### **TABLES**



#### Table 2-1 Groundwater Elevations in Micro-Wells Former Barker Chemical Site, Site No. 932119 Somerset, New York

Well	Top of	05/2	2/03	06/03	3/03	07/1	6/03	07/3	0/03
Designation	Riser	Depth to	Elevation						
	Elevation	Water (ft)	(ft amsl)						
MW-1	498.69	2.89	495.80	3.27	495.42	3.07	495.62	5.99	492.70
MW-2	499.80	5.33	494.47	5.92	493.88	7.41	492.39	8.15	491.65
MW-3	496.09	3.92	492.17	4.17	491.92	7.83	488.26	8.83	487.26
MW-4	501.03	4.74	496.29	5.09	495.94	6.39	494.64	6.77	494.26
MW-5	499.11	3.34	495.77	3.70	495.41	6.15	492.96	6.89	492.22
MW-6	500.48	5.02	495.46	5.36	495.12	9.22	491.26	10.69	489.79
MW-11	499.75	4.88	494.87	5.05	494.70	10.83	488.92	10.83	488.92
MW-12	498.05	4.11	493.94	4.45	493.60	9.83	488.22	11.56	486.49

Well	Top of	09/0	3/03	10/01	1/03	10/3	1/03	11/2	1/03
Designation	Riser Flevation	Depth to Water (ft)	Elevation (ft amsl)						
	Elevation	Water (It)	(It allist)	Water (It)	(It anisi)	Water (It)	(it allisi)	Water (It)	(It allisi)
MW-1	498.69	6.39	492.30	7.83	490.86	4.50	494.19	2.97	495.72
MW-2	499.80	8.97	490.83	9.72	490.08	8.91	490.89	5.66	494.14
MW-3	496.09	10.75	485.34	12.67	483.42	11.57	484.52	7.30	488.79
MW-4	501.03	8.63	492.40	10.37	490.66	11.26	489.77	9.65	491.38
MW-5	499.11	8.14	490.97	10.25	488.86	9.27	489.84	5.67	493.44
MW-6	500.48	11.38	489.10	11.38	489.10	11.38	489.10	11.38	489.10
MW-11	499.75	10.83	488.92	10.83	488.92	10.83	488.92	10.83	488.92
MW-12	498.05	11.56	486.49	11.56	486.49	11.56	486.49	11.56	486.49

Notes:

Shaded values represent dry wells. The depths given are to the bottom of the well screen.



#### Table 2-1 Groundwater Elevations in Micro-Wells Former Barker Chemical Site, Site No. 932119 Somerset, New York

Well	Top of	04/1	6/08	04/29	9/08	05/2	2/08	06/2	5/08
Designation	Riser	Depth to	Elevation						
	Elevation	Water (ft)	(ft amsl)						
MW-1	498.69	3.03	495.66	3.33	495.36	3.69	495.00	6.57	492.12
MW-2	499.80	5.54	494.26	5.52	494.28	5.76	494.04	7.37	492.43
MW-3	496.09	3.91	492.18	4.05	492.04	4.47	491.62	6.15	489.94
MW-4	501.03	4.83	496.20	5.15	495.88	5.45	495.58	6.49	494.54
MW-5	499.11	3.68	495.43	3.85	495.26	4.09	495.02	6.37	492.74
MW-6	500.48	5.13	495.35	5.26	495.22	5.56	494.92	8.94	491.54
MW-11	499.75	4.79	494.96	4.87	494.88	5.40	494.35	9.65	490.10
MW-12	498.05	4.24	493.81	4.37	493.68	4.72	493.33	8.06	489.99

Notes:

Shaded values represent dry wells. The depths given are to the bottom of the well screen.



# Table 2.2A Summary of Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York

Sample ID	Date Sampled	Time Sampled	Sample Depth	Analytical Parameters	Sample Description and/or Location	Table Reference
				Lime Waste Samples		
W-2	12/17/99	1500	2.0'	Metals, Cyanide, Leachable pH	Coarse grained, cream colored, lime-like material in the Filled Lagoon	Table 2-3
WP-13	06/21/00	1345	0.0' - 2.4'	Herbicides, Metals, Sulfur, Boron	Coarse grained, cream colored, lime-like material in the Filled Lagoon. EPA boring WP-13	Table 2-3
SB-4	05/21/03	1300	0.0' - 4.0'	SVOCs, Pesticides, Herbicides, Metals, Sulfur, Boron, Leachable pH	Coarse grained, cream colored, lime-like material in the Filled Lagoon	Table 2-3
SB-8	05/21/03	1530	0.0' - 4.0'	Pesticides, Herbicides, Metals, Sulfur, Boron, Leachable pH	Coarse grained, cream colored, lime-like material in the Filled Lagoon	Table 2-3
SB-9	05/21/03	1450	0.0' - 4.0'	Metals, Sulfur, Boron	Coarse grained, cream colored, lime-like material in the Filled Lagoon	Table 2-3
SB-10	05/21/03	1410	0.0' - 4.0'	SVOCs, Pesticides, Herbicides, Metals, Sulfur, Boron, Leachable pH	Coarse grained, cream colored, lime-like material in the Filled Lagoon	Table 2-3
SB-13	05/21/03	1430	3.5' - 5.0'	Pesticides, Herbicides, Metals, Sulfur, Boron, Leachable pH	Coarse grained, cream colored, lime-like material in the Filled Lagoon	Table 2-3
				Sludge Samples		
WP-13	06/21/00	1345	2.4' - 3.2'	Herbicides, Metals, Sulfur, Boron	Dark green sludge in Filled Lagoon. EPA boring WP-13	Table 2-4A
SLDG-5	01/24/01	1500	NR	Metals	Stabilized lagoon sludge in the South Lagoon	Table 2-4A
SB-4	05/21/03	1300	4.0' - 8.0'	SVOCs, Pesticides, Herbicides, Metals, Sulfur, Boron, Leachable pH	Green-blue sludge in the Filled Lagoon	Table 2-4A
SB-9	05/21/03	1450	4.0' - 8.0'	Metals, Sulfur, Boron	Green-blue sludge in the Filled Lagoon	Table 2-4A
SB-13	05/21/03	1430	5.0' - 6.0'	Herbicides, Metals, Sulfur, Boron	Green-blue sludge in the Filled Lagoon	Table 2-4A
SB-14	05/21/03	1410	4.0' - 7.0'	Pesticides, Herbicides, Metals, Sulfur, Boron	Green-blue sludge in the South Lagoon	Table 2-4A
A(-2)	08/07/13	0850	4.0'	RCRA Metals	Sludge from the southern portion of the site	Table 2-4B
A1	08/05/13	0953	4.0'	Arsenic	Sludge from the southern portion of the site	Table 2-4B
B(-2)	08/07/13	0930	4.0'	RCRA Metals	Sludge from the southern portion of the site	Table 2-4B
B(-1)	08/06/13	0930	4.0'	RCRA Metals	Sludge from the southern portion of the site	Table 2-4B
C(-1)	08/06/13	1002	3.0'	RCRA Metals	Sludge from the southern portion of the site	Table 2-4B
				Miscellaneous Fill Samples		
A(-2)	08/07/13	0850	2.0'	Arsenic	Reworked soil from the southern portion of the site	Table 2-5A
A0	08/05/13	1500	2.3'	Arsenic	Granular fill from the southern portion of the site	Table 2-5A
A2	08/05/13	1025	1.2'	Arsenic	Cinder fill from the southern portion of the site	Table 2-5A



# Table 2.2A Summary of Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York

Sample	Date Sampled	Time	Sample	Analytical Parameters	Sample Description and/or Location	Table Poforonco			
	Sampleu	Sampleu	Deptii		N	Reference			
	T	-	I	Miscellaneous Fill Samples (continued					
B(-2)	08/07/13	0930	2.0'	Arsenic	Reworked soil from the southern portion of the site	Table 2-5A			
B(-2)	08/07/13	0930	5.5'	RCRA Metals	Granular fill from the southern portion of the site	Table 2-5B			
B(-1)	08/06/13	0930	2.0'	Arsenic	Reworked soil from the southern portion of the site	Table 2-5A			
C(-2)	08/07/13	0955	2.0'	Arsenic	Reworked soil from the southern portion of the site	Table 2-5A			
D7	07/15/13	1147	2.0'	Arsenic	Granular fill from the southern portion of the site	Table 2-5A			
G(-1)	08/06/13	1300	2.2'	RCRA Metals	Cinder fill from the southern portion of the site	Table 2-5B			
G1	08/07/13	1312	1.6'	RCRA Metals	Ash with coal from the southern portion of the site	Table 2-5B			
B-5R	08/06/13	0845	6.0'	RCRA Metals	Fill from the southern portion of the site	Table 2-5B			
Surface Soil Samples									
S-16	08/23/01	1708	Surface •	Arsenic	Soil from the former Chip Area	Table 2-6A			
S-17	08/23/01	1705	Surface •	Arsenic	Soil from the former Chip Area	Table 2-6A			
S-22	08/23/01	1715	Surface •	Arsenic	Soil from the former Chip Area	Table 2-6A			
S-25	08/23/01	1630	Surface •	Arsenic	Soil from the former Chip Area	Table 2-6A			
S-26	08/23/01	1635	Surface •	Arsenic	Soil from the former Chip Area	Table 2-6A			
S-27	08/23/01	1639	Surface •	Arsenic	Soil from the former Chip Area	Table 2-6A			
S-28	08/23/01	1644	Surface •	Arsenic	Soil from the former Chip Area	Table 2-6A			
S-29	08/23/01	1648	Surface •	Arsenic	Soil from the former Chip Area	Table 2-6A			
S-30	08/23/01	1655	Surface •	Arsenic	Soil from the former Chip Area	Table 2-6A			
S-31	08/23/01	1700	Surface •	Arsenic	Soil from the former Chip Area	Table 2-6A			
S-32	08/23/01	1719	Surface •	Arsenic	Soil from the Swale near the former Chip Area	Table 2-6A			
S-33	08/23/01	1725	Surface •	Arsenic	Soil from the Swale near the former Chip Area	Table 2-6A			
S-34	08/23/01	1730	Surface •	Arsenic	Soil from the Swale near the former Chip Area	Table 2-6A			
SS-3	06/13/12	1300	Surface •	SVOCs, Pesticides, Metals, Sulfur, Leachable pH	Soil near the gravel drive near West Somerset Road	Table 2-6B			
SS-6	06/13/12	1300	Surface •	SVOCs, Pesticides, Metals, Sulfur, Leachable pH	Soil west of the former Office Building	Table 2-6B			
SS-13	06/13/12	1300	Surface •	SVOCs, Pesticides, Metals, Sulfur, Leachable pH	Soil east of the Western Storage Building	Table 2-6B			
SS-29	06/13/12	1515	Surface •	SVOCs, Pesticides, Metals, Sulfur, Leachable pH	Soil northwest of the former Chip Area	Table 2-6B			
SS-40	06/13/12	1515	Surface •	SVOCs, Pesticides, Metals, Sulfur, Leachable pH	Soil from the NE portion of the property in woods	Table 2-6B			
SS-45	06/13/12	1515	Surface •	SVOCs, Pesticides, Metals, Sulfur, Leachable pH	Soil from the NW corner of the property in woods	Table 2-6B			
A2	05/07/13	0940	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A			



