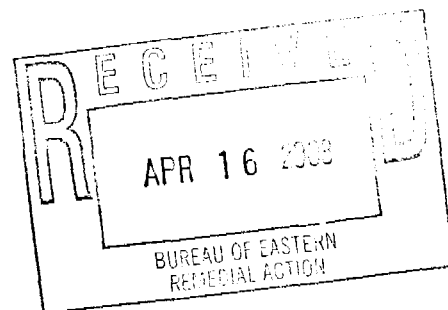




Dvirka and Bartilucci

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April 14, 2003

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Mr. Joseph Jones
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-7010

Re: New Cassel Industrial Area (Site No. 1-30-043)
Off-site Groundwater Monitoring and Assessment Program
Work Assignment No. D003600-25
D&B No. 1898-3F

Dear Mr. Jones:

Enclosed please find the groundwater results from the sixth round of sampling of the four early warning wells (EW-1B, EW-1C, EW-2B and EW-2C) and the nine monitoring wells (MW-1 through MW-9) as part of the New Cassel Industrial Area Off-site Groundwater Monitoring and Assessment Program. The wells were sampled on January 29 through February 4, 2003. Figure 1 illustrates the locations of the wells. The groundwater sampling procedures, purge water parameter data, Data Usability Summary Report (DUSR) and analytical results are provided below.

Sampling Procedures

Sampling was conducted in accordance with the approved work plan. Prior to sampling, each monitoring well was purged to remove the standing water inside the well. A minimum of three casing volumes were removed to ensure that water being sampled was representative of the aquifer. The early warning wells were purged using dedicated submersible pumps and purging of the monitoring wells was accomplished using a decontaminated submersible pump. All purge water was discharged to the Nassau County sanitary sewer system with approval of the Nassau County Department of Public Works. For the monitoring wells, purging was accomplished by first measuring the static water level in the well and calculating the standing water volume. Water level measurements were collected using an electronic water level indicator. Water levels were not measured in the four early warning wells, since dedicated pumps are installed in these wells and the casings are not accessible. The depth to water at these locations was estimated based on water table elevation information in the study area.

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New York State Department of Environmental Conservation
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During the purging process, pH, specific conductivity, temperature, turbidity, dissolved oxygen and redox potential (eH) were monitored at regular intervals. When the values of all field parameters, except turbidity, had stabilized to within 10 percent for two successive readings, and the turbidity of the water was less than 50 Nephelometric Turbidity Units (NTUs), and a minimum of three casing volumes had been removed, well purging was considered complete. Results for the parameters monitored during purging are summarized in Table 1. Measurements of the parameters collected immediately prior to sampling are shown on the Sample Information Records included as Attachment A.

After purging, groundwater samples were collected from the dedicated discharge tubing. Samples were collected at a maximum flow rate of approximately 1-gallon per minute. Samples for volatile organic compound (VOC) analyses were collected first, followed by the remaining parameters. Filled sample bottles were immediately placed into an ice-filled cooler for shipment under chain-of-custody procedures to Southwest Laboratory of Oklahoma, Inc. Samples were shipped to arrive at the laboratory within 48 hours after collection.

Appropriate quality assurance/quality control (QA/QC) samples, including matrix spike, matrix spike duplicate and trip blank samples, were collected in conformance with the approved work plan.

Decontamination of the submersible pump used for purging the nine monitoring wells was performed in accordance with procedures described in the approved QA/QC Plan.

Data Usability Summary Report

Thirteen groundwater samples were collected in January/February 2003 during the sixth round of sampling for the Groundwater Monitoring and Assessment Program. The samples were analyzed by Southwest Laboratory of Oklahoma, a laboratory contractor to the New York State Department of Environmental Conservation (NYSDEC). The samples were analyzed in accordance with the specified methods and NYSDEC Analytical Services Protocol (ASP) Quality Assurance/Quality Control (QA/QC) requirements.

The data packages submitted by Southwest have been validated by Nancy Potak, a NYSDEC-approved data validator and subcontractor to Dvirka and Bartilucci Consulting Engineers. Validation was performed in accordance with NYSDEC ASP requirements. The findings of the validation process have been summarized below and copies of the validation reports prepared by Nancy Potak are available upon request.

All samples were analyzed within the NYSDEC 6/00 ASP specified holding times of 10 days based upon Verified Time of Sample Receipt (VTSR).

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New York State Department of Environmental Conservation
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Sample MW-4 was utilized as the matrix spike (MS) and matrix spike duplicate (MSD) and all recoveries were within QC limits.

Eight of the samples required reanalysis of the volatile fraction at secondary dilutions due to compound concentrations exceeding the instrument calibration range. The results for these compounds were taken from the diluted run and have been flagged with a "D" on the data summary table (Table 2).

Qualification of the data for the sample MW-9 was required. Three compounds (1,1-dichloroethene, 1,1-dichloroethane and 1,1,1-trichloroethane) were detected in this sample and in the trip blank. Since the concentrations of these compounds in the sample from MW-9 were less than five times the concentration detected in the trip blank, the results for these compounds were qualified as non-detect in MW-9.

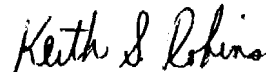
No other problems were found with the data packages and all results have been deemed valid and usable for environmental assessment purposes as qualified above.

Analytical Results

The analytical results for the four early warning wells and the nine monitoring wells are summarized in Table 2 (VOCs) and Table 3 (inorganic parameters). The results are compared to previous sample results (Rounds 1 through 5) and the NYSDEC Class GA groundwater standards and guidance values. A complete copy of the laboratory data package is enclosed for your files.

If you have any questions or require additional information, please contact me at (516) 364-9890.

Very truly yours,



Keith S. Robins

KSR/JM(t)/ld
Enclosures
♦ 1898\KSR03L\TR-06.doc(R01)

Table 1

**NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
SUMMARY OF PURGE WATER PARAMETER DATA**

Well Number	Gallons	pH (standard units)	Temperature (°C)	Specific Conductivity (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	eH (mv)
EW-1B	Initial	6.10	13.5	2.05	8.6	3.42	248
	10	5.90	14.1	0.243	1.5	5.08	263
	20	5.61	14.4	0.243	1.2	2.79	274
	30	5.50	14.2	0.225	0.7	1.54	281
	40	5.48	14.4	0.223	1.0	1.32	287
	50	5.42	14.2	0.207	0.9	1.30	286
	60	5.43	14.5	0.207	0.5	1.37	295
	70	5.43	14.4	0.201	0.7	1.39	289
	80	5.46	14.3	0.208	0.6	1.41	291
	90	5.42	14.4	0.198	0.4	1.40	288
	100	5.45	14.4	0.199	0.3	1.42	290
EW-1C	Initial	8.77	13.5	0.110	34.9	3.10	301
	150	9.61	12.4	0.096	60.5	3.00	304
	300	9.00	11.1	0.102	289	6.16	296
	450	8.03	11.3	0.105	38.6	7.52	231
	600	7.39	11.0	0.101	13.9	7.14	230
	750	6.92	11.2	0.099	19.3	7.93	236
	900	7.11	11.9	0.147	6.9	6.73	207
	1,050	6.10	12.1	0.102	5.2	7.85	257
	1,200	5.98	12.0	0.101	14.2	10.76	256
	1,350	5.89	12.1	0.099	5.4	11.21	270
	1,500	5.90	12.0	0.097	3.5	11.51	269
EW-2B	Initial	5.70	13.70	0.154	0.0	1.91	258
	20	5.37	14.11	0.144	0.0	1.07	276
	40	5.38	14.34	0.146	0.0	0.95	290
	60	5.39	14.33	0.148	0.0	1.45	298
	80	5.17	14.12	0.149	1.1	1.46	314
	100	5.33	14.52	0.148	0.6	1.47	301
	120	5.33	14.46	0.146	0.7	1.53	293
EW-2C	Initial	5.87	13.63	0.096	136	3.17	247
	200	8.31	13.64	0.061	0.0	2.27	189
	400	9.25	12.93	0.058	0.0	2.06	48
	600	8.18	12.14	0.050	839.0	5.44	72
	800	7.27	11.72	0.048	258.0	7.89	183
	1,000	6.54	11.11	0.047	35.0	8.04	207
	1,200	6.31	11.46	0.047	35.8	8.34	213
	1,400	6.21	11.50	0.047	33.3	8.50	216
	1,600	6.22	11.45	0.047	0.0	8.37	219
MW-1	Initial	4.81	13.30	0.275	1.2	2.51	382
	10	5.14	14.68	0.246	4.9	1.84	374
	20	5.13	14.83	0.245	1.4	2.42	379

Table 1 (continued)

**NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
SUMMARY OF PURGE WATER PARAMETER DATA**

Well Number	Gallons	pH (standard units)	Temperature (°C)	Specific Conductivity (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	eH (mv)
MW-1 (cont'd)	30	5.14	14.84	0.246	0.3	2.40	379
	40	5.13	14.89	0.245	1.1	1.95	378
	50	5.13	14.73	0.247	1.0	2.00	378
	60	5.12	14.83	0.246	2.6	2.04	378
	70	5.10	14.95	0.245	1.1	2.02	379
MW-2	Initial	5.66	11.32	0.207	1.3	1.23	344
	10	5.93	14.25	0.250	26.6	1.10	218
	20	5.78	14.46	0.228	3.9	1.01	223
	30	5.76	14.43	0.234	3.0	1.17	216
	40	5.70	14.79	0.227	2.6	0.99	224
	50	5.70	14.83	0.224	1.3	1.05	224
	60	5.69	14.98	0.224	0.7	1.07	227
	70	5.67	15.10	0.225	0.4	1.15	228
MW-3	Initial	4.70	13.99	0.097	0.7	1.09	188
	10	4.59	14.93	0.100	2.1	1.06	169
	20	4.59	15.21	0.103	1.5	0.95	168
	30	4.64	15.14	0.130	10.1	1.10	170
	40	4.68	15.41	0.145	15.5	0.96	170
	50	4.71	15.37	0.154	10.7	0.99	171
	60	4.79	15.37	0.163	9.2	0.84	169
	70	4.85	15.38	0.166	0.8	0.91	166
	80	4.90	15.51	0.168	0.1	0.85	165
MW-4	Initial	5.16	14.80	0.254	0.0	5.63	354
	50	5.42	14.85	0.228	3.6	1.80	355
	100	5.41	14.98	0.234	1.1	1.52	349
	150	5.39	14.72	0.235	0.9	2.08	340
	200	5.37	14.84	0.229	1.2	1.43	339
	250	5.35	14.98	0.222	1.1	1.68	339
	300	5.39	15.11	0.229	0.6	1.66	335
	350	5.32	10.13	0.221	0.9	1.63	339
MW-5	Initial	5.05	13.27	0.138	3.3	8.30	325
	10	5.58	14.45	0.225	13.5	7.30	332
	20	5.61	14.64	0.230	3.5	8.70	340
	30	5.62	14.84	0.236	2.1	8.76	347
	40	5.62	14.64	0.236	1.1	8.61	350
	50	5.63	14.70	0.237	0.6	8.76	354
MW-6	Initial	5.73	6.34	0.323	3.1	2.77	333
	10	5.61	13.39	0.304	4.0	1.89	329
	20	5.66	14.26	0.308	1.2	1.03	313
	30	5.65	14.68	0.306	2.6	0.83	307
	40	5.65	14.89	0.303	1.4	0.79	298

Table 1 (continued)

**NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
SUMMARY OF PURGE WATER PARAMETER DATA**

Well Number	Gallons	pH (standard units)	Temperature (°C)	Specific Conductivity (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	eH (mv)
MW-6 (cont'd)	50	5.67	14.76	0.306	9.3	1.14	290
	60	5.67	14.77	0.305	15.4	1.04	289
	70	5.66	14.68	0.309	13.9	1.07	286
MW-7	Initial	5.33	12.4	0.122	1.1	6.09	171
	10	5.06	13.0	0.159	115.0	5.96	223
	20	5.01	12.8	0.161	7.1	4.75	263
	30	5.02	13.1	0.160	2.1	4.73	285
	40	5.02	12.8	0.161	2.1	4.71	297
	50	5.02	12.9	0.161	1.0	4.72	307
MW-8	Initial	5.71	11.0	0.167	110.2	4.28	319
	10	5.67	12.9	0.165	128.0	3.50	202
	20	5.74	13.2	0.172	78.1	2.77	145
	30	5.80	13.2	0.174	103.0	2.87	136
	40	5.83	13.3	0.174	102.1	3.13	130
	50	5.80	13.1	0.175	40.4	3.45	132
	60	5.82	13.2	0.176	42.1	3.46	126
	70	5.79	12.9	0.176	29.9	3.45	126
MW-9	Initial	8.76	13.39	0.160	9.9	6.70	275
	50	11.20	13.48	0.428	8.4	5.12	193
	100	11.42	13.26	0.390	3.6	5.13	166
	150	11.34	13.94	0.311	2.1	5.34	154
	200	11.11	12.94	0.248	1.4	5.80	160
	250	9.97	12.68	0.155	2.3	6.69	199
	300	9.03	12.68	0.140	1.1	7.28	224
	350	8.34	12.57	0.130	0.6	7.57	240
	400	7.85	12.63	0.126	1.4	7.99	254
	450	7.51	12.54	0.121	1.0	8.03	264
	500	7.27	12.54	0.122	0.9	8.20	271
	550	7.11	12.54	0.122	1.3	8.10	277
	600	6.97	12.53	0.117	1.2	8.26	283

Notes:

°C - degrees Celsius
ms/cm - millisiemens/centimeter
NTUs - Nephelometric Turbidity Units
mv - millivolt
mg/l - milligrams per liter

