/13/2008	13:20	
129D	24.28	586.03	561.75	8/13/2008	13:19	
129E	17.89	580.88	562.99	8/13/2008	13:10	
129F	18.77	581.36	562.59	8/13/2008	13:09	
130B	12.93	585.63	572.70	8/13/2008	13:11	
130C	13.97	585.51	571.54	8/13/2008	13:12	
130D	28.16	584.96	556.80	8/13/2008	13:13	
130F	25.08	581.49	556.41	8/13/2008	13:45	
130G	22.26	580.79	558.53	8/13/2008	13:46	
131A	14.75	585.43	570.68	8/13/2008	13:25	
136B	7.58	581.69	574.11	8/13/2008	12:41	
136C	8.73	581.62	572.89	8/13/2008	12:40	
136D	23.29	579.68	556.39	8/13/2008	12:39	
136E	23.52	579.59	556.07	8/13/2008	12:38	
136F	24.46	580.33	555.87	8/13/2008	12:36	
136F	24.44	580.33	555.89	8/13/2008	14:06	
136G	17.62	579.76	562.14	8/13/2008	12:37	
137A	7.51	579.09	571.58	8/13/2008	14:19	
137B	6.82	578.31	571.49	8/13/2008	14:16	
137C	7.71	578.47	570.76	8/13/2008	14:15	
138B	13.06	583.98	570.92	8/13/2008	13:37	
138C	15.65	587.06	571.41	8/13/2008	13:36	
139B	14.91	585.39	570.48	8/13/2008	12:56	
139C	22.08	585.27	563.19	8/13/2008	12:55	
139D	21.61	585.49	563.88	8/13/2008	12:54	
140A	7.36	581.43	574.07	8/13/2008	13:32	
141G	24.53	582.53	558.00	8/13/2008	13:34	
142E	23.93	586.00	562.07	8/13/2008	13:51	
142F	23.80	585.69	561.89	8/13/2008	13:52	
143G	33.27	591.34	558.07	8/13/2008	13:10	
145A	3.98	575.84	571.86	8/13/2008	11:49	
145B	5.92	575.48	569.56	8/13/2008	11:55	
145C	11.58	575.90	564.32	8/13/2008	12:33	
145D	11.24	576.05	564.81	8/13/2008	12:35	
145E	12.17	575.98	563.81	8/13/2008	11:51	
145F	12.11	576.05	563.94	8/13/2008	11:53	
146AR	5.62	576.92	571.30	8/13/2008	12:10	
146B	6.42	576.90	570.48	8/13/2008	12:11	
146C	6.21	576.35	570.14	8/13/2008	12:13	
146E	20.33	576.08	555.75	8/13/2008	12:14	