Sample ID	Date Sampled	Time Sampled	Sample Depth	Analytical Parameters	Sample Description and/or Location	Table Reference
	_		_	Surface Soil Samples (continued)		
A7	05/07/13	1005	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
B5	05/07/13	1045	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
B7	05/07/13	1035	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
D4	05/07/13	1325	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
D5	05/07/13	1320	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
D6	05/07/13	1315	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
D7	05/07/13	1200	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
E3	05/14/13	1035	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
E5	05/14/13	1025	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
E6	05/14/13	1020	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
E7	05/14/13	1015	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
F2	05/14/13	1118	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
F3	05/14/13	1112	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
F4	05/14/13	1107	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
F5	05/14/13	1103	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
F6	05/14/13	1100	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
SB-2	07/17/13	1033	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
SB-3	07/17/13	0932	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
SB-5	07/17/13	0842	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
SB-6	07/17/13	1055	0.0' - 0.17'	Arsenic	Soil from the southern portion of the site	Table 2-6A
				Subsurface Soil Samples		
WP-6	06/21/00	1515	5.7' - 8.0'	SVOCs, Herbicides, Metals, Sulfur, Boron, Leachable pH	Dark red glacial till under the Filled Lagoon. EPA boring WP-6	Table 2-7A
WP-13	06/21/00	1345	3.2' - 4.2'	SVOCs, Herbicides, Metals, Sulfur, Boron, TPH, Leachable pH	Black stained glacial till under the Filled Lagoon. EPA boring WP-13	Table 2-7A
S-4B	12/13/00	1410	3.0' - 4.0'	VOCs, SVOCs, PCBs, TCLP, Pesticides, Herbicides, Metals	Soil underlying the former Production Building EPA sample PB-SB-01	Table 2-7A
S-5B	12/13/00	1420	3.0' - 4.0'	VOCs, SVOCs, PCBs, TCLP, Pesticides, Herbicides, Metals	Soil underlying the former Production Building	Table 2-7A
S-6B	12/13/00	1430	3.0' - 4.0'	VOCs, SVOCs, PCBs, TCLP, Pesticides, Herbicides. Metals	Soil underlying the former Production Building	Table 2-7A



Sample	Date	Time	Sample	Analytical	Sample Description and/or Location	Table Deference
	Sampled	Sampled	Depth	Farameters		Reference
		-		Subsurface Soil Samples (continued)		
S-8A	08/22/01	1711	2.0'	Pesticides, Herbicides, Metals, TCLP Metals	Soil underlying the former Eastern Storage Building	Table 2-7A
S-8B	08/22/01	1630	4.0'	Pesticides, Herbicides, Metals, TCLP Metals	Soil underlying the former Eastern Storage Building	Table 2-7A
S-11	08/22/01	1142	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-11	08/22/01	1147	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-12	08/22/01	1243	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-12	08/22/01	1245	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-13	08/22/01	1350	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-13	08/22/01	1351	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-15	08/22/01	1436	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-16	08/23/01	1108	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-16	08/23/01	1110	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-17	08/23/01	1141	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-17	08/23/01	1143	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-18	08/22/01	1154	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-18	08/22/01	1155	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-19	08/22/01	1237	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-19	08/22/01	1240	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-20	08/22/01	1357	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-20	08/22/01	1359	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-21	08/22/01	1414	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-21	08/22/01	1416	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-22	08/22/01	1445	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-22	08/22/01	1447	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-23	08/23/01	1113	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-23	08/23/01	1114	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-24	08/23/01	1150	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-24	08/23/01	1154	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-25	08/22/01	1211	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-25	08/22/01	1214	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B



Sample	Date Sampled	Time	Sample	Analytical	Sample Description and/or Location	Table Boforence
ID .	Sampleu	Sampleu	Deptii			Kelerence
				Subsurface Soil Samples (continued)	)	
S-26	08/22/01	1219	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-26	08/22/01	1220	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-27	08/23/01	1105	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-27	08/23/01	1106	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-28	08/22/01	1422	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-28	08/22/01	1424	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-29	08/23/01	1059	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-29	08/23/01	1100	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-30	08/23/01	1054	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-30	08/23/01	1055	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-31	08/23/01	1202	2.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-31	08/23/01	1204	4.0'	Arsenic	Soil from the former Chip Area	Table 2-7B
S-32	08/23/01	1310	2.0'	Arsenic	Soil from the Swale near the former Chip Area	Table 2-7B
S-32	08/23/01	1313	4.0'	Arsenic	Soil from the Swale near the former Chip Area	Table 2-7B
S-33	08/23/01	1322	2.0'	Arsenic	Soil from the Swale near the former Chip Area	Table 2-7B
S-33	08/23/01	1325	4.0'	Arsenic	Soil from the Swale near the former Chip Area	Table 2-7B
S-34	08/23/01	1434	2.0'	Arsenic	Soil from the Swale near the former Chip Area	Table 2-7B
S-34	08/23/01	1438	4.0'	Arsenic	Soil from the Swale near the former Chip Area	Table 2-7B
SB-1	05/20/03	1130	0.0' - 4.0'	Pesticides, Herbicides, Metals, Boron, Leachable pH	Sand zone in boring SB-1 near West Somerset Road	Table 2-7C
SB-2	05/20/03	1250	0.0' - 4.0'	Pesticides, Herbicides, Metals, Boron, Leachable pH	Sand zone in boring SB-2 near West Somerset Road	Table 2-7C
SB-3	05/20/03	1455	9.0' - 9.8'	Pesticides, Herbicides, Metals, Sulfur, Boron, Leachable pH	Gray-blue stained soil in boring SB-3 (east of the South Lagoon) with a hydrogen sulfide odor	Table 2-7C
SB-5	05/21/03	1115	4.0' - 5.0'	Pesticides, Herbicides, Metals, Boron, Leachable pH	Stained soil in boring SB-5 (west of the North Lagoon) with a hydrogen sulfide odor	Table 2-7C
SB-6	05/21/03	0920	0.0' - 4.0'	Pesticides, Herbicides, Metals, Boron, Leachable pH	Till zone in boring SB-6 in the former Chip Area	Table 2-7C
SB-7	05/20/03	1545	0.0' - 4.0'	Pesticides, Herbicides, Metals, Boron, Leachable pH	Sand zone in boring SB-7 north of the North Lagoon	Table 2-7C
SB-10	05/21/03	1410	4.0' - 8.0'	SVOCs, Pesticides, Herbicides, Metals, Sulfur, Boron, Leachable pH	Stained soil in boring SB-10 in the Filled Lagoon	Table 2-7C
SB-12	05/21/03	0815	0.0' - 4.0'	Pesticides, Herbicides, Metals, Boron, Leachable pH	Sand zone in boring SB-12 north of the North Lagoon	Table 2-7D
B1	06/14/12	0900	8.0' - 10.0'	SVOCs, Pesticides, Metals, Sulfur, Leachable pH	Soil from the former Chip Area	Table 2-7D



Sample ID	Date Sampled	Time Sampled	Sample Depth	Analytical Parameters	Sample Description and/or Location	Table Reference
	<b>F</b>	<b>I</b>		Subsurface Soil Samples (continued)	)	
B2	06/14/12	1000	8.0' - 10.0'	SVOCs, Pesticides, Metals, Sulfur, Leachable pH	Soil from the former Chip Area	Table 2-7D
B3	06/14/12	1120	8.0' - 10.0'	SVOCs, Pesticides, Metals, Sulfur, Leachable pH	Soil from the former Chip Area	Table 2-7D
B4	06/15/12	0830	7.0' - 9.0'	SVOCs, Pesticides, Metals, Sulfur, Leachable pH	Soil from Storage Tank spill area	Table 2-7D
B9	06/15/12	1620	5.0' - 7.0'	SVOCs, Pesticides, Metals, Sulfur, Leachable pH	Soil west of the former Office Building	Table 2-7D
A(-2)	08/07/13	0850	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A(-2)	08/07/13	0850	8.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A(-1)	08/05/13	1600	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A(-1)	08/05/13	1600	8.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A0	08/05/13	1500	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A0	08/05/13	1500	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A0	08/05/13	1500	8.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A1	07/10/13	1020	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A1	07/10/13	1020	8.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A1	07/10/13	1020	10.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A2	07/10/13	1107	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A2	07/10/13	1107	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A2	07/10/13	1107	8.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A3	08/05/13	1052	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A3	07/10/13	1140	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A3	08/05/13	1052	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A3	07/10/13	1140	8.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A3	07/10/13	1140	8.3'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A4	07/10/13	1207	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A4	07/10/13	1207	5.6'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A5	07/10/13	1320	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A5	07/10/13	1320	6.9'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A6	07/10/13	1350	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A6	07/10/13	1350	6.4'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A7	07/10/13	1415	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E



Sample	Date	Time	Sample	Analytical	Sample Description and/or Location	Table
ID	Sampled	Sampled	Depth	rarameters		Reference
			-	Subsurface Soil Samples (continued)		
A7	07/10/13	1415	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
A7	07/10/13	1415	5.4'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B(-2)	08/07/13	0930	8.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B(-1)	08/06/13	0930	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B(-1)	08/06/13	0930	8.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B0	08/05/13	1412	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B0	08/05/13	1412	8.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B1	07/12/13	1007	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B1	07/12/13	1007	6.9'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B2	07/12/13	0940	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B2	07/12/13	0940	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B3	07/12/13	0905	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B3	07/12/13	0905	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B4	07/12/13	0817	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B4	07/12/13	0817	5.8'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B5	07/10/13	1520	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B5	07/10/13	1520	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B5	07/10/13	1520	6.4'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B6	07/10/13	1500	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B6	07/10/13	1500	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B7	07/10/13	1440	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B7	07/10/13	1440	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
B7	07/10/13	1440	5.8'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
C(-2)	08/07/13	0955	4.0'	RCRA Metals	Stained soil from the southern portion of the site	Table 2-7F
C(-2)	08/07/13	0955	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
C(-1)	08/06/13	1002	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
C(-1)	08/06/13	1002	7.3'	RCRA Metals	Stained soil from the southern portion of the site	Table 2-7F
C0(-5)	07/12/13	1110	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
C0(-5)	07/12/13	1110	8.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E



Sample	Date	Time	Sample	Analytical	Sample Description and/or Location	Table
ID	Sampled	Sampled	Depth	rarameters		Reference
-				Subsurface Soil Samples (continued)		
C0(-5)	07/12/13	1110	8.8'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
C1	08/05/13	1340	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
C1	08/05/13	1340	7.3'	Arsenic	Stained soil from the southern portion of the site	Table 2-7E
C2	07/12/13	1155	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
C2	07/12/13	1155	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
C3	07/12/13	1312	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
C4	07/12/13	1342	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
C4	07/12/13	1342	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
C5	07/12/13	1407	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
C5	07/12/13	1407	5.6'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
C6	07/12/13	1430	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
C6	07/12/13	1430	5.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
C7	07/12/13	1450	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
C7	07/12/13	1450	5.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D(-2)	08/07/13	1030	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D(-2)	08/07/13	1030	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D(-1)	08/06/13	1045	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D(-1)	08/06/13	1045	7.8'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D0	07/15/13	0825	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D0	07/15/13	0825	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D0	07/15/13	0825	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D0	07/15/13	0825	7.5'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D1	08/05/13	1105	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D1	07/15/13	0852	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D1	07/15/13	0852	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D1	07/15/13	0852	7.8'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D2	07/15/13	0920	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D2	07/15/13	0920	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D2	07/15/13	0920	7.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E



Sample	Date	Time	Sample	Analytical	Sample Description and/or Location	Table
ID	Sampled	Sampled	Depth	Parameters		Reference
				Subsurface Soil Samples (continued)		
D3	07/15/13	1010	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D3	07/15/13	1010	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D3	07/15/13	1010	7.6'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D4	07/15/13	1037	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D4	07/15/13	1037	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D4	07/15/13	1037	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D5	07/15/13	1105	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D5	07/15/13	1105	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D5	07/15/13	1105	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D6	07/15/13	1125	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D6	07/15/13	1125	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D6	07/15/13	1125	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D7	07/15/13	1147	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
D7	07/15/13	1147	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E(-2)	08/07/13	1132	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E(-1)	08/06/13	1115	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E(-1)	08/06/13	1115	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E(-1)	08/06/13	1115	8.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E0	07/16/13	1007	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E0	07/16/13	1007	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E0	07/16/13	1007	8.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E1	08/05/13	1143	2.2'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E1	07/16/13	0922	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E1	07/16/13	0922	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E1	07/16/13	0922	7.3'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E2	07/16/13	0840	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E2	07/16/13	0840	5.6'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E3	07/16/13	0807	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E3	07/16/13	0807	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E