TABLE 2
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample Identification	EW-1B	EW-1B	EW-1B	EW-1B	EW-1B	EW-1B	Contract	NYSDEC Class GA
Sample Depth, ft	154-164	154-164	154-164	154-164	154-164	154-164	Required	Groundwater
Date of Collection	09/25/01	01/28/02	04/25/02	07/18/02	10/16/02	01/29/03	Detection	Standard or
Dilution Factor	1.0	50.0	1.0	1.0	1.0	1.0	Limit	Guidance Value
Units	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
Dichlorodifluoromethane	U	U	U	U	U	U	0.5	5 ST
Chloromethane	U	U	U	U	U	U	0.5	5 ST
Vinyl Chloride	U	U	U	U	U	U	0.5	2 ST
Bromomethane	U	U	U	U	U	U	0.5	5 ST
Chloroethane	U	U	U	U	U	U	0.5	5 ST
Fluorotrichloromethane	U	U	U	U	U	U	0.5	5 ST
1,1-Dichloroethene	39	45	39	38	47	31	0.5	5 ST
Methylene Chloride	U	26	U	U	U	U	0.5	5 ST
trans-1,2-Dichloroethene	0.6	U	U	0.8	U	0.7	0.5	5 ST
1,1-Dichloroethane	3.8	U	10	7	8	6	0.5	5 ST
2,2-Dichloropropane	**	U	U	U	U	U	0.5	5 ST
cis-1,2-Dichloroethene	58 **D	87	64 D	44 D	68	53 D	0.5	5 ST
Chloroform	U	U	0.3 J	U	9	U	0.5	7 ST
Bromochloromethane	U	U	U	U	U	U	0.5	5 ST
1,1,1-Trichloroethane	40	59	52 D	41 D	59	34 D	0.5	5 ST
1,1-Dichloropropene	U	U	U	U	U	U	0.5	5 ST
Carbon Tetrachloride	U	U	U	U	U	U	0.5	5 ST
1,2-Dichloroethane	U	U	U	U	U	U	0.5	0.6 ST
Trichloroethene	66 D	120	91 D	67 D	830	64 D	0.5	5 ST
1,2-Dichloropropane	U	U	U	U	U	U	0.5	1 ST
Bromodichloromethane	U	U	U	U	U	U	0.5	50GV
Dibromomethane	U	U	U	U	U	U	0.5	5 ST
cis-1,3-Dichloropropene	U	U	U	U	U	U	0.5	0.4 ST *
trans-1,3-Dichloropropene	U	U	U	U	U	U	0.5	0.4 ST *
1,1,2-Trichloroethane	U	U	U	U	U	U	0.5	1 ST
1,3-Dichloropropane	U	U	U	U	U	U	0.5	5 ST
Tetrachloroethene	630 D	1000	780 D	540 D	U	470 D	0.5	5 ST
Dibromochloromethane	U	U	U	U	U	U	0.5	50GV
Chlorobenzene	U	U	U	U	U	U	0.5	5 ST
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	0.5	5 ST
Bromoforn	U	U	U	U	U	U	0.5	50GV
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	0.5	5 ST
1,2,3-Trichloropropane	U	U	U	U	U	U	0.5	0.04 ST
Bromobenzene	U	U	U	U	U	U	0.5	5 ST
1,3-Dichlorobenzene	1.1	U	U	2	2	2	0.5	3 ST
1,4-Dichlorobenzene	0.7	U	0.8	0.9	U	0.9	0.5	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	0.5	5 ST
Hexchlorobutadiene	U	U	U	U	U	U	0.5	0.5 ST
1,2,3-Trichlorobenzene	U	U	U	U	U	U	0.5	5 ST
Methyl-tert-butyl ether	U	U	U	U	U	U	0.5	—
Benzene	U	U	U	U	U	U	0.5	1 ST
Toluene	U	U	U	U	U	U	0.5	5 ST
Ethylbenzene	U	U	U	U	U	U	0.5	5 ST
m-Xylene	U	U	U	U	U	U	0.5	5 ST
p-Xylene	U	U	U	U	U	U	0.5	5 ST
o-Xylene	U	U	U	U	U	U	0.5	5 ST
Styrene	U	U	U	U	U	U	0.5	5 ST
Isopropylbenzene (Cumene)	U	U	U	U	U	U	0.5	5 ST
n-Propylbenzene	U	U	U	U	U	U	0.5	5 ST
1,3,5-Trimethylbenzene	U	U	U	U	U	U	0.5	5 ST
2-Chlorotoluene	U	U	U	U	1	U	0.5	5 ST
4-Chlorotoluene	U	U	U	U	U	2	0.5	5 ST
tert-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
1,2,4-Trimethylbenzene	U	U	U	U	U	U	0.5	5 ST
sec-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
p-Isopropyltoluene(p-Cymene)	U	U	U	U	0.6	U	0.5	5 ST
n-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
Total VOCs	839.2	1337	1037.1	840.7	1024.8	663.6		

QUALIFIERS:

U: Compound analyzed for but not detected
J: Compound found at a concentration below the CRDL, value estimated
**: Result reported as a sum of 2,2-dichloropropane and cis-1,2-dichloroethene
E: Compound concentration exceeds instrument calibration range, value estimated
D: Result taken from reanalysis at a secondary dilution

NOTES:

*: Value pertains to the sum of the isomers
ST: Standard
GV: Guidance Value
---: Not established
 Indicates value exceeds NYSDEC Class GA groundwater standard or guidance value

TABLE 2 (continued)
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample Identification	EW-1C	EW-1C	EW-1C	EW-1C	EW-1C	EW-1C	Contract Required	NYSDEC Class GA
Sample Depth, ft	506-516	506-516	506-516	506-516	506-516	506-516	Detection	Groundwater
Date of Collection	09/25/01	01/28/02	04/25/02	07/18/02	10/16/02	01/29/03	Limit	Standard or Guidance Value
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0		
Units	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)		(ug/l)
Dichlorodifluoromethane	U	U	U	U	U	U	0.5	5 ST
Chloromethane	U	U	U	U	U	U	0.5	5 ST
Vinyl Chloride	U	U	U	U	U	U	0.5	2 ST
Bromomethane	U	U	U	U	U	U	0.5	5 ST
Chloroethane	U	U	U	U	U	U	0.5	5 ST
Fluorotrichloromethane	U	U	U	U	U	U	0.5	5 ST
1,1-Dichloroethene	U	U	U	U	U	U	0.5	5 ST
Methylene Chloride	U	U	U	U	U	U	0.5	5 ST
trans-1,2-Dichloroethene	U	U	U	U	U	U	0.5	5 ST
1,1-Dichloroethane	U	U	U	U	U	U	0.5	5 ST
2,2-Dichloropropane	U	U	U	U	U	U	0.5	5 ST
cis-1,2-Dichloroethene	U	U	U	U	U	U	0.5	5 ST
Chloroform	U	U	U	U	U	U	0.5	7 ST
Bromochloromethane	U	U	U	U	U	U	0.5	5 ST
1,1,1-Trichloroethane	U	U	U	U	U	U	0.5	5 ST
1,1-Dichloropropene	U	U	U	U	U	U	0.5	5 ST
Carbon Tetrachloride	U	U	U	U	0.5	0.6	0.5	5 ST
1,2-Dichloroethane	U	U	U	U	U	U	0.5	0.6 ST
Trichloroethene	12	13	15	13	18	21	0.5	5 ST
1,2-Dichloropropane	U	U	U	U	U	U	0.5	1 ST
Bromodichloromethane	U	U	U	U	U	U	0.5	50GV
Dibromomethane	U	U	U	U	U	U	0.5	5 ST
cis-1,3-Dichloropropene	U	U	U	U	U	U	0.5	0.4 ST *
trans-1,3-Dichloropropene	U	U	U	U	U	U	0.5	0.4 ST *
1,1,2-Trichloroethane	U	U	U	U	U	U	0.5	1 ST
1,3-Dichloropropane	U	U	U	U	U	U	0.5	5 ST
Tetrachloroethene	U	0.6	5	U	2	U	0.5	5 ST
Dibromochloromethane	U	U	U	U	U	U	0.5	50GV
Chlorobenzene	U	U	U	U	U	U	0.5	5 ST
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	0.5	5 ST
Bromoform	U	U	U	U	U	U	0.5	50GV
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	0.5	5 ST
1,2,3-Trichloropropane	U	U	U	U	U	U	0.5	0.04 ST
Bromobenzene	U	U	U	U	U	U	0.5	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	0.5	5 ST
Hexchlorobutadiene	U	U	U	U	U	U	0.5	0.5 ST
1,2,3-Trichlorobenzene	U	U	U	U	U	U	0.5	5 ST
Methyl-tert-butyl ether	U	U	U	U	U	U	0.5	—
Benzene	U	U	U	U	U	U	0.5	1 ST
Toluene	U	U	U	U	U	U	0.5	5 ST
Ethylbenzene	U	U	U	U	U	U	0.5	5 ST
m-Xylene	U	U	U	U	U	U	0.5	5 ST
p-Xylene	U	U	U	U	U	U	0.5	5 ST
o-Xylene	U	U	U	U	U	U	0.5	5 ST
Styrene	U	U	U	U	U	U	0.5	5 ST
Isopropylbenzene (Cumene)	U	U	U	U	U	U	0.5	5 ST
n-Propylbenzene	U	U	U	U	U	U	0.5	5 ST
1,3,5-Trimethylbenzene	U	U	U	U	U	U	0.5	5 ST
2-Chlorotoluene	U	U	U	U	U	U	0.5	5 ST
4-Chlorotoluene	U	U	U	U	U	U	0.5	5 ST
tert-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
1,2,4-Trimethylbenzene	U	U	U	U	U	U	0.5	5 ST
sec Butylbenzene	U	U	U	U	U	U	0.5	5 ST
p-Isopropyltoluene(p-Cymene)	U	U	U	U	U	U	0.5	5 ST
n-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
Total VOCs	12	13.6	20	13	20.5	21.6		—

QUALIFIERS:

U: Compound analyzed for but not detected
J: Compound found at a concentration below the CRDL, value estimated
*: Result reported as a sum of 2,2- dichloropropane and cis-1,2-dichloroethene
E: Compound concentration exceeds instrument calibration range, value estimated
D: Result taken from reanalysis at a secondary dilution
B: Compound found in the method blank as well as the sample

NOTES:

*: Value pertains to the sum of the isomers
ST: Standard
GV: Guidance Value
—: Not established
☒ Indicates value exceeds NYSDEC Class GA groundwater standard or guidance value

TABLE 2 (continued)
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample Identification	EW-2B	EW-2B	EW-2B	EW-2B	EW-2B	EW-2B	Contract Required Detection Limit	NYSDEC Class GA Groundwater Standard or Guidance Value
Sample Depth, ft	132-142	132-142	132-142	132-142	132-142	132-142		
Date of Collection	09/25/01	01/28/02	04/25/02	07/19/02	10/16/02	01/29/03		
Dilution Factor	1.0	5.0	5.0	5.0	1.0	1.0		
Units	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)		(ug/l)
Dichlorodifluoromethane	U	U	U	U	U	U	0.5	5 ST
Chloromethane	U	U	U	U	U	U	0.5	5 ST
Vinyl Chloride	51 D	32	24	29	32	28	0.5	2 ST
Bromomethane	U	U	U	U	U	U	0.5	5 ST
Chloroethane	2.6	U	24	19	U	U	0.5	5 ST
Fluorotrichloromethane	0.6	U	U	U	U	U	0.5	5 ST
1,1-Dichloroethene	43 D	10	8	U	7	5	0.5	5 ST
Methylene Chloride	1.5	3 J	U	U	U	U	0.5	5 ST
trans-1,2-Dichloroethene	U	U	U	U	U	U	0.5	5 ST
1,1-Dichloroethane	150 D	24	9	5	4	3	0.5	5 ST
2,2-Dichloropropane	--	U	U	U	U	U	0.5	5 ST
cis-1,2-Dichloroethene	36 **	25	19	18	19	19	0.5	5 ST
Chloroform	U	U	U	U	U	0.5	0.5	7 ST
Bromochloromethane	U	U	U	U	U	U	0.5	5 ST
1,1,1-Trichloroethane	85 D	16	8	5	4	3	0.5	5 ST
1,1-Dichloropropene	U	U	U	U	U	U	0.5	5 ST
Carbon Tetrachloride	U	U	U	U	U	U	0.5	5 ST
1,2-Dichloroethane	0.7	U	0.5	U	0.6	0.7	0.5	0.6 ST
Trichloroethene	140 D	130	100 D	64 D	98	110 D	0.5	5 ST
1,2-Dichloropropane	U	U	U	U	U	U	0.5	1 ST
Bromodichloromethane	U	U	U	U	U	U	0.5	50GV
Dibromomethane	U	U	U	U	U	U	0.5	5 ST
cis-1,3-Dichloropropene	U	U	U	U	U	U	0.5	0.4 ST *
trans-1,3-Dichloropropene	U	U	U	U	U	U	0.5	0.4 ST *
1,1,2-Trichloroethane	U	U	U	U	U	U	0.5	1 ST
1,3-Dichloropropane	U	U	U	U	U	U	0.5	5 ST
Tetrachloroethene	20	21	17	21	17	16	0.5	5 ST
Dibromochloromethane	U	U	U	U	U	U	0.5	50GV
Chlorobenzene	1.3	U	U	U	0.9	1	0.5	5 ST
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	0.5	5 ST
Bromoform	U	U	U	U	U	U	0.5	50GV
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	0.5	5 ST
1,2,3-Trichloropropane	0.5	U	U	U	U	U	0.5	0.04 ST
Bromobenzene	U	U	U	U	U	U	0.5	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	0.5	5 ST
Hexachlorobutadiene	U	U	U	U	U	U	0.5	0.5 ST
1,2,3-Trichlorobenzene	U	U	U	U	U	U	0.5	5 ST
Methyl-tert-butyl ether	U	U	U	U	U	U	0.5	—
Benzene	U	U	U	U	U	U	0.5	1 ST
Toluene	U	U	U	U	U	U	0.5	5 ST
Ethylbenzene	U	U	U	U	U	U	0.5	5 ST
m-Xylene	U	U	U	U	U	U	0.5	5 ST
p-Xylene	U	U	U	U	U	U	0.5	5 ST
o-Xylene	U	U	U	U	U	U	0.5	5 ST
Styrene	U	U	U	U	U	U	0.5	5 ST
Isopropylbenzene (Cumene)	U	U	U	U	U	U	0.5	5 ST
n-Propylbenzene	U	U	U	U	U	U	0.5	5 ST
1,3,5-Trimethylbenzene	U	U	U	U	U	U	0.5	5 ST
2-Chlorotoluene	U	U	U	U	U	U	0.5	5 ST
4-Chlorotoluene	U	U	U	U	U	U	0.5	5 ST
tert-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
1,2,4-Trimethylbenzene	U	U	U	U	U	U	0.5	5 ST
sec-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
p-Isopropyltoluene(p-Cymene)	U	U	U	U	U	U	0.5	5 ST
n-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
Total VOCs	532.2	281	209.5	181	182.5	186.2		

QUALIFIERS:

U: Compound analyzed for but not detected
J: Compound found at a concentration below the CRDL, value estimated
**: Result reported as a sum of 2,2-dichloropropane and cis-1,2-dichloroethene
E: Compound concentration exceeds instrument calibration range, value estimated
D: Result taken from reanalysis at a secondary dilution
B: Compound found in the method blank as well as the sample

NOTES:

*: Value pertains to the sum of the isomers
ST: Standard
GV: Guidance Value
—: Not established
 Indicates value exceeds NYSDEC Class GA groundwater standard or guidance value