APPENDIX A
GROUNDWATER ELEVATION DATA
3Q08
DUPONT NECCO PARK

Location	Depth to Water	Casing Elevation	Groundwater Elevation	Date	Time	Comment
146F	20.22	576.04	555.82	8/13/2008	12:15	
148D	7.72	576.38	568.66	8/13/2008	11:14	
148F	20.52	576.21	555.69	8/13/2008	11:16	
149B	3.71	572.87	569.16	8/13/2008	11:28	
149C	5.08	573.26	568.18	8/13/2008	11:30	
149D	15.44	572.86	557.42	8/13/2008	11:32	
150A	4.86	575.86	571.00	8/13/2008	11:37	
150B	5.32	575.99	570.67	8/13/2008	11:38	
150C	8.18	576.13	567.95	8/13/2008	11:39	
150E	17.54	576.15	558.61	8/13/2008	11:40	
150F	17.78	575.98	558.20	8/13/2008	11:42	
151B	6.68	573.36	566.68	8/13/2008	11:05	
151C	7.11	573.18	566.07	8/13/2008	11:07	
159A	18.37	596.16	577.79	8/13/2008	13:05	
159B	21.61	596.37	574.76	8/13/2008	13:04	
159C	24.19	597.36	573.17	8/13/2008	13:02	
159D	41.69	597.67	555.98	8/13/2008	13:00	
160B	12.16	582.75	570.59	8/13/2008	12:28	
160C	17.94	582.72	564.78	8/13/2008	12:29	
161B	11.09	582.84	571.75	8/13/2008	12:45	
161C	19.24	582.64	563.40	8/13/2008	12:47	
162C	12.06	581.00	568.94	8/13/2008	13:17	
163A	5.13	578.14	573.01	8/13/2008	12:57	
163B	4.98	577.94	572.96	8/13/2008	12:56	
163D	20.93	578.82	557.89	8/13/2008	12:55	
163E	22.83	579.06	556.23	8/13/2008	12:54	
163F	22.97	578.76	555.79	8/13/2008	12:53	
164D	18.88	577.42	558.54	8/13/2008	12:48	
164E	21.56	577.32	555.76	8/13/2008	12:49	
164F	21.48	577.27	555.79	8/13/2008	12:50	
165E	21.97	577.56	555.59	8/13/2008	12:45	
165F	22.48	577.72	555.24	8/13/2008	12:46	
167B	11.84	580.93	569.09	8/13/2008	13:03	
168B	11.52	578.90	567.38	8/13/2008	12:20	
168C	13.21	579.21	566.00	8/13/2008	12:21	
169B	10.49	580.43	569.94	8/13/2008	12:25	
171B	8.82	579.54	570.72	8/13/2008	12:30	
172B	6.79	576.95	570.16	8/13/2008	11:47	
173A	8.94	580.71	571.77	8/13/2008	13:53	
174A	5.92	577.62	571.70	8/13/2008	14:13	
175A	12.22	586.81	574.59	8/13/2008	13:04	
176A	8.32	580.03	571.71	8/13/2008	14:07	
178A	8.23	579.92	571.69	8/13/2008	13:54	
179A	7.38	579.01	571.63	8/13/2008	14:02	
180AT	7.51	579.47	571.96	8/13/2008	13:22	
184A	8.33	579.88	571.55	8/13/2008	13:48	
184AT	8.29	579.69	571.40	8/13/2008	13:49	
185A	9.12	580.84	571.72	8/13/2008	13:40	
185AT	9.39	580.69	571.30	8/13/2008	13:39	
186A	12.59	579.76	567.17	8/13/2008	13:34	
186AT	8.88	580.10	571.22	8/13/2008	13:33	
187A	13.28	579.94	566.66	8/13/2008	13:30	
187AT	7.91	579.30	571.39	8/13/2008	13:31	
188A	16.98	580.91	563.93	8/13/2008	13:25	
188AT	8.73	580.59	571.86	8/13/2008	13:26	
189A	14.27	579.82	565.55	8/13/2008	13:20	
189AT	8.55	580.40	571.85	8/13/2008	13:19	
190A	13.06	580.58	567.52	8/13/2008	13:07	
190AT	9.09	580.92	571.83	8/13/2008	13:05	
191A	9.70	580.62	570.92	8/13/2008	13:00	
191AT	9.17	581.06	571.89	8/13/2008	13:01	
192A	13.15	584.08	570.93	8/13/2008	13:13	
192AT	13.92	584.46	570.54	8/13/2008	13:12	
193A	12.07	584.13	572.06	8/13/2008	12:49	
193AT	7.88	583.09	575.21	8/13/2008	12:50	

APPENDIX A
GROUNDWATER ELEVATION DATA
3Q08
DUPONT NECCO PARK

Location	Depth to Water	Casing Elevation	Groundwater Elevation	Date	Time	Comment
194A	13.37	584.35	570.98	8/13/2008	12:52	
194AT	11.12	584.93	573.81	8/13/2008	12:51	
201B	7.86	579.25	571.39	8/13/2008	14:03	
202D	36.15	593.73	557.58	8/13/2008	12:36	
202E	36.46	593.73	557.27	8/13/2008	12:38	
202F	35.82	593.73	557.91	8/13/2008	12:39	
203D	31.25	593.86	562.61	8/13/2008	12:30	
203E	31.20	593.86	562.66	8/13/2008	12:32	
203F	31.14	593.86	562.72	8/13/2008	12:33	
BZTW-1	8.29	579.67	571.38	8/13/2008	13:41	
BZTW-2	7.71	579.38	571.67	8/13/2008	13:55	
D-10	8.49	580.02	571.53	8/13/2008	13:44	
D-11	6.45	578.07	571.62	8/13/2008	13:57	
D-13	6.63	579.07	572.44	8/13/2008	14:22	
D-14	7.43	579.01	571.58	8/13/2008	14:21	
D-23	14.94	580.55	565.61	8/13/2008	13:15	
D-9	8.35	580.15	571.80	8/13/2008	13:43	
RDB-3	5.18	579.31	574.13	8/13/2008	12:42	
RDB-5	5.31	578.57	573.26	8/13/2008	12:44	
RW-10	6.50	577.90	571.40	8/13/2008	14:05	
RW-4	33.26	581.52	548.26	8/13/2008	12:54	
RW-5	18.23	578.88	560.65	8/13/2008	13:28	
RW-8	31.98	585.52	553.54	8/13/2008	13:01	
RW-9	20.93	575.13	554.20	8/13/2008	12:41	