Sample ID	Date Sampled	Time Sampled	Sample Depth	Analytical Parameters	Sample Description and/or Location	Table Reference
	4	•		Subsurface Soil Samples (continued)	)	•
E3	07/16/13	0807	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E4	07/15/13	1432	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E4	07/15/13	1432	5.8'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E5	07/15/13	1410	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E5	07/15/13	1410	4.0'	Arsenic Native soil from the southern portion of the site		Table 2-7E
E5	07/15/13	1410	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E6	07/15/13	1340	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E6	07/15/13	1340	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E7	07/15/13	1315	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E7	07/15/13	1315	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
E7	07/15/13	1315	6.0'	Arsenic Native soil from the southern portion of the site		Table 2-7E
F(-1)	08/06/13	1142	4.0'	Arsenic Native soil from the southern portion of the site		Table 2-7E
F(-1)	08/06/13	1142	6.0'	Arsenic Native soil from the southern portion of the site		Table 2-7E
F(-1)	08/06/13	1142	8.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
F0	07/16/13	1105	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
F0	07/16/13	1105	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
F0	07/16/13	1105	8.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
F1	07/16/13	1130	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
F1	07/16/13	1130	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
F1	07/16/13	1130	8.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
F2	07/16/13	1252	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
F2	07/16/13	1252	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
F3	07/16/13	1321	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
F3	07/16/13	1321	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
F4	07/16/13	1345	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
F4	07/16/13	1345	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
F4	07/16/13	1345	5.7'	Arsenic Native soil from the southern portion of the site		
F5	07/16/13	1406	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E



Sample	Date	Time	Sample	Analytical	Sample Description and/or Location	Table
ID	Sampled	Sampled	Depth	Parameters		Reference
				Subsurface Soil Samples (continued)		
F5	07/16/13	1406	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
F6	07/16/13	1442	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
F6	07/16/13	1442	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
F6	07/16/13	1442	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
F7	07/17/13	0810	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
F7	07/17/13	0810	5.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
G(-1)	08/06/13	1300	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
G0	08/06/13	1340	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
G0	08/06/13	1340	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
G1	08/07/13	1312	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
G1	08/07/13	1312	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
G2	08/07/13	1341	2.0'	Arsenic	Native soil from the southern portion of the site	
G2	08/07/13	1341	4.0'	Arsenic	Native soil from the southern portion of the site	
G2	08/07/13	1341	5.8'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
SB-1	07/16/13	1030	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
SB-1	07/16/13	1030	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
SB-1	07/16/13	1030	8.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
SB-2	07/17/13	1033	1.9'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
SB-2	07/17/13	1033	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
SB-3	07/17/13	0932	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
SB-3	07/17/13	0932	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
SB-4	07/17/13	0900	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
SB-4	07/17/13	0900	5.5'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
SB-5	07/17/13	0842	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
SB-5	07/17/13	0842	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
SB-5	07/17/13	0842	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
SB-6	07/17/13	1055	3.1'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
SB-6	07/17/13	1055	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E
SB-7	07/17/13	1130	2.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E



# Table 2.2A Summary of Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York

Sample ID	Date Sampled	Time Sampled	Sample Depth	Analytical Parameters	Sample Description and/or Location	Table Reference			
				Subsurface Soil Samples (continued)					
SB-7	07/17/13	1130	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E			
SB-7	07/17/13	1130	6.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E			
SB-7	07/17/13	1130	8.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E			
B-5R	08/06/13	0845	8.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E			
B-7R	08/05/13	1307	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E			
B-7R	08/05/13	1307	6.0'	Arsenic Native soil from the southern portion of the site		Table 2-7E			
B-7R	08/05/13	1307	8.0'	Arsenic Native soil from the southern portion of the site		Table 2-7E			
B-8R	08/07/13	1140	4.0'	Arsenic	Native soil from the southern portion of the site	Table 2-7E			
B-8R	08/07/13	1140	6.0'	Arsenic Native soil from the southern portion of the		Table 2-7E			
	Sediment Samples								
SED-1	06/21/00	NR	NR	Herbicides, Metals, Sulfur, Boron Boundary Ditch downstream of the former Low pH Trough		Table 2-9A			
SED-2	06/21/00	NR	NR	Herbicides, Metals, Sulfur, Boron Low pH Trough		Table 2-9A			
SED-5	12/14/00	1100	NR	VOCs, SVOCs, PCBs, Pesticides, Metals	Boundary Ditch at the 90 <sup>0</sup> bend	Table 2-9A			
SED-6	09/03/03	830	0.0' - 0.08'	SVOCs, Pesticides, Herbicides, Metals, Boron, Leachable pH	Boundary Ditch at West Somerset Road	Table 2-9A			
SED-7	09/03/03	905	0.0' - 0.17'	SVOCs, Pesticides, Herbicides, Metals, Boron, Leachable pH	Boundary Ditch at the 90 <sup>0</sup> bend	Table 2-9B			
SED-8	09/03/03	915	0.17' - 0.33'	SVOCs, Pesticides, Herbicides, Metals, Boron, Leachable pH	Historic Ditch east of the North Lagoon	Table 2-9B			
SED-11	09/03/03	935	0.0' - 0.17'	SVOCs, Pesticides, Herbicides, Metals, Sulfur, Boron, Leachable pH	North end of Ponded Water Area	Table 2-9B			
				Surface Water Samples					
SW-7	04/30/08	1425	N/A	VOCs, SVOCs, Pesticides, Metals, Sulfate, Sulfide	Center of the Ponded Water Area	Table 2-10			
SW-8	05/01/08	1155	N/A	VOCs, SVOCs, Pesticides, Metals, Sulfate, Sulfide	Southeast corner of the North Lagoon	Table 2-10			
SW-9	04/30/08	1345	N/A	VOCs, SVOCs, Pesticides, Metals, Sulfate, Sulfide	Former Low pH Trough south of Filled Lagoon	Table 2-10			
SW-1	06/13/12	1145	N/A	VOCs, SVOCs, Pesticides, Metals, Sulfate, Sulfide	Boundary Ditch at the 90 <sup>0</sup> bend	Table 2-10			
SW-2	06/13/12	1200	N/A	VOCs, SVOCs, Pesticides, Metals, Sulfate, Sulfide	Northeast corner of the North Lagoon	Table 2-10			



#### Table 2.2A Summary of Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York

Sample ID	Date Sampled	Time Sampled	Sample Depth	Analytical Parameters	Sample Description and/or Location	Table Reference
				Groundwater Samples		
MW-1	04/30/08 & 05/01/08	1000 & 1020	4.0' - 6.0'	VOCs, Pesticides, Metals, Sulfate, Sulfide	West side of site near the Western Storage Building and West Somerset Road	Table 2-12A
MW-2	04/30/08 & 05/01/08	1030 & 1030	4.0' - 6.0'	VOCs, Pesticides, Metals, Sulfate, Sulfide East side of site near West Somerset Road		Table 2-12A
MW-3	04/30/08 & 05/01/08	1040 & 1050	5.0' - 9.0'	VOCs, Pesticides, Metals, Sulfate, Sulfide West of the 90° bend in the Eastern Boundary Ditch		Table 2-12A
MW-4	04/30/08	1315	3.5' - 10.5'	VOCs, SVOCs, Pesticides, Metals, Sulfate, Sulfide	In the Filled Lagoon	Table 2-12A
MW-5	04/30/08 & 05/01/08	1100 & 1105	3.0' - 13.0'	VOCs, Pesticides, Metals, Sulfate, Sulfide	West of the North Lagoon	Table 2-12A
MW-6	04/30/08 & 05/01/08	1115 & 1110	4.0' - 7.5'	VOCs, Pesticides, Metals, Sulfate, Sulfide	Northwest of the North Lagoon	Table 2-12B
MW-12	04/30/08	1140	4.0' - 8.0'	VOCs, SVOCs, Pesticides, Metals, Sulfate, Sulfide	Northeast of the North Lagoon	Table 2-12B
MW-3	06/15/12	1140	5.0' - 9.0'	Pesticides	West of the 90° bend in the Eastern Boundary Ditch	Table 2-12A
MW-5	06/15/12	1115	3.0' - 13.0'	Pesticides, Metals, Sulfate, Sulfide	West of the North Lagoon	Table 2-12A
TPMW-3	06/15/12	1250	4.0' - 9.0'	VOCs, SVOCs, Pesticides, Metals, Sulfate, Sulfide	In the Storage Tank spill area	Table 2-12B

Notes:

**VOCs = Volatile Organic Compounds.** 

SVOCs = Semivolatile Organic Compounds.

**PCBs = Polychlorinated Biphenyls.** 

**TPHs = Total Petroleum Hydrocarbons.** 

N/A = Not Applicable.

NR = Not Reported.

• = The sample was described as a surface soil sample but the exact sample interval was not specified.

For groundwater samples, the sample interval is the screen interval.



Sample	Date Sampled	Time	Sample	Analytical	Sample Description and/or Location	Table Reference
ID	Sampleu	Sampleu	Deptii			Kelefence
	-			Confirmatory Samples	r	1
CONF-1	11/15/00	NR	1.5'	VOCS, SVOCS, PCBS, Pesticides, Metals	Native soil underlying the former Barren Strip	Table 2-8A
CONF-2	11/15/00	NR	1.5'	VOCS, SVOCS, PCBS, Pesticides, Metals	Native soil underlying the former Barren Strip	Table 2-8A
CONF-3	11/15/00	NR	1.5'	VOCS, SVOCS, PCBS, Pesticides, Metals	Native soil underlying the former Barren Strip	Table 2-8A
CONF-4	12/14/00	1045	NR	VOCs, SVOCs, PCBs, Pesticides, Metals	Native soil underlying the Ponded Water Area east of the South Lagoon	Table 2-8A
CONF-5	12/14/00	1015	NR	VOCs, SVOCs, PCBs, Pesticides, Metals	Native soil underlying the former Low pH Trough	Table 2-8A
CONF-6	12/14/00	1030	NR	VOCs, SVOCs, PCBs, Pesticides, Metals	Native soil underlying the former Low pH Trough	Table 2-8A
CONF-7	05/15/01	1230	NR	Metals	Metals Native soil underlying the Drainage Ditch south of the Filled Lagoon	
CONF-8	05/15/01	1130	2.0'	Metals Native soil underlying the former Production Building		Table 2-8B
CONF-9	05/15/01	1145	2.0'	Metals Native soil underlying the former Production Building		Table 2-8B
CONF-10	06/25/01	1530	NR	Pesticides, Herbicides, Metals Native soil underlying the North Lagoon		Table 2-8B
CONF-11	06/25/01	1530	NR	Pesticides, Herbicides, Metals Native soil underlying the North Lagoon		Table 2-8B
F-1	02/26/14	0950	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-2	02/26/14	0956	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-1	02/26/14	1000	≈ 1.5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-2	02/26/14	1005	≈ 1.5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-3	02/26/14	1011	≈ 1.5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-3	02/26/14	1212	$\approx 2'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-4	02/26/14	1232	≈ 1'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-5	02/28/14	0915	≈ 2'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-6	02/28/14	0922	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-5	02/28/14	0928	≈ 1.5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-7	02/28/14	1357	≈ 5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-8	02/28/14	1405	≈ 5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-6	03/03/14	0905	$\approx 1'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-7	03/03/14	0909	≈ 1'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-9	03/03/14	0918	$\approx 2'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-10	03/03/14	0923	$\approx 2'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C