TABLE 2 (continued)
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample Identification	EW-2C	EW-2C	EW-2C	EW-2C	EW-2C	EW-2C		Contract	NYSDEC Class GA
Sample Depth, ft	504-514	504-514	504-514	504-514	504-514	504-514		Required	Groundwater
Date of Collection	09/25/01	01/28/02	04/25/02	07/19/02	10/16/02	01/29/03		Detection	Standard or
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0		Limit	Guidance Value
Units	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)		(ug/l)	(ug/l)
Dichlorodifluoromethane	U	U	U	U	U	U		0.5	5 ST
Chloromethane	U	U	U	U	U	U		0.5	5 ST
Vinyl Chloride	U	U	U	U	U	U		0.5	2 ST
Bromomethane	U	U	U	U	U	U		0.5	5 ST
Chloroethane	U	U	U	U	U	U		0.5	5 ST
Fluorotrichloromethane	U	U	U	U	U	U		0.5	5 ST
1,1-Dichloroethene	U	U	U	U	U	U		0.5	5 ST
Methylene Chloride	U	U	U	U	U	U		0.5	5 ST
trans-1,2-Dichloroethene	U	U	U	U	U	U		0.5	5 ST
1,1-Dichloroethane	U	U	U	U	U	U		0.5	5 ST
2,2-Dichloropropane	U	U	U	U	U	U		0.5	5 ST
cis-1,2-Dichloroethene	U	U	U	U	U	U		0.5	5 ST
Chloroform	U	U	U	U	U	U		0.5	7 ST
Bromochloromethane	U	U	U	U	U	U		0.5	5 ST
1,1,1-Trichloroethane	U	U	U	U	U	U		0.5	5 ST
1,1-Dichloropropene	U	U	U	U	U	U		0.5	5 ST
Carbon Tetrachloride	U	U	U	U	U	U		0.5	5 ST
1,2-Dichloroethane	U	U	U	U	U	U		0.5	0.6 ST
Trichloroethene	U	U	U	U	U	U		0.5	5 ST
1,2-Dichloropropane	U	U	U	U	U	U		0.5	1 ST
Bromodichloromethane	U	U	U	U	U	U		0.5	50GV
Dibromomethane	U	U	U	U	U	U		0.5	5 ST
cis-1,3-Dichloropropene	U	U	U	U	U	U		0.5	0.4 ST *
trans-1,3-Dichloropropene	U	U	U	U	U	U		0.5	0.4 ST *
1,1,2-Trichloroethane	U	U	U	U	U	U		0.5	1 ST
1,3-Dichloropropane	U	U	U	U	U	U		0.5	5 ST
Tetrachloroethene	U	U	U	U	U	0.8		0.5	5 ST
Dibromochloromethane	U	U	U	U	U	U		0.5	50GV
Chlorobenzene	U	U	U	U	U	U		0.5	5 ST
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U		0.5	5 ST
Bromofom	U	U	U	U	U	U		0.5	50GV
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U		0.5	5 ST
1,2,3-Trichloropropane	U	U	U	U	U	U		0.5	0.04 ST
Bromobenzene	U	U	U	U	U	U		0.5	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U		0.5	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U		0.5	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U		0.5	3 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U		0.5	5 ST
Hexchlorobutadiene	U	U	U	U	U	U		0.5	0.5 ST
1,2,3-Trichlorobenzene	U	U	U	U	U	U		0.5	5 ST
Methyl-tert-butyl ether	U	U	U	U	U	U		0.5	—
Benzene	U	U	U	U	U	U		0.5	1 ST
Toluene	U	U	U	U	U	U		0.5	5 ST
Ethylbenzene	U	U	U	U	U	U		0.5	5 ST
m-Xylene	U	U	U	U	U	U		0.5	5 ST
p-Xylene	U	U	U	U	U	U		0.5	5 ST
o-Xylene	U	U	U	U	U	U		0.5	5 ST
Styrene	U	U	U	U	U	U		0.5	5 ST
Isopropylbenzene (Cumene)	U	U	U	U	U	U		0.5	5 ST
n-Propylbenzene	U	U	U	U	U	U		0.5	5 ST
1,3,5-Trimethylbenzene	U	U	U	U	U	U		0.5	5 ST
2-Chlorotoluene	U	U	U	U	U	U		0.5	5 ST
4-Chlorotoluene	U	U	U	U	U	U		0.5	5 ST
tert-Butylbenzene	U	U	U	U	U	U		0.5	5 ST
1,2,4-Trimethylbenzene	U	U	U	U	U	U		0.5	5 ST
sec-Butylbenzene	U	U	U	U	U	U		0.5	5 ST
p-Isopropyltoluene(p-Cymene)	U	U	U	U	U	U		0.5	5 ST
n-Butylbenzene	U	U	U	U	U	U		0.5	5 ST
Total VOCs	0	0	0	1	0	0.8			

QUALIFIERS:

U: Compound analyzed for but not detected
J: Compound found at a concentration below the CRDL, value estimated
*: Result reported as a sum of 2,2-dichloropropane and cis-1,2-dichloroethene
E: Compound concentration exceeds instrument calibration range, value estimated
D: Result taken from reanalysis at a secondary dilution

NOTES:

*: Value pertains to the sum of the isomers
ST: Standard
GV: Guidance Value
—: Not established
[] Indicates value exceeds NYSDEC Class GA groundwater standard or guidance value

TABLE 2 (continued)
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample Identification	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1		Contract	NYSDEC Class GA
Sample Depth, ft	90-110	90-110	90-110	90-110	90-110	90-110		Required	Groundwater
Date of Collection	11/02/01	01/24/02	04/25/02	07/16/02	10/17/02	02/03/03		Detection	Standard or
Dilution Factor	1.0	1.0	2.0	1.0	1.0	1.0		Limit	Guidance Value
Units	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)		(ug/l)	(ug/l)
Dichlorodifluoromethane	U	U	U	U	U	U		0.5	5 ST
Chloromethane	U	U	U	U	U	U		0.5	5 ST
Vinyl Chloride	U	U	U	U	U	U		0.5	2 ST
Bromomethane	U	U	U	U	U	U		0.5	5 ST
Chloroethane	U	U	U	U	U	U		0.5	5 ST
Fluorotrichloromethane	U	U	U	U	U	U		0.5	5 ST
1,1-Dichloroethene	16	8	26	24	49	33		0.5	5 ST
Methylene Chloride	U	U	U	U	U	U		0.5	5 ST
trans-1,2-Dichloroethene	U	U	U	U	U	U		0.5	5 ST
1,1-Dichloroethane	2.8	2	5	4	6	7		0.5	5 ST
2,2-Dichloropropane	**	U	U	U	U	U		0.5	5 ST
cis-1,2-Dichloroethene	1.1 **	1	3	3	5	5		0.5	5 ST
Chloroform	0.5	U	U	1	2	2		0.5	7 ST
Bromochloromethane	U	U	U	U	U	U		0.5	5 ST
1,1,1-Trichloroethane	7.2	4	10 J	10	15	16		0.5	5 ST
1,1-Dichloropropene	U	U	U	U	U	U		0.5	5 ST
Carbon Tetrachloride	U	U	U	U	U	U		0.5	5 ST
1,2-Dichloroethane	U	U	U	U	U	U		0.5	0.6 ST
Trichloroethene	21	16	52 DJ	55 E	79	51 D		0.5	5 ST
1,2-Dichloropropane	U	U	U	U	U	U		0.5	1 ST
Bromodichloromethane	U	U	U	U	U	U		0.5	50GV
Dibromomethane	U	U	U	U	U	U		0.5	5 ST
cis-1,3-Dichloropropene	U	U	U	U	U	U		0.5	0.4 ST *
trans-1,3-Dichloropropene	U	U	U	U	U	U		0.5	0.4 ST *
1,1,2-Trichloroethane	U	U	U	U	U	U		0.5	1 ST
1,3-Dichloropropane	U	U	U	U	U	U		0.5	5 ST
Tetrachloroethene	4.1	3	9	9	13	10		0.5	5 ST
Dibromochloromethane	U	U	U	U	U	U		0.5	50GV
Chlorobenzene	U	U	U	U	U	U		0.5	5 ST
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U		0.5	5 ST
Bromoform	U	U	U	U	U	U		0.5	50GV
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U		0.5	5 ST
1,2,3-Trichloropropane	U	U	U	U	U	U		0.5	0.04 ST
Bromobenzene	U	U	U	U	U	U		0.5	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U		0.5	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U		0.5	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U		0.5	3 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U		0.5	5 ST
Hexchlorobutadiene	U	U	U	U	U	U		0.5	0.5 ST
1,2,3-Trichlorobenzene	U	U	U	U	U	U		0.5	5 ST
Methyl-tert-butyl ether	U	U	U	U	U	U		0.5	---
Benzene	U	U	U	U	U	U		0.5	1 ST
Toluene	U	U	U	U	U	U		0.5	5 ST
Ethylbenzene	U	U	U	U	U	U		0.5	5 ST
m-Xylene	U	U	U	U	U	U		0.5	5 ST
p-Xylene	U	U	U	U	U	U		0.5	5 ST
o-Xylene	U	U	U	U	U	U		0.5	5 ST
Styrene	U	U	U	U	U	U		0.5	5 ST
Isopropylbenzene (Cumene)	U	U	U	U	U	U		0.5	5 ST
n-Propylbenzene	U	U	U	U	U	U		0.5	5 ST
1,3,5-Trimethylbenzene	U	U	U	U	U	U		0.5	5 ST
2-Chlorotoluene	U	U	U	U	U	U		0.5	5 ST
4-Chlorotoluene	U	U	U	U	U	U		0.5	5 ST
tert-Butylbenzene	U	U	U	U	U	U		0.5	5 ST
1,2,4-Trimethylbenzene	U	U	U	U	U	U		0.5	5 ST
sec-Butylbenzene	U	U	U	U	U	U		0.5	5 ST
p-Isopropyltoluene(p-Cymene)	U	U	U	U	U	U		0.5	5 ST
n-Butylbenzene	U	U	U	U	U	U		0.5	5 ST
Total VOCs	53.3	34	105	106	169	124			---

QUALIFIERS:

U: Compound analyzed for but not detected
J: Compound found at a concentration below the CRDL, value estimated
**: Result reported as a sum of 2,2-dichloropropane and cis-1,2-dichloroethene
E: Compound concentration exceeds instrument calibration range, value estimated
D: Result taken from reanalysis at a secondary dilution
B: Compound found in the method blank as well as the sample

NOTES:

*: Value pertains to the sum of the isomers
ST: Standard
GV: Guidance Value
---: Not established
[] Indicates value exceeds NYSDEC Class GA groundwater standard or guidance value

TABLE 2 (continued)
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample Identification	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	Contract Required Detection Limit	NYSDEC Class GA Groundwater Standard or Guidance Value
Sample Depth, ft	110-130	110-130	110-130	110-130	110-130	110-130		
Date of Collection	11/02/01	01/24/02	04/24/02	07/16/02	10/18/02	02/03/03		
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0		
Units	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
Dichlorodifluoromethane	U	U	U	U	U	U	0.5	5 ST
Chloromethane	U	U	U	U	U	U	0.5	5 ST
Vinyl Chloride	U	U	U	U	U	U	0.5	2 ST
Bromomethane	U	U	U	U	U	U	0.5	5 ST
Chloroethane	U	1	2	U	0.8	0.9	0.5	5 ST
Fluorotrichloromethane	U	U	U	U	U	U	0.5	5 ST
1,1-Dichloroethene	540 D	440 D	480 D	190 E	420	130 D	0.5	5 ST
Methylene Chloride	1.9	U	U	U	0.9	U	0.5	5 ST
trans-1,2-Dichloroethene	U	U	U	U	U	U	0.5	5 ST
1,1-Dichloroethane	140 D	140 D	140 D	52 E	95	63 D	0.5	5 ST
2,2-Dichloropropane	**	U	U	U	U	U	0.5	5 ST
cis-1,2-Dichloroethene	48 **E	35	42 D	17	39	38	0.5	5 ST
Chloroform	5.2	2	4	2 B	4	4	0.5	7 ST
Bromochloromethane	U	U	U	U	U	U	0.5	5 ST
1,1,1-Trichloroethane	230 D	220 D	210 D	75 E	140	82 D	0.5	5 ST
1,1-Dichloropropene	U	U	U	U	U	U	0.5	5 ST
Carbon Tetrachloride	U	U	U	U	U	U	0.5	5 ST
1,2-Dichloroethane	2.2	U	2	U	2	2	0.5	0.6 ST
Trichloroethene	580 D	500 D	450 D	190 E	360	210 D	0.5	5 ST
1,2-Dichloropropane	U	U	U	U	U	U	0.5	1 ST
Bromodichloromethane	U	U	U	U	U	U	0.5	50GV
Dibromomethane	U	U	U	U	U	U	0.5	5 ST
cis-1,3-Dichloropropene	U	U	U	U	U	U	0.5	0.4 ST *
trans-1,3-Dichloropropene	U	U	U	U	U	U	0.5	0.4 ST *
1,1,2-Trichloroethane	1.5	2	U	U	1	2	0.5	1 ST
1,3-Dichloropropane	U	U	U	U	U	U	0.5	5 ST
Tetrachloroethene	49 JD	53 D	52 D	26	50	39	0.5	5 ST
Dibromochloromethane	U	U	U	U	U	U	0.5	50GV
Chlorobenzene	U	U	U	U	U	U	0.5	5 ST
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	0.5	5 ST
Bromoforn	U	U	U	U	U	U	0.5	50GV
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	0.5	5 ST
1,2,3-Trichloropropane	U	U	U	U	U	U	0.5	0.04 ST
Bromobenzene	U	U	U	U	U	U	0.5	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	0.5	5 ST
Hexchlorobutadiene	U	U	U	U	U	U	0.5	0.5 ST
1,2,3-Trichlorobenzene	U	U	U	U	U	U	0.5	5 ST
Methyl-tert-butyl ether	U	U	U	U	U	U	0.5	—
Benzene	U	U	U	U	U	U	0.5	1 ST
Toluene	U	U	U	U	U	U	0.5	5 ST
Ethylbenzene	U	U	U	U	U	U	0.5	5 ST
m-Xylene	U	U	U	U	U	U	0.5	5 ST
p-Xylene	U	U	U	U	U	U	0.5	5 ST
o-Xylene	U	U	U	U	U	U	0.5	5 ST
Styrene	U	U	U	U	U	U	0.5	5 ST
Isopropylbenzene (Cumene)	U	U	U	U	U	U	0.5	5 ST
n-Propylbenzene	U	U	U	U	U	U	0.5	5 ST
1,3,5-Trimethylbenzene	U	U	U	U	U	U	0.5	5 ST
2-Chlorotoluene	U	U	U	U	U	U	0.5	5 ST
4-Chlorotoluene	U	U	U	U	U	U	0.5	5 ST
tert-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
1,2,4-Trimethylbenzene	U	U	U	U	U	U	0.5	5 ST
sec-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
p-Isopropyltoluene(p-Cymene)	U	U	U	U	U	U	0.5	5 ST
n-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
Total VOCs	1597.8	1393	1382	552	1112.7	570.9		—

QUALIFIERS:

U: Compound analyzed for but not detected
J: Compound found at a concentration below the CRDL, value estimated
**: Result reported as a sum of 2,2 -dichloropropane and cis-1,2-dichloroethene
E: Compound concentration exceeds instrument calibration range, value estimated
D: Result taken from reanalysis at a secondary dilution

NOTES:

*: Value pertains to the sum of the isomers
ST: Standard
GV: Guidance Value
---: Not established
☒ Indicates value exceeds NYSDEC Class GA groundwater standard or guidance value

TABLE 2 (continued)
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample Identification	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3		Contract Required Detection Limit	NYSDEC Class GA Groundwater Standard or Guidance Value
Sample Depth, ft	130-150	130-150	130-150	130-150	130-150	130-150			
Date of Collection	11/02/01	01/24/02	04/24/02	07/16/02	10/16/02	02/03/03			
Dilution Factor	1.0	1.0	50.0	1.0	1.0	1.0			
Units	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)		(ug/l)	(ug/l)
Dichlorodifluoromethane	U	U	U	U	U	U		0.5	5 ST
Chloromethane	U	U	U	U	U	U		0.5	5 ST
Vinyl Chloride	U	U	U	U	U	U		0.5	2 ST
Bromomethane	U	U	U	U	U	U		0.5	5 ST
Chloroethane	0.7	1	U	1	U	1		0.5	5 ST
Fluorotrichloromethane	U	U	U	U	U	U		0.5	5 ST
1,1-Dichloroethene	906 D	770 D	350 D	670 E	275 D	190 D		0.5	5 ST
Methylene Chloride	7.1	U	50 D	3	0.9	3		0.5	5 ST
trans-1,2-Dichloroethene	0.5	U	U	U	U	U		0.5	5 ST
1,1-Dichloroethane	230 D	250 D	130 D	210 E	70 D	110 D		0.5	5 ST
2,2-Dichloropropane	**	U	**	U	U	U		0.5	5 ST
cis-1,2-Dichloroethene	54 **E	40	25 **D	40 E	21	34		0.5	5 ST
Chloroform	5.7	3	U	U	2	4		0.5	7 ST
Bromochloromethane	U	U	U	4 B	U	U		0.5	5 ST
1,1,1-Trichloroethane	350 D	350 D	160 D	270 E	107 D	120 D		0.5	5 ST
1,1-Dichloropropene	U	U	U	U	U	U		0.5	5 ST
Carbon Tetrachloride	U	U	U	U	U	U		0.5	5 ST
1,2-Dichloroethane	5.1	U	U	U	2	5		0.5	0.6 ST
Trichloroethene	1200 D	1000 D	490 D	920 E	322 D	440 D		0.5	5 ST
1,2-Dichloropropane	U	U	U	U	U	U		0.5	1 ST
Bromodichloromethane	U	U	U	U	U	U		0.5	50GV
Dibromomethane	U	U	U	U	U	U		0.5	5 ST
cis-1,3-Dichloropropene	U	U	U	U	U	U		0.5	0.4 ST *
trans-1,3-Dichloropropene	U	U	U	U	U	U		0.5	0.4 ST *
1,1,2-Trichloroethane	2.1	2	U	2	0.8	2		0.5	1 ST
1,3-Dichloropropane	U	U	U	U	U	U		0.5	5 ST
Tetrachloroethene	67 E	74 D	28 D	70 E	22	27 D		0.5	5 ST
Dibromochloromethane	U	U	U	U	U	U		0.5	50GV
Chlorobenzene	U	U	U	U	U	U		0.5	5 ST
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U		0.5	5 ST
Bromoform	U	U	U	U	U	U		0.5	50GV
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U		0.5	5 ST
1,2,3-Trichloropropane	U	U	U	U	U	U		0.5	0.04 ST
Bromobenzene	U	U	U	U	U	U		0.5	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U		0.5	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U		0.5	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U		0.5	3 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U		0.5	5 ST
Hexchlorobutadiene	U	U	U	U	U	U		0.5	0.5 ST
1,2,3-Trichlorobenzene	U	U	U	U	U	U		0.5	5 ST
Methyl-tert-butyl ether	U	U	U	U	U	U		0.5	—
Benzene	U	U	U	U	U	U		0.5	1 ST
Toluene	U	U	U	U	U	U		0.5	5 ST
Ethylbenzene	U	U	U	U	U	U		0.5	5 ST
m-Xylene	U	U	U	U	U	U		0.5	5 ST
p-Xylene	U	U	U	U	U	U		0.5	5 ST
o-Xylene	U	U	U	U	U	U		0.5	5 ST
Styrene	U	U	U	U	U	U		0.5	5 ST
Isopropylbenzene (Cumene)	U	U	U	U	U	U		0.5	5 ST
n-Propylbenzene	U	U	U	U	U	U		0.5	5 ST
1,3,5-Trimethylbenzene	U	U	U	U	U	U		0.5	5 ST
2-Chlorotoluene	U	U	U	U	U	U		0.5	5 ST
4-Chlorotoluene	U	U	U	U	U	U		0.5	5 ST
tert-Butylbenzene	U	U	U	U	U	U		0.5	5 ST
1,2,4-Trimethylbenzene	U	U	U	U	U	U		0.5	5 ST
sec-Butylbenzene	U	U	U	U	U	U		0.5	5 ST
p-Isopropyltoluene(p-Cymene)	U	U	U	U	U	U		0.5	5 ST
n-Butylbenzene	U	U	U	U	U	U		0.5	5 ST
Total VOCs	2822.2	2490	1273	2190	822.7	936			—

QUALIFIERS:

U: Compound analyzed for but not detected
J: Compound found at a concentration below the CRDL, value estimated
**: Result reported as a sum of 2,2-dichloropropane and cis-1,2-dichloroethene
E: Compound concentration exceeds instrument calibration range, value estimated
D: Result taken from reanalysis at a secondary dilution
B: Compound found in the method blank as well as the sample
*: Sample result highly estimated, based on validation criteria

NOTES:

*: Value pertains to the sum of the isomers
ST: Standard
GV: Guidance Value
—: Not established
☐ Indicates value exceeds NYSDEC Class GA groundwater standard or guidance value

TABLE 2 (continued)
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample Identification	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	Contract Required Detection	NYSDEC Class GA Groundwater Standard or Guidance Value
Sample Depth, ft	180-200	180-200	180-200	180-200	180-200	180-200		
Date of Collection	11/02/01	01/24/02	04/24/02	07/16/02	10/17/02	02/03/03		
Dilution Factor	1.0	1.0	50.0	1.0	10.0	10.0	Limit	Guidance Value
Units	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
Dichlorodifluoromethane	U	U	U	U	U	U	0.5	5 ST
Chloromethane	U	U	U	U	U	U	0.5	5 ST
Vinyl Chloride	U	U	U	U	U	U	0.5	2 ST
Bromomethane	U	U	U	U	U	U	0.5	5 ST
Chloroethane	0.7	1	U	U	U	1	0.5	5 ST
Fluorotrichloromethane	U	U	U	U	U	U	0.5	5 ST
1,1-Dichloroethene	1100 D	750 D	530 D	520 D	911 D	690 D	0.5	5 ST
Methylene Chloride	8.9	U	55 D	U	7	3	0.5	5 ST
trans-1,2-Dichloroethene	0.8	U	U	U	U	U	0.5	5 ST
1,1-Dichloroethane	310 D	280 D	180 D	170 D	310	250 D	0.5	5 ST
2,2-Dichloropropane	**	U	**	U	U	U	0.5	5 ST
cis-1,2-Dichloroethene	82 **E	64 D	43 **D	38 D	84	57 D	0.5	5 ST
Chloroform	2.4	3	U	37 BD	4 J	3	0.5	7 ST
Bromochloromethane	U	U	U	U	U	U	0.5	5 ST
1,1,1-Trichloroethane	350 D	280 D	180 D	170 D	320	270 D	0.5	5 ST
1,1-Dichloropropene	U	U	U	U	U	U	0.5	5 ST
Carbon Tetrachloride	U	U	U	U	U	U	0.5	5 ST
1,2-Dichloroethane	7	U	U	U	7	6	0.5	0.6 ST
Trichloroethene	1000 D	790 D	550 D	480 D	895 D	760 D	0.5	5 ST
1,2-Dichloropropane	U	U	U	U	U	U	0.5	1 ST
Bromodichloromethane	U	U	U	U	U	U	0.5	50GV
Dibromomethane	U	U	U	U	U	U	0.5	5 ST
cis-1,3-Dichloropropene	U	U	U	U	U	U	0.5	0.4 ST*
trans-1,3-Dichloropropene	U	U	U	U	U	U	0.5	0.4 ST*
1,1,2-Trichloroethane	3.6	3	U	4	4 J	3	0.5	1 ST
1,3-Dichloropropane	U	U	U	U	U	U	0.5	5 ST
Tetrachloroethene	150 D	130 D	38 D*	77 D	130	120 D	0.5	5 ST
Dibromochloromethane	U	U	U	U	U	U	0.5	50GV
Chlorobenzene	U	U	U	U	U	U	0.5	5 ST
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	0.5	5 ST
Bromofom	U	U	U	U	U	U	0.5	50GV
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	0.5	5 ST
1,2,3-Trichloropropane	U	U	U	U	U	U	0.5	0.04 ST
Bromobenzene	U	U	U	U	U	U	0.5	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	0.5	5 ST
Hexchlorobutadiene	U	U	U	U	U	U	0.5	0.5 ST
1,2,3-Trichlorobenzene	U	U	U	U	U	U	0.5	5 ST
Methyl-tert-butyl ether	U	U	U	U	U	U	0.5	---
Benzene	U	U	U	U	U	U	0.5	1 ST
Toluene	U	U	U	U	U	U	0.5	5 ST
Ethylbenzene	U	U	U	U	U	U	0.5	5 ST
m-Xylene	U	U	U	U	U	U	0.5	5 ST
p-Xylene	U	U	U	U	U	U	0.5	5 ST
o-Xylene	U	U	U	U	U	U	0.5	5 ST
Styrene	U	U	U	U	U	U	0.5	5 ST
Isopropylbenzene (Cumene)	U	U	U	U	U	U	0.5	5 ST
n-Propylbenzene	U	U	U	U	U	U	0.5	5 ST
1,3,5-Trimethylbenzene	U	U	U	U	U	U	0.5	5 ST
2-Chlorotoluene	U	U	U	U	U	U	0.5	5 ST
4-Chlorotoluene	U	U	U	U	U	U	0.5	5 ST
tert-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
1,2,4-Trimethylbenzene	U	U	U	U	U	U	0.5	5 ST
sec-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
p-Isopropyltoluene(p-Cymene)	U	U	U	U	U	U	0.5	5 ST
n-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
Total VOCs	3015.4	2301	1576	1496	2652	2163		---

QUALIFIERS:

U: Compound analyzed for but not detected
J: Compound found at a concentration below the CRDL, value estimated
**: Result reported as a sum of 2,2-dichloropropane and cis-1,2-dichloroethene
E: Compound concentration exceeds instrument calibration range, value estimated
D: Result taken from reanalysis at a secondary dilution
B: Compound found in the method blank as well as the sample

NOTES:

*: Value pertains to the sum of the isomers
ST: Standard
GV: Guidance Value
---: Not established
☐ Indicates value exceeds NYSDEC Class GA groundwater standard or guidance value

TABLE 2 (continued)
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample Identification	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	Contract Required Detection Limit	NYSDEC Class GA Groundwater Standard or Guidance Value
Sample Depth, ft	90-110	90-110	90-110	90-110	90-110	90-110		
Date of Collection	11/05/01	01/24/02	04/25/02	07/17/02	10/18/02	01/30/03		
Dilution Factor	1.0	1.0	1.0	1.0	5.0	1.0		
Units	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
Dichlorodifluoromethane	U	U	U	U	U	U	0.5	5 ST
Chloromethane	U	U	U	U	U	U	0.5	5 ST
Vinyl Chloride	U	U	U	U	U	U	0.5	2 ST
Bromomethane	U	U	U	U	U	U	0.5	5 ST
Chloroethane	U	U	U	U	U	U	0.5	5 ST
Fluorotrichloromethane	U	U	U	U	U	U	0.5	5 ST
1,1-Dichloroethene	11	10	3	2	8	55 D	0.5	5 ST
Methylene Chloride	U	U	U	U	U	U	0.5	5 ST
trans-1,2-Dichloroethene	U	U	U	U	U	U	0.5	5 ST
1,1-Dichloroethane	1.5	2	0.8	U	2	13	0.5	5 ST
2,2-Dichloropropane	U	U	U	U	U	U	0.5	5 ST
cis-1,2-Dichloroethene	U	0.5	1	6	12	6	0.5	5 ST
Chloroform	U	U	0.3 J	U	U	U	0.5	7 ST
Bromochloromethane	U	U	U	U	U	U	0.5	5 ST
1,1,1-Trichloroethane	15	15	4	3	7	39	0.5	5 ST
1,1-Dichloropropene	U	U	U	U	U	U	0.5	5 ST
Carbon Tetrachloride	U	U	U	U	U	U	0.5	5 ST
1,2-Dichloroethane	U	U	U	U	U	U	0.5	0.6 ST
Trichloroethene	2.5	2	2	1	7	35	0.5	5 ST
1,2-Dichloropropane	U	U	U	U	U	U	0.5	1 ST
Bromodichloromethane	U	U	U	U	U	U	0.5	50GV
Dibromomethane	U	U	U	U	U	U	0.5	5 ST
cis-1,3-Dichloropropene	U	U	U	U	U	U	0.5	0.4 ST *
trans-1,3-Dichloropropene	U	U	U	U	U	U	0.5	0.4 ST *
1,1,2-Trichloroethane	U	U	U	U	U	U	0.5	1 ST
1,3-Dichloropropane	U	U	U	U	U	U	0.5	5 ST
Tetrachloroethene	3.7	16	25	19	9	18	0.5	5 ST
Dibromochloromethane	U	U	U	U	U	U	0.5	50GV
Chlorobenzene	U	U	U	U	U	U	0.5	5 ST
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	0.5	5 ST
Bromoform	U	U	U	U	U	U	0.5	50GV
1,1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	0.5	5 ST
1,2,3-Trichloropropane	U	U	U	U	U	U	0.5	0.04 ST
Bromobenzene	U	U	U	U	U	U	0.5	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	0.5	5 ST
Hexachlorobutadiene	U	U	U	U	U	U	0.5	0.5 ST
1,2,3-Trichlorobenzene	U	U	U	U	U	U	0.5	5 ST
Methyl-tert-butyl ether	U	U	U	U	U	U	0.5	—
Benzene	U	U	U	U	U	U	0.5	1 ST
Toluene	U	U	U	U	U	U	0.5	5 ST
Ethylbenzene	U	U	U	U	U	U	0.5	5 ST
m-Xylene	U	U	U	U	U	U	0.5	5 ST
p-Xylene	U	U	U	U	U	U	0.5	5 ST
o-Xylene	U	U	U	U	U	U	0.5	5 ST
Styrene	U	U	U	U	U	U	0.5	5 ST
Isopropylbenzene (Cumene)	U	U	U	U	U	U	0.5	5 ST
n-Propylbenzene	U	U	U	U	U	U	0.5	5 ST
1,3,5-Trimethylbenzene	U	U	U	U	U	U	0.5	5 ST
2-Chlorotoluene	U	U	U	U	U	U	0.5	5 ST
4-Chlorotoluene	U	U	U	U	U	U	0.5	5 ST
tert-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
1,2,4-Trimethylbenzene	U	U	U	U	U	U	0.5	5 ST
sec-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
p-Isopropyltoluene(p-Cymene)	U	U	U	U	U	U	0.5	5 ST
n-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
Total VOCs	33.7	45.5	36.1	31	45	166		—