Appendix B

GWTF Process Sampling Results

Appendix B: Summary of 3Q08 Analytical Results
DuPont Necco Park

		BC-INFLUENT	DEF-INFLUENT	COMB-EFFLUENT	FILTER-BLK	TBLK
Analyte	Units	8/13/08	8/13/08	8/13/08	8/13/08	8/13/08
Field Parameters						
COLOR QUALITATIVE (FIELD)	NS	grey	grey	grey	NA	NA
ODOR (FIELD)	NS	moderate	moderate	slight	NA	NA
PH (FIELD)	STD UNITS	5.92	7.61	7.6	NA	NA
REDOX (FIELD)	MV	-147	-240	-127	NA	NA
SPECIFIC CONDUCTANCE (FIELD)	UMHOS/CM	28250	4370	7514	NA	NA
TEMPERATURE FIELD)	DEGREES C	17.8	14.8	16.2	NA	NA
TURBIDITY QUANTITATIVE (FIELD)	NTU	39.9	47.1	107.1	NA	NA
Volatile Organics						
1,1,2,2-TETRACHLOROETHANE	UG/L	4400 J	1400 J	810 J	NS	<0.18 UJ
1,1,2-TRICHLOROETHANE	UG/L	1200	2400	850 J	NS	<0.27
1,1-DICHLOROETHENE	UG/L	140 J	360 J	<6.3	NS	<0.19
1,2-DICHLOROETHANE	UG/L	360 J	220 J	54	NS	<0.22
CARBON TETRACHLORIDE	UG/L	880	1500	8.5 J	NS	<0.13
CHLOROFORM	UG/L	5200	4900	330	NS	<0.16
CIS-1,2 DICHLOROETHENE	UG/L	9300	11000	680	NS	<0.17
METHYLENE CHLORIDE	UG/L	2300 B	4900	480	NS	0.57 J
TETRACHLOROETHYLENE	UG/L	1500	1600	32 J	NS	<0.29
TRANS-1,2-DICHLOROETHENE	UG/L	450	730	15 J	NS	<0.19
TRICHLOROETHENE	UG/L	5900	7600	190	NS	<0.17
VINYL CHLORIDE	UG/L	2500	2100	<7.3 UJ	NS	<0.22
Semivolatile Organics						
2,4,5-TRICHLOROPHENOL	UG/L	<19	270	240 J	NS	NS
2,4,6-TRICHLOROPHENOL	UG/L	<28	130	120 J	NS	NS
3- AND 4- METHYLPHENOL	UG/L	250 J	<0.75	15 J	NS	NS
HEXACHLOROBENZENE	UG/L	<1.3	<0.65	<0.65	NS	NS
HEXACHLOROBUTADIENE	UG/L	640	32 J	70 J	NS	NS
HEXACHLOROETHANE	UG/L	460 J	9.9 J	5.8 J	NS	NS
PENTACHLOROPHENOL	UG/L	71 J	510	480 J	NS	NS
PHENOL	UG/L	150 J	34 J	44 J	NS	NS
TIC 01	UG/L	1100 J	370 J	760 J	NS	NS
Inorganics						
BARIUM, DISSOLVED	UG/L	934000	100 J	480	NS	NS
BARIUM, TOTAL	UG/L	991000	90 J	27400	1.3 B	NS
SULFATE	UG/L	1000	871000	647000	NS	NS
Total Volatiles	UG/L	34130	38710	3450	NS	0.57

NA = not applicable

< and ND = Non detect at stated reporting limit

B=analyte concentration not significantly greater than detected in method blank.