Sample ID	Date Sampled	Time Sampled	Sample Depth	Analytical Parameters	Sample Description and/or Location	Table Reference
				Confirmatory Samples (continued)		
W-9	03/03/14	0932	$\approx 1'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-10	03/03/14	0937	≈ 1'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-11	03/03/14	0944	≈ 2'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-12	03/03/14	0951	≈ 2'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-11	03/03/14	1152	$\approx 1.5'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-12	03/03/14	1156	$\approx 1.5'$	Arsenic Native soil from the southern portion of the site		Table 2-8C
W-13	03/03/14	1159	$\approx 1.5'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-13	03/03/14	1205	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-14	03/03/14	1232	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-14	03/03/14	1234	$\approx 1.5'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-15	03/03/14	1240	≈ 1.5'	Arsenic Native soil from the southern portion of the site		Table 2-8C
F-15	03/03/14	1457	≈ 3'	Arsenic Native soil from the southern portion of the site		Table 2-8C
W-16	03/03/14	1450	≈ 1.5 <b>'</b>	Arsenic Native soil from the southern portion of the site		Table 2-8C
F-16	03/04/14	1405	≈ 5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-17	03/04/14	1410	≈ 5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-18	03/04/14	1415	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-19	03/04/14	1420	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-20	03/04/14	1425	≈ 2'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-21	03/04/14	1430	≈ 2'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-17	03/04/14	1440	≈ 1'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-4R	03/04/14	0805	$\approx 2.5'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-22	03/04/14	1450	≈ 5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-23	03/04/14	1455	≈ 5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-24	03/05/14	1220	≈ 2'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-25	03/05/14	1225	≈ 2'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-26	03/05/14	1230	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-27	03/05/14	1235	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-18	03/05/14	1240	$\approx 1'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-19	03/05/14	1245	$\approx 1'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C



Sample ID	Date Sampled	Time Sampled	Sample Depth	Analytical Parameters	Sample Description and/or Location	Table Reference
				Confirmatory Samples (continued)		
W-20	03/05/14	1250	≈ 1'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-21	03/05/14	1255	≈ 1'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-22	03/05/14	1300	≈ 1.5 <b>'</b>	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-23	03/05/14	1305	$\approx 1.5'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-24	03/05/14	1310	$\approx 1.5'$	Arsenic Native soil from the southern portion of the site		Table 2-8C
F-28	03/05/14	1535	≈ 3'	Arsenic	Arsenic Native soil from the southern portion of the site	
W-25	03/05/14	1540	≈ 2.5 <b>'</b>	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-29	03/07/14	1100	≈ 5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-26	03/07/14	1107	≈ 2.5 <b>'</b>	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-27	03/07/14	1111	≈ 2.5 <b>'</b>	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-28	03/07/14	1119	$\approx 1'$	Arsenic	Arsenic Native soil from the southern portion of the site	
F-30	03/07/14	1127	$\approx 2'$	Arsenic Native soil from the southern portion of the site		Table 2-8C
F-31	03/07/14	1134	≈ 2 <b>'</b>	Arsenic Native soil from the southern portion of the site		Table 2-8C
W-29	03/07/14	1144	$\approx 1'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-32	03/10/14	0845	≈ 5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-33	03/10/14	0851	≈ 5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-30	03/10/14	0900	≈ 2.5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-31	03/10/14	0911	$\approx 2.5'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-32	03/10/14	0917	≈ 2.5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-33	03/10/14	0933	$\approx 2.5'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-34	03/10/14	1117	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-35	03/10/14	1123	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-34	03/10/14	1129	≈ 1.5 <b>'</b>	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-36	03/10/14	1400	≈ 5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-37	03/10/14	1408	≈ 5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-36	03/10/14	1416	$\approx 2.5'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-37	03/10/14	1420	$\approx 2.5'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-38	03/11/14	0855	$\approx 3'$	Arsenic Native soil from the southern portion of the site		Table 2-8C
F-39	03/11/14	0902	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C



Sample ID	Date Sampled	Time Sampled	Sample Depth	Analytical Parameters	Sample Description and/or Location	Table Reference
				Confirmatory Samples (continued)		
W-38	03/11/14	0907	≈ 1.5 <b>'</b>	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-39	03/11/14	0912	≈ 1.5 <b>'</b>	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-40	03/11/14	0917	≈ 1.5 <b>'</b>	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-40	03/11/14	0930	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-41	03/11/14	0937	$\approx 1.5'$	Arsenic	Arsenic Native soil from the southern portion of the site	
W-42	03/11/14	0941	$\approx 1.5'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-43	03/11/14	0946	≈ 1.5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-44	03/11/14	0950	≈ 1.5 <b>'</b>	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-41	03/11/14	1140	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-42	03/11/14	1146	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-45	03/11/14	1150	≈ 1.5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-46	03/11/14	1154	≈ 1.5'	Arsenic Native soil from the southern portion of the site		Table 2-8C
W-47	03/11/14	1158	≈ 1.5'	Arsenic Native soil from the southern portion of the site		Table 2-8C
F-43	03/14/14	0834	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-44	03/14/14	0842	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-48	03/14/14	0847	≈ 1.5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-49	03/14/14	0851	≈ 1.5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-50	03/14/14	0856	≈ 1.5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-45	03/14/14	0950	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-46	03/14/14	0956	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-47	03/14/14	1325	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-48	03/14/14	1332	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-49	03/17/14	0910	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-50	03/17/14	0916	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-51	03/17/14	0936	$\approx 1.5'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-51	03/17/14	1144	≈ 5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-52	03/17/14	1151	≈ 5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-52	03/17/14	1156	≈ 2.5'	Arsenic Native soil from the southern portion of the site		Table 2-8C
W-53	03/17/14	1200	$\approx 2.5'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C



#### Table 2.2B Summary of Confirmatory Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York

Sample ID	Date Sampled	Time Sampled	Sample Depth	Analytical Parameters	Sample Description and/or Location	Table Reference
				Confirmatory Samples (continued)		
W-54	03/17/14	0923	$\approx 1.5'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-53	03/18/14	0900	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-54	03/18/14	0912	≈ 3'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-55	03/18/14	0920	≈ 1.5'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-56	03/18/14	0927	$\approx 1.5'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-55	03/18/14	1336	≈ 5'	Arsenic Native soil from the southern portion of the site		Table 2-8C
F-56	03/18/14	1345	≈ 5'	Arsenic Native soil from the southern portion of the site		Table 2-8C
W-57	03/18/14	1350	$\approx 2.5'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-58	03/18/14	1357	$\approx 2.5'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-57	03/18/14	1112	≈ 2'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
F-58	03/18/14	1118	≈ 2'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-59	03/18/14	1130	$\approx 1'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-60	03/18/14	1138	≈ 1'	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-61	03/18/14	1142	$\approx 1'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-62	03/18/14	1151	$\approx 1'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C
W-63	03/18/14	1210	$\approx 1'$	Arsenic	Native soil from the southern portion of the site	Table 2-8C

Notes:

**VOCs = Volatile Organic Compounds.** 

SVOCs = Semivolatile Organic Compounds.

**PCBs = Polychlorinated Biphenyls.** 

N/A = Not Applicable.

NR = Not Reported.

Sample depths for the 2014 arsenic removal action were not recorded. Excavations, however, were completed to either 2', 3' or 5' depth. As an estimate, the sample intervals for the floor samples (designated F-) were assigned the excavation depth in that cell. Wall samples were assigned the midpoint depth between ground surface and the excevation depth.

#### Table 2-3 Analytical Results for Lime Waste Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Sample Number Date Sampled	NYSDEC Part 375	NYSDEC Part 375	W-2 12/17/99	WP-13 06/21/00	SB-4 05/21/03	SB-8 05/21/03	SB-9 05/21/03	SB-10 05/21/03	SB-13 05/21/03		
Sample Depth Sample Location	Unrestricted SCO *	Commercial SCO *	2.0' Filled Lagoon	0.0' - 2.4' Filled Lagoon	0.0' - 4.0' Filled Lagoon	3.5' - 5.0' Filled Lagoon					
	500	500	Semivolatile O	rganic Compound	s (µg/kg or ppb)	T meu Lagoon	Tineu Lugoon	T med Eugoon	T meu Lugoon		
Butylbenzylphthalate	NC	100,000 **	NA	NA	14 J	NA	NA	17 J	NA		
4',5-Dihydroxy-7-methoxyflavone	NC	NC	"	"	120 J	"	"	220 J	"		
Di-n-butylphthalate	NC	100,000 **	"	"	19 J	"	"	20 J	"		
Fluoranthene (PAH)	100,000	500,000	"	"	NA	"	"	21 J	"		
Phenanthrene (PAH)	100,000	500,000	"	"	"	"	"	37 J	"		
Pyrene (PAH)	100,000	500,000	"	"	"	"	"	21 J	"		
	Pesticides (µg/kg or ppb)										
Aldrin	5.0	680.0	NA	NA	ND (25)	ND (12)	NA	ND (28)	ND (1,100)		
alpha-BHC	20.0	3,400	"	"	ND (25)	3.0 J	"	ND (28)	280 J		
delta-BHC	40.0	500,000	"	"	ND (25)	2.4 J	"	ND (28)	250 J		
gamma-BHC (Lindane)	100.0	9,200	"	"	ND (25)	3.9 J	"	ND (28)	ND (1,100)		
Chlordane	94.0	24,000	"	"	ND (120)	ND (61)	"	ND (140)	ND (5,400)		
4,4'-DDD	3.3	92,000	"	"	ND (50)	ND (24)	"	5.6 J	5,400 J		
4,4'-DDE	3.3	62,000	"	"	ND (50)	ND (24)	"	17 J	670 J		
4,4'-DDT	3.3	47,000	"	"	ND (50)	ND (24)	"	5.8 J	21,000		
Dieldrin	5.0	1,400	"	"	ND (50)	ND (24)	"	ND (56)	ND (2,100)		
Endosulfan (I)	2,400	200,000	"	"	ND (50)	ND (24)	"	ND (56)	ND (2,100)		
Endosulfan (II)	2,400	200,000	"	"	ND (50)	ND (24)	"	ND (56)	ND (2,100)		
Endrin	14.0	89,000	"	"	ND (50)	ND (24)	"	ND (56)	ND (2,100)		
Endrin Ketone	NC	NC	"	"	ND (50)	3.0 J	"	ND (56)	180 J		
Heptachlor	42.0	15,000	"	"	ND (25)	ND (12)	"	ND (28)	ND (1,100)		
Methoxychlor	NS	100,000 **	"	"	ND (250)	3.3 J	"	ND (280)	250 J		
			He	rbicides (µg/kg or	ppb)						
2,4-D	NC	100,000 **	NA	3.4 JBP	ND (1,200)	ND (1,200)	NA	ND (1,400)	ND (1,100)		
2,4,5-TP (Silvex)	3,800	500,000	"	1.8 JBP	ND (500)	ND (490)	"	ND (560)	ND (430)		
2,4,5-T	NC	100,000 **	"	2.0 JBP	ND (500)	ND (490)	"	ND (560)	ND (430)		