QUALIFIERS:

U: Compound analyzed for but not detected
J: Compound found at a concentration below the CRDL, value estimated
*: Result reported as a sum of 2,2-dichloropropane and cis-1,2-dichloroethene
E: Compound concentration exceeds instrument calibration range, value estimated
D: Result taken from reanalysis at a secondary dilution
B: Compound found in the method blank as well as the sample
U*: Result qualified as non-detect based on validation criteria

NOTES:

*: Value pertains to the sum of the isomers
ST: Standard
GV: Guidance Value
—: Not established
Indicates value exceeds NYSDEC Class GA groundwater standard or guidance value

TABLE 2 (continued)
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample Identification	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	Contract	NYSDEC Class GA
Sample Depth, ft	110-130	110-130	110-130	110-130	110-130	110-130	Required	Groundwater
Date of Collection	11/05/01	01/25/02	04/25/02	07/17/02	10/18/02	01/30/03	Detection	Standard or
Dilution Factor	1.0	1.0	10.0	1.0	5.0	1.0	Limit	Guidance Value
Units	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
Dichlorodifluoromethane	U	U	U	U	U	U	0.5	5 ST
Chloromethane	U	U	U	U	U	U	0.5	5 ST
Vinyl Chloride	U	U	U	U	U	U	0.5	2 ST
Bromomethane	U	U	U	U	U	U	0.5	5 ST
Chloroethane	U	U	U	U	U	U	0.5	5 ST
Fluorotrichloromethane	U	U	1 J	U	U	U	0.5	5 ST
1,1-Dichloroethene	270 D	72 D	100 D	99 D	135	150 D	0.5	5 ST
Methylene Chloride	1.3	U	U	5 D	U	12	0.5	5 ST
trans-1,2-Dichloroethene	U	U	U	U	U	U	0.5	5 ST
1,1-Dichloroethane	52 D	36	33	29	31	47 D	0.5	5 ST
2,2-Dichloropropane	**	U	**	U	U	U	0.5	5 ST
cis-1,2-Dichloroethene	22 **	13	9 **	9	21	15	0.5	5 ST
Chloroform	1.1	U	1	U	U	1	0.5	7 ST
Bromochloromethane	U	U	U	U	U	U	0.5	5 ST
1,1,1-Trichloroethane	240 D	89 D	96 D	90 D	122	170 D	0.5	5 ST
1,1-Dichloropropene	U	U	U	U	U	U	0.5	5 ST
Carbon Tetrachloride	U	U	U	U	U	U	0.5	5 ST
1,2-Dichloroethane	0.8	U	U	U	U	U	0.5	0.6 ST
Trichloroethene	93 D	54 D	43	51 D	59	89 D	0.5	5 ST
1,2-Dichloropropane	U	U	U	U	U	U	0.5	1 ST
Bromodichloromethane	U	U	U	U	U	U	0.5	50GV
Dibromomethane	U	U	U	U	U	U	0.5	5 ST
cis-1,3-Dichloropropene	U	U	U	U	U	U	0.5	0.4 ST *
trans-1,3-Dichloropropene	U	U	U	U	U	U	0.5	0.4 ST *
1,1,2-Trichloroethane	U	U	U	U	U	U	0.5	1 ST
1,3-Dichloropropane	U	U	U	U	U	U	0.5	5 ST
Tetrachloroethene	80 D	37 D	58 E	47 D	60	58 D	0.5	5 ST
Dibromochloromethane	U	U	U	U	U	U	0.5	50GV
Chlorobenzene	U	U	U	U	U	U	0.5	5 ST
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	0.5	5 ST
Bromoform	U	U	U	U	U	U	0.5	50GV
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	0.5	5 ST
1,2,3-Trichloropropane	U	U	U	U	U	U	0.5	0.04 ST
Bromobenzene	U	U	U	U	U	U	0.5	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	0.5	5 ST
Hexchlorobutadiene	U	U	U	U	U	U	0.5	0.5 ST
1,2,3-Trichlorobenzene	1 B	U	U	U	U	U	0.5	5 ST
Methyl-tert-butyl ether	U	U	U	U	U	U	0.5	---
Benzene	U	U	U	U	U	U	0.5	1 ST
Toluene	U	U	U	U	U	U	0.5	5 ST
Ethylbenzene	U	U	U	U	U	U	0.5	5 ST
m-Xylene	U	U	U	U	U	U	0.5	5 ST
p-Xylene	U	U	U	U	U	U	0.5	5 ST
o-Xylene	U	U	U	U	U	U	0.5	5 ST
Styrene	U	U	U	U	U	U	0.5	5 ST
Isopropylbenzene (Cumene)	U	U	U	U	U	U	0.5	5 ST
n-Propylbenzene	U	U	U	U	U	U	0.5	5 ST
1,3,5-Trimethylbenzene	U	U	U	U	U	U	0.5	5 ST
2-Chlorotoluene	U	U	U	U	U	U	0.5	5 ST
4-Chlorotoluene	U	U	U	U	U	U	0.5	5 ST
tert-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
1,2,4-Trimethylbenzene	U	U	U	U	U	U	0.5	5 ST
sec-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
p-Isopropyltoluene(p-Cymene)	U	U	U	U	U	U	0.5	5 ST
n-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
Total VOCs	761.2	301	351	330	428	542		

QUALIFIERS:

U: Compound analyzed for but not detected
J: Compound found at a concentration below the CRDL, value estimated
**: Result reported as a sum of 2,2-dichloropropane and cis-1,2-dichloroethene
E: Compound concentration exceeds instrument calibration range, value estimated
D: Result taken from reanalysis at a secondary dilution
B: Compound found in the method blank as well as the sample

NOTES:

*: Value pertains to the sum of the isomers
ST: Standard
GV: Guidance Value
---: Not established
[] Indicates value exceeds NYSDEC Class GA groundwater standard or guidance value

TABLE 2 (continued)
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample Identification	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	Contract Required Detection Limit	NYSDEC Class GA Groundwater Standard or Guidance Value
Sample Depth, ft	90-110	90-110	90-110	90-110	90-110	90-110		
Date of Collection	11/05/01	01/25/02	04/24/02	07/16/02	10/18/02	01/29/03		
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0		
Units	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
Dichlorodifluoromethane	U	U	U	U	U	U	0.5	5 ST
Chloromethane	U	U	U	U	U	U	0.5	5 ST
Vinyl Chloride	U	U	U	U	U	U	0.5	2 ST
Bromomethane	U	U	U	U	U	U	0.5	5 ST
Chloroethane	U	U	U	U	U	U	0.5	5 ST
Fluorotrichloromethane	U	U	U	U	U	U	0.5	5 ST
1,1-Dichloroethene	U	0.5	0.7	2	0.5	0.6	0.5	5 ST
Methylene Chloride	U	U	U	U	U	U	0.5	5 ST
trans-1,2-Dichloroethene	U	U	U	U	U	U	0.5	5 ST
1,1-Dichloroethane	0.7	1	1	2	1	2	0.5	5 ST
2,2-Dichloropropane	--	U	--	U	U	U	0.5	5 ST
cis-1,2-Dichloroethene	23 **	18	15 **	18	22	27	0.5	5 ST
Chloroform	U	U	U	U	U	U	0.5	7 ST
Bromochloromethane	U	U	U	U	U	U	0.5	5 ST
1,1,1-Trichloroethane	U	0.5	0.6	2	0.5	0.7	0.5	5 ST
1,1-Dichloropropene	U	U	U	U	U	U	0.5	5 ST
Carbon Tetrachloride	U	U	U	U	U	U	0.5	5 ST
1,2-Dichloroethane	U	U	U	U	U	U	0.5	0.6 ST
Trichloroethene	2	3	3	8	4	4	0.5	5 ST
1,2-Dichloropropane	U	U	U	U	U	U	0.5	1 ST
Bromodichloromethane	U	U	U	U	U	U	0.5	50GV
Dibromomethane	U	U	U	U	U	U	0.5	5 ST
cis-1,3-Dichloropropene	U	U	U	U	U	U	0.5	0.4 ST *
trans-1,3-Dichloropropene	U	U	U	U	U	U	0.5	0.4 ST *
1,1,2-Trichloroethane	U	U	U	U	U	U	0.5	1 ST
1,3-Dichloropropane	U	U	U	U	U	U	0.5	5 ST
Tetrachloroethene	5.2	6	4	6	7	7	0.5	5 ST
Dibromochloromethane	U	U	U	U	U	U	0.5	50GV
Chlorobenzene	U	U	U	U	U	U	0.5	5 ST
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	0.5	5 ST
Bromoform	U	U	U	U	U	U	0.5	50GV
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	0.5	5 ST
1,2,3-Trichloropropane	U	U	U	U	U	U	0.5	0.04 ST
Bromobenzene	U	U	U	U	U	U	0.5	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	0.5	5 ST
Hexchlorobutadiene	U	U	U	U	U	U	0.5	0.5 ST
1,2,3-Trichlorobenzene	U	U	U	U	U	U	0.5	5 ST
Methyl-tert-butyl ether	U	U	U	2	U	2	0.5	—
Benzene	U	U	U	U	U	U	0.5	1 ST
Toluene	U	U	U	U	U	U	0.5	5 ST
Ethylbenzene	U	U	U	U	U	U	0.5	5 ST
m-Xylene	U	U	U	U	U	U	0.5	5 ST
p-Xylene	U	U	U	U	U	U	0.5	5 ST
o-Xylene	U	U	U	U	U	U	0.5	5 ST
Styrene	U	U	U	U	U	U	0.5	5 ST
Isopropylbenzene (Cumene)	U	U	U	U	U	U	0.5	5 ST
n-Propylbenzene	U	U	U	U	U	U	0.5	5 ST
1,3,5-Trimethylbenzene	U	U	U	U	U	U	0.5	5 ST
2-Chlorotoluene	U	U	U	U	U	U	0.5	5 ST
4-Chlorotoluene	U	U	U	U	U	U	0.5	5 ST
tert-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
1,2,4-Trimethylbenzene	U	U	U	U	U	U	0.5	5 ST
sec-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
p-Isopropyltoluene(p-Cymene)	U	U	U	U	U	U	0.5	5 ST
n-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
Total VOCs	30.9	29	24.3	40	28	43.3		—

QUALIFIERS:

U: Compound analyzed for but not detected
J: Compound found at a concentration below the CRDL, value estimated
**: Result reported as a sum of 2,2-dichloropropane and cis-1,2-dichloroethene
E: Compound concentration exceeds instrument calibration range, value estimated
D: Result taken from reanalysis at a secondary dilution
B: Compound found in the method blank as well as the sample
U*: Result qualified as non-detect based on validation criteria

NOTES:

*: Value pertains to the sum of the isomers
ST: Standard
GV: Guidance Value
---: Not established
 Indicates value exceeds NYSDEC Class GA groundwater standard or guidance value

TABLE 2 (continued)
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample Identification	MW-8	MW-9	MW-8	MW-8	MW-8	MW-8	Contract	NYSDEC Class GA
Sample Depth, ft	120-140	120-140	120-140	120-140	120-140	120-140	Required	Groundwater
Date of Collection	11/05/01	01/25/02	04/24/02	07/17/02	10/18/02	01/29/03	Detection	Standard or
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	Limit	Guidance Value
Units	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
Dichlorodifluoromethane	U	U	U	U	U	U	0.5	5 ST
Chloromethane	U	U	U	U	U	U	0.5	5 ST
Vinyl Chloride	U	U	U	U	U	U	0.5	2 ST
Bromomethane	U	U	U	U	U	U	0.5	5 ST
Chloroethane	U	U	U	U	U	U	0.5	5 ST
Fluorotrichloromethane	U	U	U	U	U	U	0.5	5 ST
1,1-Dichloroethene	U	0.8	U	0.5	1	1	0.5	5 ST
Methylene Chloride	U	0.6	U	U	U	U	0.5	5 ST
trans-1,2-Dichloroethene	U	U	0.9	U	U	U	0.5	5 ST
1,1-Dichloroethane	1.3	2	2	1	3	3	0.5	5 ST
2,2-Dichloropropane	**	U	**	U	U	U	0.5	5 ST
cis-1,2-Dichloroethene	1.7 **	2	2 **	2	4	4	0.5	5 ST
Chloroform	U	U	U	U	U	U	0.5	7 ST
Bromochloromethane	U	U	U	U	U	U	0.5	5 ST
1,1,1-Trichloroethane	0.7	0.7	0.8	U	1	1	0.5	5 ST
1,1-Dichloropropene	U	U	U	U	U	U	0.5	5 ST
Carbon Tetrachloride	U	U	U	U	U	U	0.5	5 ST
1,2-Dichloroethane	U	U	U	U	U	U	0.5	0.6 ST
Trichloroethene	1.1	2	U*	0.8	2	2	0.5	5 ST
1,2-Dichloropropane	U	U	U	U	U	U	0.5	1 ST
Bromodichloromethane	U	U	U	U	U	U	0.5	50GV
Dibromomethane	U	U	U	U	U	U	0.5	5 ST
cis-1,3-Dichloropropene	U	U	U	U	U	U	0.5	0.4 ST *
trans-1,3-Dichloropropene	U	U	U	U	U	U	0.5	0.4 ST *
1,1,2-Trichloroethane	U	U	U	U	U	U	0.5	1 ST
1,3-Dichloropropane	U	U	U	U	U	U	0.5	5 ST
Tetrachloroethene	1.1	1	1	0.8	2	3	0.5	5 ST
Dibromochloromethane	U	U	U	U	U	U	0.5	50GV
Chlorobenzene	U	U	U	U	U	U	0.5	5 ST
1,1,1,2-Tetrachloroethane	U	U	U	U	U	U	0.5	5 ST
Bromoform	U	U	U	U	U	U	0.5	50GV
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	0.5	5 ST
1,2,3-Trichloropropane	U	U	U	U	U	U	0.5	0.04 ST
Bromobenzene	U	U	U	U	U	U	0.5	5 ST
1,3-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,4-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,2-Dichlorobenzene	U	U	U	U	U	U	0.5	3 ST
1,2,4-Trichlorobenzene	U	U	U	U	U	U	0.5	5 ST
Hexachlorobutadiene	U	U	U	U	U	U	0.5	0.5 ST
1,2,3-Trichlorobenzene	U	U	U	U	U	U	0.5	5 ST
Methyl-tert-butyl ether	U	U	U	U	U	U	0.5	---
Benzene	U	U	U	U	U	U	0.5	1 ST
Toluene	U	U	U	U	U	U	0.5	5 ST
Ethylbenzene	U	U	U	U	U	U	0.5	5 ST
m-Xylene	U	U	U	U	U	U	0.5	5 ST
p-Xylene	U	U	U	U	U	U	0.5	5 ST
o-Xylene	U	U	U	U	U	U	0.5	5 ST
Styrene	U	U	U	U	U	U	0.5	5 ST
Isopropylbenzene (Cumene)	U	U	U	U	U	U	0.5	5 ST
n-Propylbenzene	U	U	U	U	U	U	0.5	5 ST
1,3,5-Trimethylbenzene	U	U	U	U	U	U	0.5	5 ST
2-Chlorotoluene	U	U	U	U	U	U	0.5	5 ST
4-Chlorotoluene	U	U	U	U	U	U	0.5	5 ST
tert-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
1,2,4-Trimethylbenzene	U	U	U	U	U	U	0.5	5 ST
sec-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
p-Isopropyltoluene(p-Cymene)	U	U	U	U	U	U	0.5	5 ST
n-Butylbenzene	U	U	U	U	U	U	0.5	5 ST
Total VOCs	5.9	9.1	6.7	5.1	13	14		---