NS= not sampled

J= estimated concentration

Appendix C

Recovery Well Sampling Results

Appendix C: Recovery Well Sampling Results

Necco Park

3Q08

		EQBLK 8/13/08	RW-4 8/13/08	RW-4 8/13/08	RW-5 8/13/08	RW-8 8/13/08	RW-9 8/13/08	TBLK 8/13/08
Analyte	Units	EB	DUPLICATE	FS	FS	FS	FS	TB
Field Parameters								
COLOR QUALITATIVE (FIELD)	NS	NA	clear	clear	white tint	clear	clear	NA
DEPTH TO WATER FROM TOC	Feet	NA	33.26	33.26	18.23	31.98	20.93	NA
ODOR (FIELD)	NS	NA	strong	strong	strong	moderate	moderate	NA
PH (FIELD)	STD UNITS	NA	7.04	7.04	6.24	7.75	7.66	NA
REDOX (FIELD)	MV	NA	-281	-281	-187	-295	-293	NA
SPECIFIC CONDUCTANCE (FIELD UMHOS/CM		NA	9094	9094	29610	3885	4515	NA
TEMPERATURE (FIELD)	DEGREES C	NA	17.7	17.7	17.4	13.7	13.5	NA
TURBIDITY QUALITATIVE (FIELD)	NS	NA	14.5	14.5	38.8	3.97	5.19	NA
Volatile Organics								
1,1,2,2-TETRACHLOROETHANE	UG/L	<0.18 UJ	12000 J	12000 J	4000 J	1300 J	1500 J	<0.18 UJ
1,1,2-TRICHLOROETHANE	UG/L	<0.27	500	500	1400	2500	2400 J	<0.27
1,1-DICHLOROETHENE	UG/L	<0.19	<79	<79	300 J	240 J	460 J	<0.19
1,2-DICHLOROETHANE	UG/L	<0.22	<92	<92	450 J	240 J	210 J	<0.22
CARBON TETRACHLORIDE	UG/L	<0.13	2200	2600	1400	2900	1200	<0.13
CHLOROFORM	UG/L	<0.16	5500	5600	6700	9100	2700	<0.16
CIS-1,2 DICHLOROETHENE	UG/L	<0.17	830	890	13000	7300	13000	<0.17
METHYLENE CHLORIDE	UG/L	0.33 J	790 B	820 B	2700 B	2500 B	6200 J	0.74 J
TETRACHLOROETHYLENE	UG/L	<0.29	2100	2300	2400	3000	1300	<0.29
TRANS-1,2-DICHLOROETHENE	UG/L	<0.19	170 J	160 J	740	640	920	<0.19
TRICHLOROETHENE	UG/L	<0.17	4500	5000	8700	10000	7000	<0.17
VINYL CHLORIDE	UG/L	<0.22	390 J	410 J	4800	1500	3200 J	<0.22
Semivolatile Organics								
2,4,5-TRICHLOROPHENOL	UG/L	<0.96	<240	<240	<24	520	180	NS
2,4,6-TRICHLOROPHENOL	UG/L	<1.4	<350	<350	<35	300	48 J	NS
3- AND 4- METHYLPHENOL	UG/L	<0.75	<0.75	<0.75	210 J	<0.75	19 J	NS
HEXACHLOROBENZENE	UG/L	<0.065	<16	<16	<1.6	<1.6	<0.43	NS
HEXACHLOROBUTADIENE	UG/L	<0.51	5500	5900	660	65 J	12 J	NS
HEXACHLOROETHANE	UG/L	<0.58	1200 J	1300 J	470 J	18 J	4.7 J	NS
PENTACHLOROPHENOL	UG/L	<0.48	<120	<120	86 J	1100 J	45 J	NS
PHENOL	UG/L	<0.96	<240	<240	120 J	<24	61 J	NS
Tentatively Identified Compound 01	UG/L	<NS J	500 J	570 J	1200 J	<NS J	490 J	NS
Inorganics								
BARIUM, DISSOLVED	UG/L	0.75 J	390	390	1080000	110 J	200	NS
CHLORIDE	UG/L	100 J	3240000	3250000	16600000	771000	1190000	NS
Total Volatiles	UG/L	0.33 J	28980 J	30280 J	46590 J	41220 J	40090 J	0.74 J

NS= Location not sampled for this parameter

< and ND = non-detect at stated reported limit

J= Analyte present, however concentration may be estimated

UJ= Not detected. Reporting limit may be estimated

B= Detected in associated blank sample

R= Unusable due to QC exceedance