#### Table 2-3 Analytical Results for Lime Waste Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Sample Number NYSDEC NYSDEC **W-2 WP-13 SB-4 SB-8** SB-9 **SB-10 SB-13 Date Sampled** Part 375 Part 375 12/17/99 06/21/00 05/21/03 05/21/03 05/21/03 05/21/03 05/21/03 3.5' - 5.0' Sample Depth Unrestricted Commercial 2.0' 0.0' - 2.4' 0.0' - 4.0' 0.0' - 4.0' 0.0' - 4.0' 0.0' - 4.0' **Sample Location** SCO\* SCO \* Filled Lagoon Filled Lagoon **Filled Lagoon Filled Lagoon** Filled Lagoon Filled Lagoon **Filled Lagoon** Metals (mg/kg or ppm) Aluminum NC 10,000 • 2,950 E 4,350 NA NA NA NA NA 13.0 16.0 16.1 N 3.7 N 3.9 11.6 3.6 4.7 12.5 Arsenic 7.2 ND (0.30) 0.15 B 0.22 B 0.03 B 0.18 B 0.19 B 0.10 B 590.0 Beryllium Cadmium 2.5 9.3 ND (0.21) ND (0.042) ND (0.05) ND (0.05) ND (0.05) ND (0.05) 0.09 B Chromium 30.0 1,500 4.0 5.8 4.5 E 2.2 E 3.6 E 3.2 E 3.6 E NC 30 \*\* 0.76 B 0.3 B 0.77 B 0.4 B 0.76 B 0.39 B Cobalt 0.69 B Copper 50.0 270.0 52.3 E 3.4 N 6.0 E 143.0 E 6.2 E 7.4 E 6.8 E 27.0 Cyanide 27.0ND (1.6) NA NA NA NA NA NA Iron NC 2.000 \*\* 3,270 E 3,450 NA NA NA NA NA 63.0 1,000 5.7 N 2.6 6.3 7.0 61.8 Lead 33.1 15.0 1,600 10,000 88.3 N 56.6 N NA NA NA NA NA Manganese 0.18 2.8 ND (0.15) 0.032 BN ND (0.007) ND (0.007) ND (0.008) ND (0.009) ND (0.007) Mercury Nickel 30.0 310.0 2.5 B 2.2 3.0 BE 1.8 BE 2.6 BE 2.5 BE 1.6 BE NC 100 \*\* 5.8 Vanadium 3.6 B 4.7 BE 1.3 BE 3.3 BE 4.3 BE 1.8 BE 7.4 7.4 E Zinc 109.0 10,000 15.1 E 4.1 E 18.5 E 37.3 E 18.9 E Miscellaneous Compounds (mg/kg or ppm) Sulfur NC NC NA 352.000 18.000 22.000 22.000 10.000 24.000 .. NC Boron NC 10.4 1.4 B 0.44 B 1.6 B 3.2 1.3 B Leachable pH (pH units) ≤2;≥12.5 NC 6.70 NA 7.06 3.34 7.01 7.54 NA

Notes:

\* = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted and Commercial Soil Cleanup Objectives, NYSDEC, 2006.

\*\* = Residential soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

• = Protection of ecological resources soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

**=** Environmental Protection Agency priority pollutant metal.

B = Analyte detected in the associated blank, as well as in the sample (organics); value is greater than or equal to the instrument detection limit, but less than the contract required detection limit (inorganics).

### Table 2-3 Analytical Results for Lime Waste Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Notes (Continued):

- **E** = Estimated concentration due to the presence of interference (inorganics).
- J = Compound is positively identified and reported at an estimated concentration below the reporting limit.
- N = Spike sample recovery is not within the quality control limits.

NA = Not analyzed.

NC = No criteria.

ND = Indicates that the compound was not detected at the method detection limit specified in parentheses.

P = >25% difference between the analytical results on two GC columns. The lower value is reported.

**PAH = Polycyclic aromatic hydrocarbon.** 

SCO = Soil cleanup objective.

Yellow shaded values exceed the 6 NYCRR Part 375 Unrestricted Soil Cleanup Objectives for arsenic.

Grey shaded values exceed the Commissioner's Policy CP-51 Residential Use Soil Cleanup Objectives.

#### Table 2-4A Analytical Results for Sludge Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Sample Number	NYSDEC	NYSDEC	WP-13	SLDG-5	SB-4	SB-9	SB-13	SB-14
Date Sampled	Part 375	Part 375	06/21/00	01/24/01	05/21/03	05/21/03	05/21/03	05/21/03
Sample Depth	Unrestricted	Commercial	2.4' - 3.2'	NR	0.0' - 4.0'	4.0' - 8.0'	5.0' - 6.0'	4.0' - 7.0'
Sample Location	SCO *	<u>sco</u> *	Filled Lagoon	South Lagoon	Filled Lagoon	Filled Lagoon	Filled Lagoon	Filled Lagoon
		Semi	volatile Organic Co	ompounds (µg/kg c	or ppb)			
Naphthalene (PAH)	12,000	500,000	NA	NA	10 J	NA	NA	NA
			Pesticides (µ	ıg/kg or ppb)				
Aldrin	5.0	680.0	NA	NA	ND (19)	NA	NA	ND (14)
alpha-BHC	20.0	3,400	"	"	ND (19)	"	"	ND (14)
delta-BHC	40.0	500,000	"	"	ND (19)	"	"	ND (14)
gamma-BHC (Lindane)	100.0	9,200	"	"	ND (19)	"	"	ND (14)
Chlordane	94.0	24,000	"	"	ND (94)	"	"	ND (68)
4,4'-DDD	3.3	92,000	"	"	ND (38)	"	"	3.8 J
4,4'-DDE	3.3	62,000	"	"	ND (38)	"	"	35.0
4,4'-DDT	3.3	47,000	"	"	ND (38)	"	"	ND (27)
Dieldrin	5.0	1,400	"	"	ND (38)	"	"	ND (27)
Endosulfan (I)	2,400	200,000	"	"	ND (38)	"	"	ND (27)
Endosulfan (II)	2,400	200,000	"	"	ND (38)	"	"	ND (27)
Endrin	14.0	89,000	"	"	ND (38)	"	"	ND (27)
Endrin Ketone	NC	NC	"	"	ND (38)	"	"	ND (27)
Heptachlor	42.0	15,000	"	"	ND (19)	"	"	ND (14)
Methoxychlor	NS	100,000 **	"	"	ND (190)	"	"	ND (140)
	·		Herbicides (	ug/kg or ppb)				
2,4-D	NC	100,000 **	9.0 JB	NA	ND (920)	NA	ND (1,200)	ND (1,400)
2,4,5-TP (Silvex)	3,800	500,000	1.1 JBP	"	ND (370)	"	ND (480)	ND (550)
2,4,5-T	NC	100,000 **	3.1 JBP	"	ND (370)	"	ND (480)	ND (550)
			Metals (mg	/kg or ppm)				
Aluminum	NC	10,000 •	1,960	7,300	NA	NA	NA	NA
Arsenic	13.0	16.0	3.3 N	ND (3)	3.7	2.3	4.5	3.5
Beryllium ∎	7.2	590.0	0.089 B	0.51	0.34 B	0.29 B	0.24 B	0.57 B
Cadmium	2.5	9.3	ND (0.045)	0.81	ND (0.04)	ND (0.04)	ND (0.05)	ND (0.05)

#### Table 2-4A Analytical Results for Sludge Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Sample Number	NYSDEC	NYSDEC	WP-13	SLDG-5	SB-4	SB-9	SB-13	SB-14			
Date Sampled	Part 375	Part 375	06/21/00	01/24/01	05/21/03	05/21/03	05/21/03	05/21/03			
Sample Depth	Unrestricted	Commercial	2.4' - 3.2'	NR	0.0' - 4.0'	4.0' - 8.0'	5.0' - 6.0'	4.0' - 7.0'			
Sample Location	SCO *	SCO *	Filled Lagoon	South Lagoon	Filled Lagoon	Filled Lagoon	Filled Lagoon	Filled Lagoon			
Metals (continued)											
Chromium	30.0	1,500	2.4	19.0	11.0 E	9.3 E	7.4 E	21.0			
Cobalt	NC	30 **	ND (0.1)	ND (2)	5.9 B	4.9 B	3.7 B	4.2 B			
Copper	50.0	270.0	2.8 N	34.0	15.5 E	13.0 E	11.6 E	17.3			
Iron	NC	2,000 **	1,770	12,000	NA	NA	NA	NA			
Lead	63.0	1,000	3.7 N	ND (10)	3.6	3.0	6.6	6.4			
Manganese	1,600	10,000	146 N	450.0	NA	NA	NA	NA			
Mercury	0.18	2.8	0.031 BN	ND (0.202)	ND (0.006)	0.024	0.124	ND (0.008)			
Nickel	30.0	310.0	1.9	8.9	10.6 E	9.5 E	8.0 E	11.7			
Vanadium	NC	100 **	3.3	20.0	18.4 E	16.8 E	12.6 E	18.8			
Zinc	109.0	10,000	7.0	74.0	25.2 E	23.5 E	24.8 E	39.6			
		Mi	iscellaneous Comp	ounds (mg/kg or p	pm)						
Sulfur	NC	NC	551,000	NA	8,200	7,700	23,000	22,000			
Boron	NC	NC	14.6	"	2.5	4.5	3.0	13.5			
Leachable pH (pH units)	≤2;≥12.5	NC	NA	"	9.65	NA	NA	NA			

Notes:

\* = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted and Commercial Soil Cleanup Objectives, NYSDEC, 2006.

\*\* = Residential soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

• = Protection of ecological resources soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

■ = Environmental Protection Agency priority pollutant metal.

B = Analyte detected in the associated blank, as well as in the sample (organics); value is greater than or equal to the instrument detection limit, but less than the contract required detection limit (inorganics).

**E** = Estimated concentration due to the presence of interference (inorganics).

J = Compound is positively identified and reported at an estimated concentration below the reporting limit.

N = Spike sample recovery is not within the quality control limits.

NA = Not analyzed.

NC = No criteria.

#### Table 2-4A Analytical Results for Sludge Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

#### Notes (Continued):

ND = Indicates that the compound was not detected at the method detection limit specified in parentheses.

P = >25% difference between the analytical results on two GC columns. The lower value is reported.

**PAH = Polycyclic aromatic hydrocarbon.** 

SCO = Soil cleanup objective.

Yellow shaded values exceed the 6 NYCRR Part 375 Unrestricted Soil Cleanup Objectives for arsenic.

Grey shaded values exceed the Commissioner's Policy CP-51 Residential Use Soil Cleanup Objectives.

### Table 2-4B Analytical Results for Sludge Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Sample Number Date Sampled Sample Depth Sample Location	NYSDEC Part 375 Unrestricted SCO *	NYSDEC Part 375 Commercial SCO *	A(-2) 08/07/13 4.0' South Area	A1 08/05/13 4.0' South Area	B(-2) 08/07/13 4.0' South Area	B(-1) 08/06/13 4.0' South Area	C(-1) 08/06/13 3.0' South Area			
Metals (mg/kg or ppm)										
Arsenic	13.0	16.0	4.3	4.7	4.4	3.9	12.8			
Barium	350.0	400.0	190.0	NA	93.1	90.7	201.0			
Cadmium ■	2.5	9.3	0.11 J		0.27	0.18 J	0.94			
Chromium	30.0	1,500	13.0	"	7.3	32.8	8.3			
Lead	63.0	1,000	5.4		3.8	2.5	90.0			
Mercury ■	0.18	2.8	0.030		0.019 J	ND (0.024)	0.12			
Selenium	3.9	1,500	ND (5.5)	"	ND (4.4)	ND (4.4)	0.69 J			
Silver	2.0	1,500	ND (0.68)	"	ND (0.55)	ND (0.56)	1.8			

Notes:

\* = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted and Commercial Soil Cleanup Objectives, NYSDEC, 2006.

**■** = Environmental Protection Agency priority pollutant metal.

J = Compound is positively identified and reported at an estimated concentration below the reporting limit.

NA = Not analyzed.

ND = Indicates that the compound was not detected at the method detection limit specified in parentheses.

SCO = Soil cleanup objective.

Yellow shaded values exceed the 6 NYCRR Part 375 Unrestricted Soil Cleanup Objectives for arsenic.

#### Table 2-5A Analytical Results for Miscellaneous Fill Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Sample Number	NYSDEC	NYSDEC	A(-2)	A0	A2	B(-2)	B(-1)	C(-2)	D7
Date Sampled	Part 375	Part 375	08/07/13	08/05/13	08/05/13	08/07/13	08/06/13	08/07/13	07/15/13
Sample Depth	Unrestricted	Commercial	2.0'	2.3'	1.2'	2.0'	2.0'	2.0'	2.0'
Sample Location	SCO *	SCO *	Arsenic Area	Arsenic Area	South Area				
Arsenic	13.0	16.0	4.9	4.5	6.5	5.9	4.7	4.2	ND (2.2)

Notes:

\* = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted and Commercial Soil Cleanup Objectives, NYSDEC, 2006.