QUALIFIERS:

U: Compound analyzed for but not detected
J: Compound found at a concentration below the CRDL, value estimated
** Result reported as a sum of 2,2-dichloropropane and cis-1,2-dichloroethene
E: Compound concentration exceeds instrument calibration range, value estimated
D: Result taken from reanalysis at a secondary dilution
B: Compound found in the method blank as well as the sample
U*: Result qualified as non-detect based on validation criteria

NOTES:

*: Value pertains to the sum of the isomers
ST: Standard
GV: Guidance Value
---: Not established
 Indicates value exceeds NYSDEC Class GA groundwater standard or guidance value

TABLE 2 (continued)
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
VOLATILE ORGANIC COMPOUNDS

Sample Identification	MW-9	MW-9	MW-9					Contract Required Detection Limit	NYSDEC Class GA Groundwater Standard or Guidance Value
Sample Depth, ft	310-315	310-315	310-315						
Date of Collection	07/17/02	10/18/02	02/03/03						
Dilution Factor	1.0	1.0	1.0						
Units	(ug/l)	(ug/l)	(ug/l)					(ug/l)	(ug/l)
Dichlorodifluoromethane	U	U	U					0.5	5 ST
Chloromethane	U	U	U					0.5	5 ST
Vinyl Chloride	U	U	U					0.5	2 ST
Bromomethane	U	U	U					0.5	5 ST
Chloroethane	U	U	U					0.5	5 ST
Fluorotrichloromethane	U	U	U					0.5	5 ST
1,1-Dichloroethene	1	2	U*					0.5	5 ST
Methylene Chloride	U	U	0.8					0.5	5 ST
trans-1,2-Dichloroethene	U	U	U					0.5	5 ST
1,1-Dichloroethane	U	U	U*					0.5	5 ST
2,2-Dichloropropane	**	U	U					0.5	5 ST
cis-1,2-Dichloroethene	0.8 **	1	1					0.5	5 ST
Chloroform	U	U	U					0.5	7 ST
Bromochloromethane	U	U	U					0.5	5 ST
1,1,1-Trichloroethane	2	2	U*					0.5	5 ST
1,1-Dichloropropene	U	U	U					0.5	5 ST
Carbon Tetrachloride	U	U	U					0.5	5 ST
1,2-Dichloroethane	U	U	U					0.5	0.6 ST
Trichloroethene	15	21	22					0.5	5 ST
1,2-Dichloropropane	U	U	U					0.5	1 ST
Bromodichloromethane	U	U	U					0.5	50GV
Dibromomethane	U	U	U					0.5	5 ST
cis-1,3-Dichloropropene	U	U	U					0.5	0.4 ST*
trans-1,3-Dichloropropene	U	U	U					0.5	0.4 ST*
1,1,2-Trichloroethane	U	U	U					0.5	1 ST
1,3-Dichloropropane	U	U	U					0.5	5 ST
Tetrachloroethene	1	1	2					0.5	5 ST
Dibromochloromethane	U	U	U					0.5	50GV
Chlorobenzene	U	U	U					0.5	5 ST
1,1,1,2-Tetrachloroethane	U	U	U					0.5	5 ST
Bromoform	U	U	U					0.5	50GV
1,1,2,2-Tetrachloroethane	U	U	U					0.5	5 ST
1,2,3-Trichloropropane	U	U	U					0.5	0.04 ST
Bromobenzene	U	U	U					0.5	5 ST
1,3-Dichlorobenzene	U	U	U					0.5	3 ST
1,4-Dichlorobenzene	U	U	U					0.5	3 ST
1,2-Dichlorobenzene	U	U	U					0.5	3 ST
1,2,4-Trichlorobenzene	U	U	U					0.5	5 ST
Hexchlorobutadiene	U	U	U					0.5	0.5 ST
1,2,3-Trichlorobenzene	U	U	U					0.5	5 ST
Methyl-tert-butyl ether	U	U	U					0.5	---
Benzene	U	U	U					0.5	1 ST
Toluene	U	U	U					0.5	5 ST
Ethylbenzene	U	U	U					0.5	5 ST
m-Xylene	U	U	U					0.5	5 ST
p-Xylene	U	U	U					0.5	5 ST
o-Xylene	U	U	U					0.5	5 ST
Styrene	U	U	U					0.5	5 ST
Isopropylbenzene (Cumene)	U	U	U					0.5	5 ST
n-Propylbenzene	U	U	U					0.5	5 ST
1,3,5-Trimethylbenzene	U	U	U					0.5	5 ST
2-Chlorotoluene	U	U	U					0.5	5 ST
4-Chlorotoluene	U	U	U					0.5	5 ST
tert-Butylbenzene	U	U	U					0.5	5 ST
1,2,4-Trimethylbenzene	U	U	U					0.5	5 ST
sec-Butylbenzene	U	U	U					0.5	5 ST
p-Isopropyltoluene(p-Cymene)	U	U	U					0.5	5 ST
n-Butylbenzene	U	U	U					0.5	5 ST
Total VOCs	19.8	27.0	25.8						---

QUALIFIERS:

U: Compound analyzed for but not detected
J: Compound found at a concentration below the CRDL, value estimated
**: Result reported as a sum of 2,2-dichloropropane and cis-1,2-dichloroethene
E: Compound concentration exceeds instrument calibration range, value estimated
D: Result taken from reanalysis at a secondary dilution
B: Compound found in the method blank as well as the sample
U*: Result qualified as non-detect based on validation criteria

NOTES:

*: Value pertains to the sum of the isomers
ST: Standard
GV: Guidance Value
---: Not established
☐ Indicates value exceeds NYSDEC Class GA groundwater standard or guidance value

TABLE 3
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
INORGANIC PARAMETERS

Sample Identification	EW-1B	EW-1B	EW-1B	EW-1B	EW-1B	EW-1B				Contract Required Detection Limit	NYSDEC Class GA Groundwater Standard or Guidance Value
Sample Depth, ft	154-164	154-164	154-164	154-164	154-164	154-164					
Date of Collection	09/25/01	01/28/02	04/25/02	07/19/02	10/16/02	01/29/03					
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0					
Units	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)				(mg/l)	(mg/l)
Ferrous Iron*	U	0.445	U	0.038 B	0.0438 B	U				0.05	0.3 ST**
Total Organic Carbon	U	1.1	2	2.7	U	U				5	---
Alkalinity	20.6	18	20	18	18	17				10	---
Chloride	26.9	31.9	33.5	31.2	30	36.6				3	250 ST
Nitrate	6.071	6.3	6	6.4	6.2	5.8				0.05	10 ST
Sulfate	21.9	23.5	23.1	21.9	23.7	22.9				5	250 ST
Carbon Dioxide	79.8	60	U	64	77	58				NA	---
Methane	0.005	U	U	U	U	U				0.002	---

Sample Identification	EW-1C	EW-1C	EW-1C	EW-1C	EW-1C	EW-1C				Contract Required Detection Limit	NYSDEC Class GA Groundwater Standard or Guidance Value
Sample Depth, ft	506-516	506-516	506-516	506-516	506-516	506-516					
Date of Collection	09/25/01	01/28/02	04/25/02	07/19/02	10/16/02	01/29/03					
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0					
Units	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)				(mg/l)	(mg/l)
Ferrous Iron*	0.157	U	0.248	0.316	0.37	1.05				0.05	0.3 ST**
Total Organic Carbon	U	U	U	1.400	U	U				5	---
Alkalinity	10.2	10	12	11.0	11.0	11.0				10	---
Chloride	9.81	13.3	13.6	13.7	13.9	14.5				3	250 ST
Nitrate	5.591	6	6	6.3	6.3	6.1				0.05	10 ST
Sulfate	U	2.3	1.4	U	2.0	U				5	250 ST
Carbon Dioxide	72.9	13	14	17	21	18				NA	---
Methane	0.009	U	U	U	U	U				0.002	---

QUALIFIERS:

U: Compound analyzed for but not detected

NA: Not Available

B: Concentration was above IDL but less than CRDL

J: Compound detected at a concentration below the CRDL, value estimated

NOTES:

ST: Standard

---: Not established

*: Sample analyzed for Total Iron instead of Ferrous Iron

**: Standard applies to Total Iron

 : Indicates value exceeds NYSDEC Class GA Groundwater Standard or Guidance Value

TABLE 3
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
INORGANIC PARAMETERS

Sample Identification	EW-2B	EW-2B	EW-2B	EW-2B	EW-2B	EW-2B				Contract Required Detection Limit	NYSDEC Class GA Groundwater Standard or Guidance Value
Sample Depth, ft	132-142	132-142	132-142	132-142	132-142	132-142					
Date of Collection	09/25/01	01/28/02	04/25/02	07/19/02	10/16/02	01/30/03					
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0					
Units	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)				(mg/l)	(mg/l)
Ferrous Iron*	U	U	U	U	U	U				0.05	0.3 ST**
Total Organic Carbon	U	1	1.2	2	2.9	U				5	---
Alkalinity	15	14	14	13	13	13				10	---
Chloride	30.3	35.8	35.9	36.8	36.7	37.7				3	250 ST
Nitrate	2.194	2.2	2.1	2.3	2.3	2.4				0.05	10 ST
Sulfate	17.1	12.4	9.7	9.5	12.8	13.1				5	250 ST
Carbon Dioxide	60.6	60	56	67	72	64				NA	---
Methane	0.11	12.4	0.004 J	0.056	22	U				0.002	---

Sample Identification	EW-2C	EW-2C	EW-2C	EW-2C	EW-2C	EW-2C				Contract Required Detection Limit	NYSDEC Class GA Groundwater Standard or Guidance Value
Sample Depth, ft	504-514	504-514	504-514	504-514	504-514	504-514					
Date of Collection	09/25/01	01/28/02	04/25/02	07/19/02	10/16/02	01/30/03					
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0					
Units	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)				(mg/l)	(mg/l)
Ferrous Iron*	0.339	0.858	0.551	U	1.27	0.817				0.05	0.3 ST**
Total Organic Carbon	U	1.4	U	U	1	U				5	---
Alkalinity	10.6	10	10	10	10	10				10	---
Chloride	4.11	7	6.8	6.8	6.9	7.1				3	250 ST
Nitrate	1.773	1.9	1.9	1.9	2	1.8				0.05	10 ST
Sulfate	U	2.7	1.5	U	U	U				5	250 ST
Carbon Dioxide	17.4	13	10	14	25	13				NA	---
Methane	0.007	U	0.074	U	U	U				0.002	---

QUALIFIERS:

U: Compound analyzed for but not detected

NA: Not Available

B: Concentration was above IDL but less than CRDL

J: Compound detected at a concentration below the CRDL, value estimated

NOTES:

ST: Standard

---: Not established

*: Sample analyzed for Total Iron instead of Ferrous Iron

**: Standard applies to Total Iron

 : Indicates value exceeds NYSDEC Class GA Groundwater Standard or Guidance Value

TABLE 3
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
INORGANIC PARAMETERS

Sample Identification	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1				Contract	NYSDEC Class GA
Sample Depth, ft	90-110	90-110	90-110	130-150	130-150	130-150				Required	Groundwater
Date of Collection	11/02/01	01/24/02	04/24/02	07/16/02	10/17/02	02/03/03				Detection	Standard or
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0				Limit	Guidance Value
Units	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)				(mg/l)	(mg/l)
Ferrous Iron*	U	U	U	U	U	U				0.05	0.3 ST**
Total Organic Carbon	U	4.1	1.9	2.1	2	U				5	---
Alkalinity	10	U	11	U	10	10				10	---
Chloride	38.8	48.9	50	59.7	51.2	56				3	250 ST
Nitrate	5.553	4.1	4.5	5.3	5.2	5.2				0.05	10 ST
Sulfate	24.2	26	27.3	29.4	25.2	29.5				5	250 ST
Carbon Dioxide	66.3	78	66	U	89	69				NA	---
Methane	0.004	U	U	U	U	U				0.002	---

Sample Identification	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2				Contract	NYSDEC Class GA
Sample Depth, ft	110-130	110-130	110-130	110-130	110-130	110-130				Required	Groundwater
Date of Collection	11/02/01	01/24/02	04/24/02	07/16/02	10/18/02	02/03/03				Detection	Standard or
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0				Limit	Guidance Value
Units	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)				(mg/l)	(mg/l)
Ferrous Iron*	U	0.474	0.265	0.254	0.178	0.193				0.05	0.3 ST**
Total Organic Carbon	U	3.5	2.7	2.6	4.4	U				5	---
Alkalinity	22	25	27	27	29	30				10	---
Chloride	33.5	37.5	37	36.6	34.2	38				3	250 ST
Nitrate	6.813	6.7	7	5.1	5.6	6				0.05	10 ST
Sulfate	20.9	22.8	22.5	18.9	18	19.8				5	250 ST
Carbon Dioxide	408	62	62	83	84	70				NA	---
Methane	0.013	U	U	0.042	0.07 E	0.053 E				0.002	---

QUALIFIERS:

U: Compound analyzed for but not detected

NA: Not Available

B: Concentration was above IDL but less than CRDL

J: Compound detected at a concentration below the CRDL, value estimated

E: Concentration exceeds instrument calibration range, value estimated

NOTES:

ST: Standard

---: Not established

*: Sample analyzed for Total Iron instead of Ferrous Iron

** : Standard applies to Total Iron

 : Indicates Value exceeds NYSDEC Class GA Groundwater Standard or Guidance Value

TABLE 3
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
INORGANIC PARAMETERS

Sample Identification	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3				Contract	NYSDEC Class GA
Sample Depth, ft	130-150	130-150	130-150	130-150	130-150	130-150				Required	Groundwater
Date of Collection	11/02/01	01/24/02	04/24/02	07/16/02	10/16/02	02/03/03				Detection	Standard or
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0				Limit	Guidance Value
Units	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)				(mg/l)	(mg/l)
Ferrous Iron*	U	7.58	5.03	3.95	3.28	3.92				0.05	0.3 ST**
Total Organic Carbon	5.505	4.3	2.7	2.3	3.9	U				5	---
Alkalinity	18	27	18	15	U	U				10	---
Chloride	36	39.9	35.7	37.6	35.2	38.6				3	250 ST
Nitrate	6.505	4.4	4.9	5.1	2.5	4.5				0.05	10 ST
Sulfate	21.1	12.4	17.2	18.9	16.5	21.3				5	250 ST
Carbon Dioxide	369	71	72	83	U	U				NA	---
Methane	1.2	0.097	0.11	0.14	0.077 E	0.071 E				0.002	---

Sample Identification	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4				Contract	NYSDEC Class GA
Sample Depth, ft	180-200	180-200	180-200	180-200	180-200	180-200				Required	Groundwater
Date of Collection	11/02/01	01/24/02	04/24/02	07/16/02	10/17/02	02/03/03				Detection	Standard or
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0				Limit	Guidance Value
Units	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)				(mg/l)	(mg/l)
Ferrous Iron*	U	0.5	U	U	U	U				0.05	0.3 ST**
Total Organic Carbon	6.309	2.8	2.9	2.4	4.3	U				5	---
Alkalinity	22.0	20	22	19	19	19				10	---
Chloride	45.7	47.4	46.8	46.9	41.1	46.6				3	250 ST
Nitrate	8.177	9.1	8.9	9.2	8.4	9.3				0.05	10 ST
Sulfate	U	2	2.3	4.4	5.6	6				5	250 ST
Carbon Dioxide	466	68	73	71	98	84				NA	---
Methane	0.013	U	U	0.002	1	0.0006 J				0.002	---

QUALIFIERS:

U: Compound analyzed for but not detected

NA: Not Available

B: Concentration was above IDL but less than CRDL

J: Compound detected at a concentration below the CRDL, value estimated

E: Concentration exceeds instrument calibration range, value estimated

NOTES:

ST: Standard

---: Not established

*: Sample analyzed for Total Iron instead of Ferrous Iron

** : Standard applies to Total Iron

 : Indicates Value exceeds NYSDEC Class GA Groundwater Standard or Guidance Value

TABLE 3
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
INORGANIC PARAMETERS

Sample Identification	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5				Contract	NYSDEC Class GA
Sample Depth, ft	90-110	90-110	90-110	90-110	90-110	90-110				Required	Groundwater
Date of Collection	11/05/01	01/25/02	04/26/02	07/17/02	10/18/02	01/30/03				Detection	Standard or
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0				Limit	Guidance Value
Units	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)				(mg/l)	(mg/l)
Ferrous Iron*	U	0.618	U	U	U	0.0419 B				0.05	0.3 ST**
Total Organic Carbon	U	4.1	1	1.8	2.5	U				5	---
Alkalinity	16	13	15	17	14	18				10	---
Chloride	43.6	53.1	62.7	66.7	50.1	48.4				3	250 ST
Nitrate	3.744	3.7	3.9	4.9	6.7	5				0.05	10 ST
Sulfate	29.2	25.7	26.6	20.5	29	36.4				5	250 ST
Carbon Dioxide	53.1	44	31	49	56	44				NA	---
Methane	0.009	U	U	U	U	U				0.002	---

Sample Identification	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6				Contract	NYSDEC Class GA
Sample Depth, ft	110-130	110-130	110-130	110-130	110-130	110-130				Required	Groundwater
Date of Collection	11/05/01	01/25/02	04/26/02	07/17/02	10/18/02	01/30/03				Detection	Standard or
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0				Limit	Guidance Value
Units	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)				(mg/l)	(mg/l)
Ferrous Iron*	U	U	0.0457 B	0.0609 B	U	0.33				0.05	0.3 ST**
Total Organic Carbon	U	4.4	2	1.9	3.3	U				5	---
Alkalinity	32	27	27	24	24	24				10	---
Chloride	117	102	99	101	85.8	84.3				3	250 ST
Nitrate	4.885	5.1	4.7	5.2	5	4.5				0.05	10 ST
Sulfate	29.1	30.9	26.4	21.3	30.8	22.9				5	250 ST
Carbon Dioxide	392	57	53	62	68	51				NA	---
Methane	0.007	U	U	U	U	U				0.002	---

QUALIFIERS:

U: Compound analyzed for but not detected

NA: Not Available

B: Concentration was above IDL but less than CRDL

J: Compound detected at a concentration below the CRDL, value estimated

NOTES:

ST: Standard

---: Not established

*: Sample analyzed for Total Iron instead of Ferrous Iron

**: Standard applies to Total Iron

 : Indicates Value exceeds NYSDEC Class GA Groundwater Standard or Guidance Value

**TABLE 3
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
INORGANIC PARAMETERS**

Sample Identification	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7				Contract Required	NYSDEC Class GA
Sample Depth, ft	90-110	90-110	90-110	90-110	90-110	90-110					Groundwater
Date of Collection	11/05/01	01/25/02	04/24/02	07/16/02	10/18/02	01/29/03				Detection	Standard or
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0				Limit	Guidance Value
Units	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)				(mg/l)	(mg/l)
Ferrous Iron*	U	0.0693 B	U	U	0.106 B	0.0375 B				0.05	0.3 ST**
Total Organic Carbon	U	3.4	1.1	1.4	2.3	U				5	---
Alkalinity	U	U	U	U	U	U				10	---
Chloride	18.8	21.8	21.5	22.7	23.7	23.2				3	250 ST
Nitrate	5.913	6	5.6	6.3	5.7	5.9				0.05	10 ST
Sulfate	31	33.8	28.4	31.1	31.1	30.1				5	250 ST
Carbon Dioxide	158	81	U	U	U	U				NA	---
Methane	0.007	U	U	U	U	U				0.002	---

Sample Identification	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8				Contract Required	NYSDEC Class GA
Sample Depth, ft	120-140	120-140	120-140	120-140	120-140	120-140					Groundwater
Date of Collection	11/05/01	01/25/02	04/24/02	07/17/02	10/18/02	01/29/03				Detection	Standard or
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0				Limit	Guidance Value
Units	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)				(mg/l)	(mg/l)
Ferrous Iron*	U	10.7	18.2	13.2	7.5	7.09				0.05	0.3 ST**
Total Organic Carbon	12.2	6.9	4.4	2.2	3.1	U				5	---
Alkalinity	14	38	53	42	28	22				10	---
Chloride	22.9	26.1	25.9	24.7	23.4	24.6				3	250 ST
Nitrate	5.049	2.8	3.4	1.7	3.7	3.3				0.05	10 ST
Sulfate	32.7	27.9	22.8	19.6	29.1	28.8				5	250 ST
Carbon Dioxide	56.2	U	48	52	60	48				NA	---
Methane	0.007	U	0.22	0.16	U	U				0.002	---

QUALIFIERS:

U: Compound analyzed for but not detected

NA: Not Available

B: Concentration was above IDL but less than CRDL

J: Compound detected at a concentration below the CRDL, value estimated

NOTES

ST: Standard

---: Not established

*: Sample analyzed for Total Iron instead of Ferrous Iron

** : Standard applies to Total Iron

 : Indicates Value exceeds NYSDEC Class GA Groundwater Standard or Guidance Value

**TABLE 3
NEW CASSEL INDUSTRIAL AREA
OFF-SITE GROUNDWATER MONITORING AND ASSESSMENT PROGRAM
MONITORING WELL SAMPLE RESULTS
INORGANIC PARAMETERS**

Sample Identification	MW-9	MW-9	MW-9							Contract Required Detection Limit	NYSDEC Class GA Groundwater Standard or Guidance Value
Sample Depth, ft	305-315	305-315	305-315								
Date of Collection	07/17/02	10/18/02	02/03/03								
Dilution Factor	1.0	1.0	1.0								
Units	(mg/l)	(mg/l)	(mg/l)							(mg/l)	(mg/l)
Ferrous Iron*	U	U	U							0.05	0.3 ST**
Total Organic Carbon	1.9	1.4	U							5	---
Alkalinity	24	27	22							10	---
Chloride	101	13.4	12.9							3	250 ST
Nitrate	5.2	2.2	2							0.05	10 ST
Sulfate	21.3	19	22.3							5	250 ST
Carbon Dioxide	62	17	13							NA	---
Methane	U	U	U							0.002	---

QUALIFIERS:

U: Compound analyzed for but not detected

NA: Not Available

B: Concentration was above IDL but less than CRDL

J: Compound detected at a concentration below the CRDL, value estimated

NOTES:

ST: Standard

---: Not established

*: Sample analyzed for Total Iron instead of Ferrous Iron

**: Standard applies to Total Iron

 : indicates Value exceeds NYSDEC Class GA Groundwater Standard or Guidance Value

ATTACHMENT A

SAMPLE INFORMATION RECORDS

Date: 1/29/03

SAMPLE INFORMATION RECORD

Site: New Cassel Industrial

Sample Crew: J. Mulligan + R. Fisher

Sample Location/Well No. Trip Blank #1

Field Sample I.D. Number Trip Blank #1

Time 1245

Weather 25°F Light Snow

Temperature 25°F

Sample Type:

Groundwater _____

Sediment _____

Surface Water/Stream _____

Air _____

Soil _____

Other (describe, i.e. Water, Trip Blank
water, seepage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water _____

Measurement Method _____

Depth of Well _____

Measurement Method _____

Volume Removed _____

Removal Method _____

Field Test Results

Color _____

pH _____

Odor _____

Temperature (°F) _____

Specific Conductance (umhos/cm) _____

Other (OVA, Methane Meter, etc.) _____

Constituents Sampled

VOCs

Remarks:

Trip Blank #1 Provided By Southwest L-B of Oklahoma

Well Casing Volumes

GAL/FT

1 1/2" = 0.077

2" = 0.16

3" = 0.37

4" = 0.65

1 1/4" = 0.10

2 1/2" = 0.24

3 1/2" = 0.50

6" = 1.46

Date: 2/3/03

SAMPLE INFORMATION RECORD

Site: New Castle Industrial

Sample Crew: J. Milligan + R. Fowler

Sample Location/Well No. Trip Blank #2

Field Sample I.D. Number Trip Blank #2

Time 1545

Weather Sunny, clear

Temperature 40° F

Sample Type:

Groundwater

Sediment

Surface Water/Stream

Air

Soil

Other (describe, i.e. Water, Trip Blank
water, septage, etc.)

Well Information (fill out for groundwater samples)

Depth to Water

Measurement Method

Depth of Well

Measurement Method

Volume Removed

Removal Method

Field Test Results

Color

pH

Odor

Temperature (°F)

Specific Conductance (umhos/cm)

Other (OVA, Methane Meter, etc.)

Constituents Sampled

VOCs

Remarks:

Trip Blank #2 Provided by Southwest Lab of Oklahoma

Well Casing Volumes

GAL/FT

1 1/2" = 0.077

2" = 0.16

3" = 0.37

4" = 0.65

1 3/4" = 0.10

2 1/2" = 0.24

3 1/2" = 0.50

6" = 1.46

Date: 1/29/03

SAMPLE INFORMATION RECORD

Site: New Cassel Industrial Sample Crew: J. Mulligan + P. Fowler
 Sample Location/Well No. EW-1B
 Field Sample I.D. Number NCMW EW-1B (164) Time 1115
 Weather 25°F Light snow Temperature 25°F

Sample Type:

Groundwater X Sediment _____
 Surface Water/Stream _____ Air _____
 Soil _____ Other (describe, i.e. _____
 water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 45.77' Measurement Method LMS 7/2002 RE/FS AQP VF
 Depth of Well 164' Measurement Method 11
 Volume Removed 100 Gallons Removal Method Dedicated Sump & PWD

Field Test Results

Color Clear pH 5.45 Odor None
 Temperature (°C) 14.4 Specific Conductance (umhos/cm) 0.199
 Other (OVA, Methane Meter, etc.) Dissolved Oxygen = 1.42 mg/L Eh = 290 mV Turb = 0.3 NTU

Constituents Sampled

<u>Voc, Tol</u>	<u>Chloride, Alkalinity</u>	<u>Nitrate, Nitrite</u>	<u>Carbon Dioxide</u>
<u>Methane</u>	<u>Ferric Iron</u>	<u>Sulfate</u>	

Remarks:

Purge water discharged to Nassau Co. Sewer System.
Sample collected off disposable discharge tube from the pump
2 Gallons Per Minute

Well Casing Volumes

GAL/FT	1 1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/2" = 0.10	2 1/2" = 0.24	3 1/2" = 0.50	6" = 1.46

Date: 1/29/03

SAMPLE INFORMATION RECORD

Site: New Cassel Industrial Sample Crew: J. Milligan + R. Fowler
Sample Location/Well No. EV-1C
Field Sample I.D. Number NCMW EV-1C(51b) Time 1100
Weather 25°F Light Snow Temperature 25°F

Sample Type:

Groundwater X Sediment _____
Surface Water/Stream _____ Air _____
Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 47.77' Measurement Method LMS/2000 RE/FS APP VI
Depth of Well 51b' Measurement Method 11
Volume Removed 1500 Gallons Removal Method Detected Submersible Pump

Field Test Results

Color clear pH 5.90 Odor None
Temperature (°F) 12.0 Specific Conductance (umhos/cm) 0.097
Other (OVA, Methane Meter, etc.) Dissolved Oxygen = 11.51 mg/L Eh = 273 mV Turb = 3.5 NTU

Constituents Sampled

Voc, Toc Chloride, Alkalinity Nitrate, Nitrite Carbon Dioxide
Methane Ferrous Iron Sulfate

Remarks:

Purge water discharged to Nassau Co. Sewer system.
Sample collected off discharge discharge tube from the pump.
15 Gallons Per Minute

Well Casing Volumes

GAL/FT	1 1/4" = 0.077	2" = 0.16	3" = 0.37
	1 1/2" = 0.10	2 1/2" = 0.24	3 1/2" = 0.50
			4" = 0.65 6" = 1.46

Date: 1/30/03

SAMPLE INFORMATION RECORD

Site: New Cassel Industrial Sample Crew: J. Milligan + R. Fuler

Sample Location/Well No. FW-2B

Field Sample I.D. Number NC MW EW-2B(142) Time 1125

Weather 35°F clear NE 0-5 MPH Temperature ~~46~~ 30°F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water ≈ 46.90 Measurement Method WS²/200 AF/FS UI #10

Depth of Well ≈ 142 Measurement Method 11

Volume Removed 120 Gallons Removal Method Delicate SB method per

Field Test Results

Color Clear pH 5.33 Odor None

Temperature (°C) 14.46 Specific Conductance (umhos/cm) 0.146

Other (OVA, Methane Meter, etc.) Dissolved oxygen = 1.53 mg/L Eh = 273 mV Turb 0.7 NTU