**=** Environmental Protection Agency priority pollutant metal.

ND = Indicates that the compound was not detected at the method detection limit specified in parentheses.

SCO = Soil cleanup objective.

Yellow shaded values exceed the 6 NYCRR Part 375 Unrestricted Soil Cleanup Objectives for arsenic.

### Table 2-5B Analytical Results for Miscellaneous Fill Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Sample Number Date Sampled Sample Depth Sample Location	NYSDEC Part 375 Unrestricted SCO *	NYSDEC Part 375 Commercial SCO *	B(-2) 08/07/13 5.5' Arsenic Area	G(-1) 08/06/13 2.2' Arsenic Area	G1 08/07/13 1.6' Arsenic Area	B-5R 08/06/13 6.0' Arsenic Area
		Interais (Ing/K	g or ppm)			-
Arsenic	13.0	16.0	3.5	6.4	12.2	9.8
Barium	350.0	400.0	68.2	74.6	122.0	100.0
Cadmium	2.5	9.3	0.056 J	0.043 J	0.33	0.59
Chromium	30.0	1,500	12.0	5.4	7.8	18.4
Lead	63.0	1,000	3.1	32.8	34.4	8.4
Mercury ■	0.18	2.8	ND (0.023)	0.045	0.039	ND (0.022)
Selenium	3.9	1,500	ND (4.3)	ND (5.0)	1.2 J	ND (4.1)
Silver	2.0	1,500	ND (0.53)	ND (0.63)	ND (0.66)	ND (0.52)

Notes:

\* = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted and Commercial Soil Cleanup Objectives, NYSDEC, 2006.

■ = Environmental Protection Agency priority pollutant metal.

J = Compound is positively identified and reported at an estimated concentration below the reporting limit.

ND = Indicates that the compound was not detected at the method detection limit specified in parentheses.

SCO = Soil cleanup objective.

Yellow shaded values exceed the 6 NYCRR Part 375 Unrestricted Soil Cleanup Objectives for arsenic.

# Table 2-6A Analytical Results for Surface Soil Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Sample Number	NYSDEC	NYSDEC	S-16	S-17	S-22	S-25	S-26	S-27
Date Sampled	Part 375	Part 375	08/23/01	08/23/01	08/22/01	08/22/01	08/22/01	08/23/01
Sample Depth	Unrestricted	Commercial	Surface **	Surface **	Surface **	Surface **	Surface **	Surface **
Sample Location	SCO *	SCO *	Chip Area	Chip Area	Chip Area	Chip Area	Chip Area	Chip Area
			Metals (mg/k	g or ppm)				
Arsenic	13.0	16.0	16.0	7.4	17.0	4.9	9.9	6.8

Sample Number	NYSDEC	NYSDEC	S-28	S-29	S-30	S-31	S-32	S-33
Date Sampled	Part 375	Part 375	08/22/01	08/23/01	08/23/01	08/23/01	08/23/01	08/23/01
Sample Depth	Unrestricted	Commercial	Surface **	Surface **	Surface **	Surface **	Surface **	Surface **
Sample Location	SCO *	SCO *	Chip Area	Chip Area	Chip Area	Chip Area	Chip Area	Chip Area
			Metals (mg/k	kg or ppm)				
Arsenic	13.0	16.0	4.6	2.7	7.4	3.0	3.8	7.1

Sample Number	NYSDEC	NYSDEC	S-34	A2	A7	B5	B7	D4
Date Sampled	Part 375	Part 375	08/23/01	05/07/13	05/07/13	05/07/13	05/07/13	05/07/13
Sample Depth	Unrestricted	Commercial	Surface **	0.0' - 0.17'	0.0' - 0.17'	0.0' - 0.17'	0.0' - 0.17'	0.0' - 0.17'
Sample Location	SCO *	SCO *	Chip Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area
			Metals (mg/k	kg or ppm)				
Arsenic	13.0	16.0	5.4	6.7	14.8	7.9	15.2	11.9

Sample Number	NYSDEC	NYSDEC	D5	D6	D7	E3	E5	E6
Date Sampled	Part 375	Part 375	05/07/13	05/07/13	05/07/13	05/14/13	05/14/13	05/14/13
Sample Depth	Unrestricted	Commercial	0.0' - 0.17'	0.0' - 0.17'	0.0' - 0.17'	0.0' - 0.17'	0.0' - 0.17'	0.0' - 0.17'
Sample Location	SCO *	SCO *	Arsenic Area					
			Metals (mg/k	g or ppm)				
Arsenic	13.0	16.0	5.9	5.2	5.4	12.5	3.8	4.0

#### Table 2-6A Analytical Results for Surface Soil Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119



Department of Environmental Conservation

Somerset, New York

Sample Number	NYSDEC	NYSDEC	E7	F2	F3	F4	F5	F6
Date Sampled	Part 375	Part 375	05/14/13	05/14/13	05/14/13	05/14/13	05/14/13	05/14/13
Sample Depth	Unrestricted	Commercial	0.0' - 0.17'	0.0' - 0.17'	0.0' - 0.17'	0.0' - 0.17'	0.0' - 0.17'	0.0' - 0.17'
Sample Location	SCO *	SCO *	Arsenic Area					
			Metals (mg/k	kg or ppm)				
Arsenic	13.0	16.0	4.5	15.0	5.3	4.9	7.6	3.4

Sample Number	NYSDEC	NYSDEC	SB-2	SB-3	SB-5	SB-6	
Date Sampled	Part 375	Part 375	07/17/13	07/17/13	07/17/13	07/17/13	
Sample Depth	Unrestricted	Commercial	0.0' - 0.17'	0.0' - 0.17'	0.0' - 0.17'	0.0' - 0.17'	
Sample Location	SCO *	SCO *	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	
			Metals (mg/k	g or ppm)			
Arsenic	13.0	16.0	3.6	4.5	7.4	4.4	

Notes:

\* = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted and Commercial Soil Cleanup Objectives, NYSDEC, 2006.

\*\* = The sample was described as a surface soil sample but the exact sample interval was not specified.

**=** Environmental Protection Agency priority pollutant metal.

SCO = Soil cleanup objective.

Yellow shaded values exceed the 6 NYCRR Part 375 Unrestricted Soil Cleanup Objectives for arsenic.

# Table 2-6B Analytical Results for Surface Soil Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Sample Number	NYSDEC	NYSDEC	SS-3	SS-6	SS-13	SS-29	SS-40	SS-45
Date Sampled	Part 375	Part 375	06/13/12	06/13/12	06/13/12	06/13/12	06/13/12	06/13/12
Sample Depth	Unrestricted	Commercial	Surface	Surface	Surface	Surface	Surface	Surface
Sample Location	SCO *	SCO *	Near Road	Office Bldg.	Western Bldg.	Near Chip Area	NE Woods	NW Corner
		Sem	ivolatile Organic C	Compounds (µg/kg	or ppb)			
Acenaphthylene (PAH)	100,000	500,000	ND (350)	ND (350)	ND (360)	ND (390)	ND (440)	ND (430)
Anthracene (PAH)	100,000	500,000	ND (350)	ND (350)	ND (360)	ND (390)	ND (440)	ND (430)
Benzo[a]anthracene (PAH)	1,000	5,600	ND (350)	ND (350)	86 J	ND (390)	ND (440)	ND (430)
Benzo[a]pyrene (PAH)	1,000	1,000	ND (350)	ND (350)	ND (360)	ND (390)	ND (440)	ND (430)
Benzo[b]fluoranthene (PAH)	1,000	5,600	ND (350)	ND (350)	97 J	ND (390)	ND (440)	130 J
Benzo[g,h,i]perylene (PAH)	100,000	500,000	ND (350)	ND (350)	ND (360)	ND (390)	ND (440)	ND (430)
Benzo[k]fluoranthene (PAH)	800.0	56,000	ND (350)	ND (350)	ND (360)	ND (390)	ND (440)	ND (430)
Chrysene (PAH)	1,000	56,000	ND (350)	ND (350)	110 J	ND (390)	ND (440)	87 J
Dibenzo[a,h]anthracene (PAH)	330.0	560.0	ND (350)	ND (350)	ND (360)	ND (390)	ND (440)	ND (430)
Di-n-butylphthalate	NC	100,000 **	ND (350)	ND (350)	88 J	ND (390)	ND (440)	ND (430)
Fluoranthene (PAH)	100,000	500,000	ND (350)	ND (350)	ND (360)	ND (390)	ND (440)	ND (430)
Hexachlorobenzene	330.0	6,000	ND (350)	ND (350)	ND (360)	ND (390)	ND (440)	ND (430)
Indeno[1,2,3-cd]pyrene (PAH)	500.0	5,600	ND (350)	ND (350)	ND (360)	ND (390)	ND (440)	ND (430)
Pentachlorophenol	800.0	6,700	ND (710)	ND (720)	ND (720)	ND (790)	ND (900)	ND (860)
Phenanthrene (PAH)	100,000	500,000	ND (350)	ND (350)	ND (360)	ND (390)	ND (440)	ND (430)
Pyrene (PAH)	100,000	500,000	ND (350)	ND (350)	150 J	ND (390)	ND (440)	140 J
			Pesticides (	µg/kg or ppb)				
Aldrin	5.0	680.0	ND (1.8)	ND (1.9)	ND (38)	ND (2.0)	ND (2.3)	ND (2.2)
alpha-BHC	20.0	3,400	ND (1.8)	ND (1.9)	ND (38)	ND (2.0)	ND (2.3)	ND (2.2)
beta-BHC	36.0	3,000	ND (1.8)	ND (1.9)	ND (38)	ND (2.0)	ND (2.3)	ND (2.2)
delta-BHC	40.0	500,000	ND (1.8)	ND (1.9)	ND (38)	ND (2.0)	ND (2.3)	ND (2.2)
gamma-BHC (Lindane)	100.0	9,200	ND (1.8)	ND (1.9)	ND (38)	ND (2.0)	ND (2.3)	ND (2.2)
Chlordane	94.0	24,000	ND (1.8)	ND (1.9)	ND (38)	ND (2.0)	ND (2.3)	ND (2.2)
4,4'-DDD	3.3	92,000	ND (3.6)	ND (3.6)	280.0	ND (3.9)	ND (4.4)	ND (4.2)
4,4'-DDE	3.3	62,000	ND (3.6)	ND (3.6)	120.0	ND (3.9)	ND (4.4)	4 J
4,4'-DDT	3.3	47,000	ND (3.6)	ND (3.6)	100.0	ND (3.9)	ND (4.4)	3 PJ