Constituents Sampled

<u>VOC, TOC</u>	<u>chloride, Alkalinity</u>	<u>Nitrite, Nitrate</u>	<u>Carbon Dioxide</u>
<u>Methane</u>	<u>Ferric Iron</u>	<u>Sulfate</u>	

Remarks:

Purge water discharged to Nassau Co. Sewer System
Sample collected off discharge pipe from the pump
2 Gallons per minute

Well Casing Volumes

GAL/FT	1 1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/2" = 0.10	2 1/2" = 0.24	3 1/2" = 0.50	6" = 1.46

Date: 1/30/03

SAMPLE INFORMATION RECORD

Site: New Cassel Industrial Sample Crew: J. Milligan + R. Fowler
Sample Location/Well No. EW-2C
Field Sample I.D. Number NCLMW EW-2C (114) Time 10/0
Weather 30° Clear NE 0-5 mph Temperature 30° F

Sample Type:

Groundwater X Sediment _____
Surface Water/Stream _____ Air _____
Soil _____ Other (describe, i.e. _____
water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water ≈ 45.0' Measurement Method LMS⁷/2nd RI/FS APP, VI
Depth of Well ≈ 514' Measurement Method 11
Volume Removed 1600 Gallons Removal Method Dedicated S-Bios with Pump

Field Test Results

Color clear pH 6.12 Odor None
Temperature (°C) 11.45 Specific Conductance (umhos/cm) 0.047
Other (OVA, Methane Meter, etc.) Dissolved Oxygen = 8.37 mg/L Eh = 219 mV Turb = 0.0

Constituents Sampled

<u>Voc, T.O.C</u>	<u>Chloride, Alkalinity</u>	<u>Nitrate, Nitrite</u>	<u>Carbon Dioxide</u>
<u>Methane</u>	<u>Ferrous Iron</u>	<u>Sulfate</u>	

Remarks:

Purge water discharged to Nassau Co. Sewer System.
Sample collected off discharge tube from pump
12 Gallons per minute

Well Casing Volumes

GAL/FT	1 1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/2" = 0.10	2 1/2" = 0.24	3 1/2" = 0.50	6" = 1.46

Date: 2/3/03

SAMPLE INFORMATION RECORD

Site: New Cassel Industrial Sample Crew: J. Mulligan + R. Fowler

Sample Location/Well No. NCMW-1 (110)

Field Sample I.D. Number MW-1 Time 0950

Weather Sunny, clear Temperature 40°F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 52.03 FT Measurement Method Water Level Indicator

Depth of Well 110 FT Measurement Method Water Level Indicator

Volume Removed 70 Gallons Removal Method Submersible Pump

Field Test Results

Color clear pH 5.10 Odor None

Temperature (°F) 14.95 Specific Conductance (umhos/cm) 0.245

Other (OVA, Methane Meter, etc.) Dissolved Oxygen = 2.02 mg/L Eh = 377 mV

Turbidity = 11 NTU

Constituents Sampled

Voc, Toc Chloride, Alkalinity Nitrate, Nitrite Carbon Dioxide

Methane Ferrous Iron Sulfate

Remarks:

Purge water discharged to Nassau Co. Sewer System.

Sample collected off disposable discharge tube from sk pump.

2 Gallons Per Minute

Well Casing Volumes

GAL/FT	1 1/2" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/4" = 0.10	2 1/2" = 0.24	3 1/2" = 0.50	6" = 1.46

Date: 2/3/03

SAMPLE INFORMATION RECORD

Site: New Cassel Industrial Sample Crew: J. Milligan + R. Fowler
Sample Location/Well No. Nc MW - 2 (130)
Field Sample I.D. Number MW - 2 Time 1055
Weather Sunny, clear Temperature 40°F
Sample Type:
Groundwater X Sediment _____
Surface Water/Stream _____ Air _____
Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 52.07 FT Measurement Method water level Indicator
Depth of Well 130 FT Measurement Method water level Indicator
Volume Removed 70 gallons Removal Method Submersible Pump

Field Test Results

Color clear pH 5.67 Odor no odor
Temperature (°F) 15.10 Specific Conductance (umhos/cm) 0.225
Other (OVA, Methane Meter, etc.) Dissolved oxygen = 1.15 Eh = 228
Turbidity = 0.4 NTU

Constituents Sampled

<u>VOC, TOC</u>	<u>Chloride, Alkalinity</u>	<u>Nitrate Nitrite</u>	<u>Carbon Dioxide</u>
<u>Methane</u>	<u>Ferrous Iron</u>	<u>Sulfate</u>	

Remarks:

Purge water discharged to Nassau Co. sewer system.
Sample collected off discharge line from the pond.
2 Gallons Permeate

Well Casing Volumes

GAL/FT	1 1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/2" = 0.10	2 1/2" = 0.24	3 1/2" = 0.50	6" = 1.46

Date: 2/3/03

SAMPLE INFORMATION RECORD

Site: New Castle Industrial Sample Crew: J. Milligan + P. Fowler
 Sample Location/Well No. NCPW-3(150)
 Field Sample I.D. Number NW-3 Time 1215
 Weather Smy. clear Temperature 40°F
 Sample Type:
 Groundwater X Sediment _____
 Surface Water/Stream _____ Air _____
 Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 52.07 ft Measurement Method Water level Indicator
 Depth of Well 150 ft Measurement Method Water level Indicator
 Volume Removed 80 Gallons Removal Method Submersible pump

Field Test Results

Color clear pH 4.90 Odor None
 Temperature (°F) 15.51 Specific Conductance (umhos/cm) 0.168
 Other (OVA, Methane Meter, etc.) Dissolved oxygen = 0.85 mg/L Eh = 165
 Turbidity = 0.1 NTU

Constituents Sampled

VOC, POC Chloride, Alkalinity Nitrite, Nitrate Carbon Dioxide
methane Ferrous Iron Sulfate

Remarks:

Purge water discharged to Nassau Co. Sewer System
Sample collected off disposable discharge tube from the pump
2 Gallons per minute

Well Casing Volumes

GAL/FT	1" = 0.077	<u>2" = 0.16</u>	3" = 0.37	4" = 0.65
	1 1/2" = 0.10	2 1/2" = 0.24	3 1/2" = 0.50	6" = 1.46

Date: 2-4-03

SAMPLE INFORMATION RECORD

Site: New Cassel Industrial Sample Crew: J. Milligan R. Fowler
Sample Location/Well No. MW-4
Field Sample I.D. Number NC-MW-4(200) Time 0920
Weather Overcast Rain Temperature 40's
Sample Type:
Groundwater X Sediment _____
Surface Water/Stream _____ Air _____
Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 52.41 Measurement Method water level Indicator
Depth of Well 200 Measurement Method water level Indicator
Volume Removed 350 Gallons Removal Method Submersible pump

Field Test Results

Color Colorless pH 5.32 Odor No odor
Temperature (°F) 10.13 Specific Conductance (umhos/cm) 221
Other (OVA, Methane Meter, etc.) Dissolved Oxygen: 1.63 Eh: 339.4 Turb: 0.9

Constituents Sampled

VOC, TOC Chloride Alkalinity Nitrate nitrite Carbon dioxide
methane Ferrous ~~oxide~~ Iron Sulfate

Remarks:

Permeate water discharge to Nassau Co. Sewer System MS/MSD Location
Samples collected from disposable discharge tube from pump
5 Gallons per Minute = Permeate rate

Well Casing Volumes

GAL/FT	1 1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/2" = 0.10	2 1/2" = 0.24	3 1/2" = 0.50	6" = 1.46

Date: 1/30/03

SAMPLE INFORMATION RECORD

Site: New Cassel Industrial Sample Crew: J. Milligan + R. Fowler
 Sample Location/Well No. MW-5
 Field Sample I.D. Number NC MW-5 (110) Time 1335
 Weather 30°F clear NE 0-5 MPH Temperature 30°F
 Sample Type:
 Groundwater X Sediment _____
 Surface Water/Stream _____ Air _____
 Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 53.80' Measurement Method Water Level Indicator
 Depth of Well 110' Measurement Method Water Level Indicator
 Volume Removed 50 Gallons Removal Method Submersible Pump

Field Test Results

Color Clear pH 5.63 Odor None
 Temperature (°F) 14.70 Specific Conductance (umhos/cm) 0.237
 Other (OVA, Methane Meter, etc.) Dissolved oxygen = 8.76 mg/L Eh = 354 mV Turb = 0.6 NTU

Constituents Sampled

<u>VOC, TOC</u>	<u>Chloride, Alkalinity</u>	<u>Nitrite, Nitrate</u>	<u>Carbon Dioxide</u>
<u>Methane</u>	<u>Ferric Iron</u>	<u>Sulfate</u>	

Remarks:

Purge water discharged to Nassau Co. Sewer System
Sample collected off disposable tube
2 Gallons per minute

Well Casing Volumes

GAL/FT	1 1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/2" = 0.10	2 1/2" = 0.24	3 1/2" = 0.50	6" = 1.46

Date: 1/30/02

SAMPLE INFORMATION RECORD

Site: New Cassel Industrial Sample Crew: J. Milligan + R. Fowler

Sample Location/Well No. MW-6

Field Sample I.D. Number Nc MW-6 (130) Time 1245

Weather 30°F clear NC 0-5 MPH Temperature 30°F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 53.88 FT Measurement Method Water level Indicator

Depth of Well 130' Measurement Method Water level Indicator

Volume Removed 20 Gallons Removal Method Submersible Pump

Field Test Results

Color clear pH 5.66 Odor None

Temperature (°F) 14.68 Specific Conductance (umhos/cm) 0.309

Other (OVA, Methane Meter, etc.) Dissolved oxygen = 1.07 mg/L Eh = 286 mV Turb = 13.9 NTU

Constituents Sampled

<u>Voc, Pce</u>	<u>Chloride, Alkalinity</u>	<u>Nitrate, Nitrite</u>	<u>Carbon dioxide</u>
<u>Methane</u>	<u>Ferrous Iron</u>	<u>Sulfate</u>	

Remarks:

Purge water discharged to Nassau County Sewer System.
Sample collected off disposable TUBE
2- Gallons per minute

Well Casing Volumes

GAL/FT	1 1/4" = 0.077	<u>2" = 0.16</u>	3" = 0.37	4" = 0.65
	1 1/2" = 0.10	2 1/2" = 0.24	3 1/2" = 0.50	6" = 1.46

Date: 1/29/03

SAMPLE INFORMATION RECORD

Site: New Castel Industrial Sample Crew: J. Milligan + R. Fowler

Sample Location/Well No. MW-7

Field Sample I.D. Number N(MW-7(110)) Time 1400

Weather 25°F Light Snow Temperature 25°F

Sample Type:

Groundwater X Sediment _____

Surface Water/Stream _____ Air _____

Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 46.05 Measurement Method water level Indicator

Depth of Well 110 Measurement Method water level Indicator

Volume Removed 50 Gallons Removal Method Separate pump

Field Test Results

Color Clear pH 5.02 Odor None

Temperature (°F) 12.9 Specific Conductance (umhos/cm) 0.161

Other (OVA, Methane Meter, etc.) Dissolved oxygen = 4.72 mg/L Eh = 307 mV Turb = 1.0 NTU

Constituents Sampled

<u>VOC, TSC</u>	<u>Chloride, Alkalinity</u>	<u>Nitrate, Nitrite</u>	<u>Carbon dioxide</u>
<u>Methane</u>	<u>Ferrous Iron</u>	<u>Sulfate</u>	

Remarks:

Purge water discharged to Nassau Co. Sewer System.
Sample GLCHL OFF disposable discharge to be
2 Gallons per minute

Well Casing Volumes

GAL/FT	1 1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/2" = 0.10	2 1/2" = 0.24	3 1/2" = 0.50	6" = 1.46

Date: 1/29/03

SAMPLE INFORMATION RECORD

Site: New Cassel Industrial Sample Crew: J. Milligan + R. Foster
Sample Location/Well No. MW-8
Field Sample I.D. Number NL MW-8 (140) Time 1310
Weather 25°F Light Snow Temperature 25°F

Sample Type:

Groundwater X Sediment _____
Surface Water/Stream _____ Air _____
Soil _____ Other (describe, i.e. water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 46.13 Measurement Method Water Level Indicator
Depth of Well 140 Measurement Method Water Level Indicator
Volume Removed 70 Removal Method Submersible Pump

Field Test Results

Color Clear pH 5.79 Odor None
Temperature (°F) 12.9 Specific Conductance (umhos/cm) 0.176
Other (OVA, Methane Meter, etc.) Dissolved Oxygen = 3.45 Eh = 126 mV Turb = 29.9

Constituents Sampled

<u>VOC, TOC</u>	<u>Chloride, Alkalinity</u>	<u>Nitrate, Nitrite</u>	<u>Carbon Dioxide</u>
<u>Methane</u>	<u>Ferrous Iron</u>	<u>Sulfate</u>	

Remarks:

Rise water discharged to Nassau Co. Sewer System.
Sample Collected ORP discharge tank from the RP.
2 Gallons Per minute.

Well Casing Volumes

GAL/FT	1 1/4" = 0.077	2" = 0.16	3" = 0.37	4" = 0.65
	1 1/2" = 0.10	2 1/2" = 0.24	3 1/2" = 0.50	6" = 1.46



Date: 2/4/03

SAMPLE INFORMATION RECORD

Site: New Cassel Industrial Sample Crew: J. Milligan + K. Fowler

Sample Location/Well No. MW-9

Field Sample I.D. Number UC MW-9 (315) Time 1230

Weather Overcast Rain Temperature 40's F

Sample Type:

Groundwater X **Sediment** _____

Surface Water/Stream	Air
----------------------	-----

Soil _____ Other (describe, i.e. _____

Other (describe, i.e. _____
water, septage, etc.) _____

Well Information (fill out for groundwater samples)

Depth to Water 49.48 **Measurement Method** Waterlevel Indicator

Depth of Well 315 Measurement Method Waterlevel Indicator

Volume Removed 550 Gallons **Removal Method** Submersible pump.

Field Test Results

Color colorless pH 6.97 Odor No odor

Temperature (°F) 12.53 Specific Conductance (umhos/cm) 0.117

Other (OVA, Methane Meter, etc.) Dissolved Oxygen: 8.26 Eh: 283 m Turb: 1.2

Constituents Sampled

VOC, TOC Chloride, Alkalinity Nitrate, Nitrite Carbon dioxide

methane Ferrous Iron Sulfate _____

Remarks:

Purge water discharge to Warsaw Co. Sewer System:

Samples collected from disposable discharge tube from pump.

5 Gallons per Minute = purge rate

Well Casing Volumes

GAL/FT **1 1/4" = 0.077**

$$2^n = 0.16$$
$$3'' = 0.37$$
$$4'' = 0.65$$
$$1\frac{1}{2} = 0.10$$
$$2\frac{1}{2}'' = 0.24$$
$$3\frac{1}{2} = 0.50$$
$$6'' = 1.46$$