# Table 2-6B Analytical Results for Surface Soil Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Sample Number Date Sampled	NYSDEC Part 375	NYSDEC Part 375	SS-3 06/13/12	SS-6 06/13/12	SS-13 06/13/12	SS-29 06/13/12	SS-40 06/13/12	SS-45 06/13/12
Sample Depth	Unrestricted	Commercial	Surface	Surface	Surface	Surface	Surface	Surface
Sample Location	SCO *	SCO *	Near Road	Office Bldg.	Western Bldg.	Near Chip Area	NE Woods	NW Corner
			Pesticides	(continued)				
Dieldrin	5.0	1,400	ND (3.6)	ND (3.6)	ND (74)	ND (3.9)	ND (4.4)	ND (4.2)
Endosulfan (I)	2,400	200,000	ND (1.8)	ND (1.9)	ND (38)	ND (2.0)	ND (2.3)	ND (2.2)
Endosulfan (II)	2,400	200,000	ND (3.6)	ND (3.6)	ND (74)	ND (3.9)	ND (4.4)	ND (4.2)
Endrin	14.0	89,000	ND (3.6)	ND (3.6)	ND (74)	ND (3.9)	ND (4.4)	ND (4.2)
Endrin Ketone	NC	NC	ND (3.6)	ND (3.6)	ND (74)	ND (3.9)	ND (4.4)	ND (4.2)
Heptachlor	42.0	15,000	ND (1.8)	ND (1.9)	ND (38)	ND (2.0)	ND (2.3)	ND (2.2)
Methoxychlor	NS	100,000 **	ND (18)	ND (19)	ND (380)	ND (20)	ND (23)	ND (22)
			Metals (m	g/kg or ppm)				
Aluminum	NC	10,000 •	1,530	1,630	2,330	11,000	10,600	10,300
Antimony	NC	12 •	ND (0.35)	ND (0.25)	ND (0.34)	ND (0.44)	2.9	ND (0.41)
Arsenic	13.0	16.0	4.6	5.6	15.9	6.2	4.9	5.9
Barium	350.0	400.0	8.5 B	9.5	17.4	71.9	96.1	103.0
Beryllium ■	7.2	590.0	0.14 B	0.14 B	0.16 B	0.33	0.25 B	0.35
Cadmium	2.5	9.3	ND (0.014)	ND (0.0099)	ND (0.013)	0.29 B	0.15 B	0.20 B
Chromium	30.0	1,500	2.6	2.8	4.1	12.1	13.4	12.3
Cobalt	NC	30 **	1.6 B	1.7	1.4 B	6.3	4.4	5.0
Copper	50.0	270.0	5.5	5.4	27.2	31.1	16.8	21.2
Iron	NC	2,000 **	6,080	6,530	5,470	143,000	13,200	14,800
Lead	63.0	1,000	16.0	14.9	25.5	39.4	572.0	29.7
Manganese	1,600	10,000	498.0	486.0	385.0	828.0	281.0	568.0
Mercury	0.18	2.8	0.022 B	0.010 B	0.10	0.042 B	0.11	0.09
Nickel	30.0	310.0	2.8	2.9	3.0	11.7	10.8	12.8
Selenium	3.9	1,500	1.1 B	1.7	2.7	ND (0.73)	ND (0.67)	ND (0.69)
Thallium	NC	5•	2.6	2.7	1.7	0.92 B	ND (0.23)	0.57 B
Vanadium	NC	100 **	4.0	4.5	4.9	19.3	19.6	21.6
Zinc	109.0	10,000	29.2	25.6	56.6	102.0	95.6	73.6

### Table 2-6B Analytical Results for Surface Soil Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Sample Number	NYSDEC	NYSDEC	SS-3	SS-6	SS-13	SS-29	SS-40	SS-45			
Date Sampled	Part 375	Part 375	06/13/12	06/13/12	06/13/12	06/13/12	06/13/12	06/13/12			
Sample Depth	Unrestricted	Commercial	Surface	Surface	Surface	Surface	Surface	Surface			
Sample Location	SCO *	SCO *	Near Road	Office Bldg.	Western Bldg.	Near Chip Area	NE Woods	NW Corner			
	Miscellaneous Compounds (mg/kg or ppm)										
Sulfur	NC	NC	3,200	2,650	1,770	158.0	218.0	188.0			
Leachable pH (pH units)	≤2;≥12.5	NC	8.3	8.3	8.2	7.2	6.9	6.7			

Notes:

\* = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted and Commercial Soil Cleanup Objectives, NYSDEC, 2006.

\*\* = Residential soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

• = Protection of ecological resources soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

**=** Environmental Protection Agency priority pollutant metal.

B = Analyte detected in the associated blank, as well as in the sample (organics); value is greater than or equal to the instrument detection limit, but less than the contract required detection limit (inorganics).

J = Compound is positively identified and reported at an estimated concentration below the reporting limit.

NC = No criteria.

ND = Indicates that the compound was not detected at the method detection limit specified in parentheses.

P = >25% difference between the analytical results on two GC columns. The lower value is reported.

**PAH = Polycyclic aromatic hydrocarbon.** 

SCO = Soil cleanup objective.

Yellow shaded values exceed the 6 NYCRR Part 375 Unrestricted Soil Cleanup Objectives for arsenic.

Grey shaded values exceed the Commissioner's Policy CP-51 Residential Use Soil Cleanup Objectives.

Orange shaded values exceed the 6 NYCRR Part 375 Commercial Use Soil Cleanup Objectives.

Purple shaded values exceed the Commissioner's Policy CP-51 Protection of Ecological Resources Soil Cleanup Objectives.

#### Table 2-7A Analytical Results for Subsurface Soil Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Sample Number	NYSDEC	NYSDEC	WP-6	WP-13	S-4B	S-5B	S-6B	S-8A	S-8B
Date Sampled	Part 375	Part 375	06/21/00	06/21/00	12/13/00	12/13/00	12/13/00	08/21/01	08/21/01
Sample Depth	Unrestricted	Commercial	5.7' - 8.0'	3.2' - 4.2'	3.0' - 4.0'	3.0' - 4.0'	3.0' - 4.0'	2.0'	4.0'
Sample Location SCU SCU Filled Lagoon Filled Lagoon Fride Lagoon Frod. Bidg. Frod. Bidg. Eastern Bidg. Eastern Bidg.									
Acenaphthene (PAH)	20,000	500,000	ND (370)	180 J	ND (660)	ND (660)	ND (660)	NA	NA
Anthracene (PAH)	100,000	500,000	ND (370)	190 J	ND (660)	ND (330)	ND (660)	"	"
Benzo[a]anthracene (PAH)	1,000	5,600	ND (370)	140 J	ND (660)	780.0	ND (660)	"	"
Benzo[a]pyrene (PAH)	1,000	1,000	ND (370)	93 J	ND (660)	520.0	ND (660)	"	"
Benzo[b]fluoranthene (PAH)	1,000	5,600	ND (370)	ND (540)	ND (660)	810.0	ND (660)	"	"
Benzo[k]fluoranthene (PAH)	800.0	56,000	ND (370)	62 J	ND (660)	ND (330)	ND (660)	"	"
Bis[2-ethylhexyl]phthalate	NC	50,000 **	78 J	3,100	ND (660)	ND (330)	ND (660)	"	
Carbazole	NC	NC	ND (370)	150 J	ND (660)	ND (330)	ND (660)	"	"
Chrysene (PAH)	1,000	56,000	ND (370)	150 J	ND (660)	1,100	ND (660)	"	"
Dibenzofuran	7,000	350,000	ND (370)	120 J	ND (660)	ND (660)	ND (660)	"	
Fluoranthene (PAH)	100,000	500,000	ND (370)	330 J	ND (660)	1,400	ND (660)	"	"
Fluorene	30,000	500,000	ND (370)	200 J	ND (660)	ND (660)	ND (660)	"	"
Indeno[1,2,3-cd]pyrene (PAH)	500.0	5,600	ND (370)	ND (540)	ND (660)	360.0	ND (660)	"	"
2-Methylnaphthalene	NC	410 **	ND (370)	120 J	ND (660)	ND (660)	ND (660)	"	
Naphthalene (PAH)	12,000	500,000	ND (370)	170 J	ND (660)	ND (660)	ND (660)	"	"
Phenanthrene (PAH)	100,000	500,000	ND (370)	800.0	700.0	1,900	ND (660)	"	"
Pyrene (PAH)	100,000	500,000	ND (370)	390 J	860.0	2,200	ND (660)	"	"
Pesticides (µg/kg or ppb)									
Aldrin	5.0	680.0	NA	NA	ND (50)	ND (50)	270.0	ND (2)	ND (1)
alpha-BHC	20.0	3,400	"	"	ND (50)	1,200	1,200	ND (2)	ND (1)
beta-BHC	36.0	3,000	"	"	ND (50)	170.0	ND (50)	ND (2)	ND (1)
delta-BHC	40.0	500,000	"	"	ND (50)	ND (50)	ND (50)	ND (2)	ND (1)
gamma-BHC (Lindane)	100.0	9,200	"	"	ND (50)	ND (50)	ND (50)	ND (2)	ND (1)
Chlordane	94.0	24,000	"	"	ND (100)	ND (100)	ND (100)	ND (40)	ND (20)
4,4'-DDD	3.3	92,000	"	"	ND (100)	ND (100)	ND (100)	85.0	ND (6)
4,4'-DDE	3.3	62,000	"	"	ND (100)	ND (100)	ND (100)	ND (4)	ND (2)


Sample Number Date Sampled	NYSDEC Part 375	NYSDEC Part 375	WP-6 06/21/00	WP-13 06/21/00	S-4B 12/13/00	S-5B 12/13/00	S-6B 12/13/00	S-8A 08/21/01	S-8B 08/21/01
Sample Depth	Unrestricted	Commercial	5.7' - 8.0'	3.2' - 4.2'	3.0' - 4.0'	3.0' - 4.0'	3.0' - 4.0'	2.0'	4.0'
Sample Location	SCO *	SCO *	Filled Lagoon	Filled Lagoon	Prod. Bldg.	Prod. Bldg.	Prod. Bldg.	Eastern Bldg.	Eastern Bldg.
			l	Pesticides (Continu	ied)				
4,4'-DDT	3.3	47,000	NA	NA	ND (100)	400.0	230.0	300.0	16.0
Dieldrin	5.0	1,400	"	"	ND (100)	ND (100)	ND (100)	13.0	ND (2)
Endosulfan (I)	2,400	200,000	"	"	ND (50)	ND (50)	ND (50)	ND (4)	ND (2)
Endosulfan (II)	2,400	200,000	"	"	ND (100)	ND (100)	ND (100)	ND (4)	ND (2)
Endrin	14.0	89,000	"	"	ND (100)	ND (100)	ND (100)	11.0	ND (2)
Endrin Ketone	NC	NC	"	"	ND (100)	ND (100)	ND (100)	NA	NA
Heptachlor	42.0	15,000	"	"	ND (50)	ND (50)	ND (50)	ND (2)	ND (1)
Methoxychlor	NS	100,000 **	"	"	ND (500)	ND (500)	ND (500)	ND (40)	ND (20)
			He	erbicides (µg/kg or	ppb)				
2,4-D	NC	100,000 **	47 BP	6.4 JBP	ND (100)	ND (100)	ND (100)	ND (1,000)	ND (1,000)
2,4,5-TP (Silvex)	3,800	500,000	10 BP	6.8 B	ND (10)	ND (10)	ND (10)	ND (1,000)	ND (1,000)
2,4,5-T	NC	100,000 **	16 BP	16 BP	NA	NA	NA	ND (1,000)	ND (1,000)
			Ν	Metals (mg/kg or p	pm)				
Aluminum	NC	10,000 •	4,240	8,810	6,500	6,000	6,100	4,500	7,700
Arsenic	13.0	16.0	2.6 N	1.2 BN	4.7	8.2	78.0	8.2	16.0
Beryllium ∎	7.2	590.0	0.19 B	0.4 B	0.23	ND (0.2)	0.22	0.26	0.49
Cadmium	2.5	9.3	ND (0.031)	ND (0.044)	1.4	0.4	2.3	ND (0.2)	ND (0.2)
Chromium	30.0	1,500	6.4	9.2	8.7	1.8	8.8	5.6	12.0
Cobalt	NC	30 **	4.0	3.4	3.9	1.1	4.6	3.2	5.5
Copper ■	50.0	270.0	19.1 N	8.9 N	16.0	40.0	39.0	40.0	51.0
Iron	NC	2,000 **	9,690	8,780	5,900	830.0	9,700	9,000	17,000
Lead	63.0	1,000	2.9 N	3.5 N	7.0	25.0	9.4	9.1	43.0
Manganese	1,600	10,000	610 N	269 N	80.0	20.0	270.0	870.0	820.0
Mercury	0.18	2.8	0.032 BN	ND (0.018)	0.34	0.34	0.25	ND (0.1)	ND (0.1)
Nickel	30.0	310.0	8.4	8.0	9.1	2.6	10.0	5.7	12.0
Vanadium	NC	100 **	10.3	13.3	13.0	5.9	9.1	11.0	19.0
Zinc ■	109.0	10,000	21.6	30.8	41.0	230.0	110.0	69.0	66.0



Department of Environmental Conservation

Sample Number	NYSDEC	NYSDEC	WP-6	WP-13	S-4B	S-5B	S-6B	S-8A	S-8B		
Date Sampled	Part 375	Part 375	06/21/00	06/21/00	12/13/00	12/13/00	12/13/00	08/21/01	08/21/01		
Sample Depth	Unrestricted	Commercial	5.7' - 8.0'	3.2' - 4.2'	3.0' - 4.0'	3.0' - 4.0'	3.0' - 4.0'	2.0'	4.0'		
Sample Location	SCO *	SCO *	Filled Lagoon	Filled Lagoon	Prod. Bldg.	Prod. Bldg.	Prod. Bldg.	Eastern Bldg.	Eastern Bldg.		
Sample Location         Second Fined Lagoon         Fin											
Sulfur	NC	NC	27,400	198,000	NA	NA	NA	NA	NA		
Boron	NC	NC	17.8	25.7	"	"	"	"	"		
Leachable pH (pH units)	≤2;≥12.5	NC	8.6	12.0	"	"	"	"	"		
ТРН	NC	NC	NA	131.0	"	"	"	"	"		

Notes:

\* = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted and Commercial Soil Cleanup Objectives, NYSDEC, 2006.

\*\* = Residential soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

• = Protection of ecological resources soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

**=** Environmental Protection Agency priority pollutant metal.

B = Analyte detected in the associated blank, as well as in the sample (organics); value is greater than or equal to the instrument detection limit, but less than the contract required detection limit (inorganics).

**E** = Estimated concentration due to the presence of interference (inorganics).

J = Compound is positively identified and reported at an estimated concentration below the reporting limit.

N = Spike sample recovery is not within the quality control limits.

NA = Not analyzed.

NC = No criteria.

ND = Indicates that the compound was not detected at the method detection limit specified in parentheses.

P = >25% difference between the analytical results on two GC columns. The lower value is reported.

**PAH = Polycyclic aromatic hydrocarbon.** 

SCO = Soil cleanup objective.

Yellow shaded values exceed the 6 NYCRR Part 375 Unrestricted Soil Cleanup Objectives for arsenic.

Grey shaded values exceed the Commissioner's Policy CP-51 Residential Use Soil Cleanup Objectives.

Orange shaded values exceed the 6 NYCRR Part 375 Commercial Use Soil Cleanup Objectives.



Department of Environmental Conservation

Sample Number Date Sampled Sample Location Sample Depth	NYSDEC Part 375 Unrestricted SCO *	NYSDEC Part 375 Commercial SCO *	S-11 08/22/01 Chip Area	S-12 08/22/01 Chip Area	S-13 08/22/01 Chip Area	S-15 08/22/01 Chip Area	S-16 08/23/01 Chip Area	S-17 08/23/01 Chip Area	S-18 08/22/01 Chip Area	S-19 08/22/01 Chip Area
				Arsenic (	mg/kg or ppm)					
2.0'	13.0	16.0	4.5	3.5	4.5	Excavated	3.1	2.1	4.8	3.3
4.0'	13.0	16.0	3.3	10.0	3.9	4.8	3.5	2.9	3.2	5.5

Sample Number Date Sampled Sample Location Sample Depth	NYSDEC Part 375 Unrestricted SCO *	NYSDEC Part 375 Commercial SCO *	S-20 08/22/01 Chip Area	S-21 08/22/01 Chip Area	S-22 08/22/01 Chip Area	S-23 08/23/01 Chip Area	S-24 08/23/01 Chip Area	S-25 08/22/01 Chip Area	S-26 08/22/01 Chip Area	S-27 08/23/01 Chip Area
				Arsenic (	mg/kg or ppm)					
2.0'	13.0	16.0	4.7	3.5	3.3	3.9	6.5	4.0	5.2	6.9
4.0'	13.0	16.0	2.9	3.8	2.7	3.1	3.0	3.0	4.2	4.5

Sample Number Date Sampled Sample Location Sample Depth	NYSDEC Part 375 Unrestricted SCO *	NYSDEC Part 375 Commercial SCO *	S-28 08/22/01 Chip Area	S-29 08/23/01 Chip Area	S-30 08/23/01 Chip Area	S-31 08/23/01 Chip Area	S-32 08/23/01 Chip Area	S-33 08/23/01 Chip Area	S-34 08/23/01 Chip Area		
Arsenic (mg/kg or ppm)											
				Arsenic (1	mg/kg or ppm)						
2.0'	13.0	16.0	4.2	4.3	<b>mg/kg or ppm)</b> 4.2	NA	3.6	2.6	2.4		

Notes:

\* = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted and Commercial Soil Cleanup Objectives, NYSDEC, 2006.

SCO = Soil cleanup objective.

Yellow shaded values exceed the 6 NYCRR Part 375 Unrestricted Soil Cleanup Objectives for arsenic.

Orange shaded values exceed the 6 NYCRR Part 375 Commercial Use Soil Cleanup Objective for arsenic.



Sample Number	NYSDEC	NYSDEC	SB-1	SB-2	SB-3	SB-5	SB-6	SB-7	SB-10
Date Sampled	Part 375	Part 375	05/20/03	05/20/03	05/20/03	05/21/03	05/21/03	05/20/03	05/21/03
Sample Depth	Unrestricted	Commercial	0.0' - 4.0' Noor Bood	0.0' - 4.0' Noor Bood	9.0' - 9.8' Creavel Bd	4.0' - 5.0' Noor Ditch	0.0' - 4.0' Chip Area	0.0' - 4.0' Noon Chin Area	4.0' - 8.0' Filled Lagoon
Sample Location	300.	SC0 *	Semivolatila (	Trear Koau	Graver Ku.	Near Ditch	Chip Area	Near Chip Area	Filled Lagoon
	20.000	500.000	Semivolatile (	Siganic Compound		NT A	NT A		ND (2(0)
Acenaphthene (PAH)	20,000	500,000	NA	NA	NA	NA	NA	NA	ND (360)
Anthracene (PAH)	100,000	500,000		"	"	"	"	"	ND (360)
Benzo[a]anthracene (PAH)	1,000	5,600	"	"	"	"	"	"	ND (360)
Benzo[a]pyrene (PAH)	1,000	1,000	"	"	"	"	"	"	ND (360)
Benzo[b]fluoranthene (PAH)	1,000	5,600	"	"	"	"	"	"	ND (360)
Benzo[k]fluoranthene (PAH)	800.0	56,000	"	"	"	"	"	"	ND (360)
Bis[2-ethylhexyl]phthalate	NC	50,000 **	"	"	"	"		"	ND (360)
Carbazole	NC	NC	"	"	"	"	-	"	ND (360)
Chrysene (PAH)	1,000	56,000	"	"	"	"	"	"	ND (360)
Dibenzofuran	7,000	350,000	"	"	"	"	"	"	ND (360)
Fluoranthene (PAH)	100,000	500,000	"	"	"	"	"	"	ND (360)
Fluorene	30,000	500,000	"	"	"	"	"	"	ND (360)
Indeno[1,2,3-cd]pyrene (PAH)	500.0	5,600	"	"	"	"	-	"	ND (360)
2-Methylnaphthalene	NC	410 **	"	"	"	"	"	"	ND (360)
Naphthalene (PAH)	12,000	500,000	"	"	"	"	"	"	ND (360)
Phenanthrene (PAH)	100,000	500,000	"	"	"	"	"	"	ND (360)
Pyrene (PAH)	100,000	500,000	"	"	"	"	"	"	ND (360)
			Pe	esticides (µg/kg or	ppb)				
Aldrin	5.0	680.0	ND (9.2)	ND (9.8)	ND (8.5)	ND (8.7)	ND (9.6)	ND (9.2)	ND (8.6)
alpha-BHC	20.0	3,400	ND (9.2)	ND (9.8)	ND (8.5)	ND (8.7)	ND (9.6)	ND (9.2)	ND (8.6)
beta-BHC	36.0	3,000	ND (9.2)	ND (9.8)	ND (8.5)	ND (8.7)	ND (9.6)	ND (9.2)	ND (8.6)
delta-BHC	40.0	500,000	ND (9.2)	ND (9.8)	ND (8.5)	ND (8.7)	ND (9.6)	ND (9.2)	ND (8.6)
gamma-BHC (Lindane)	100.0	9,200	ND (9.2)	ND (9.8)	ND (8.5)	ND (8.7)	ND (9.6)	ND (9.2)	ND (8.6)
Chlordane	94.0	24,000	ND (46)	ND (49)	ND (43)	ND (44)	ND (48)	ND (46)	ND (43)
4,4'-DDD	3.3	92,000	ND (18)	ND (20)	ND (17)	ND (17)	ND (19)	ND (18)	ND (17)
4,4'-DDE	3.3	62,000	ND (18)	ND (20)	ND (17)	ND (17)	ND (19)	ND (18)	ND (17)



Sample Number	NYSDEC	NYSDEC	SB-1	SB-2	SB-3	SB-5	SB-6	SB-7	SB-10
Date Sampled	Part 375	Part 375	05/20/03	05/20/03	05/20/03	05/21/03	05/21/03	05/20/03	05/21/03
Sample Depth Sample Location	Unrestricted	Commercial SCO *	0.0' - 4.0' Near Road	0.0' - 4.0' Near Road	9.0' - 9.8' Gravel Rd	4.0' - 5.0' Near Ditch	0.0' - 4.0' Chin Area	0.0' - 4.0' Near Chin Area	4.0' - 8.0' Filled Lagoon
	500	500		Pesticides (Continu	ied)	Treat Ditei	Cinp Area	itear emp irrea	T incu Lugoon
4,4'-DDT	3.3	47,000	ND (18)	ND (20)	ND (17)	ND (17)	ND (19)	ND (18)	ND (17)
Dieldrin	5.0	1,400	ND (18)	ND (20)	ND (17)	ND (17)	ND (19)	ND (18)	ND (17)
Endosulfan (I)	2,400	200,000	ND (18)	ND (20)	ND (17)	ND (17)	ND (19)	ND (18)	ND (17)
Endosulfan (II)	2,400	200,000	ND (18)	ND (20)	ND (17)	ND (17)	ND (19)	ND (18)	ND (17)
Endrin	14.0	89,000	ND (18)	ND (20)	ND (17)	ND (17)	ND (19)	ND (18)	ND (17)
Endrin Ketone	NC	NC	ND (18)	ND (20)	ND (17)	ND (17)	ND (19)	ND (18)	ND (17)
Heptachlor	42.0	15,000	ND (9.2)	ND (9.8)	ND (8.5)	ND (8.7)	ND (9.6)	ND (9.2)	ND (8.6)
Methoxychlor	NS	100,000 **	ND (92)	ND (98)	ND (85)	ND (87)	ND (96)	ND (92)	ND (86)
			He	erbicides (µg/kg or	ppb)				
2,4-D	NC	100,000 **	ND (930)	ND (980)	ND (880)	ND (890)	ND (960)	ND (910)	ND (860)
2,4,5-TP (Silvex)	3,800	500,000	ND (370)	ND (390)	ND (350)	ND (360)	ND (380)	ND (360)	ND (340)
2,4,5-T	NC	100,000 **	ND (370)	ND (390)	ND (350)	ND (360)	ND (380)	ND (360)	ND (340)
			N	Metals (mg/kg or p	pm)				
Aluminum	NC	10,000 •	NA	NA	NA	NA	NA	NA	NA
Arsenic	13.0	16.0	1.9	8.1	4.4	2.3	2.9	2.2	3.0
Beryllium ∎	7.2	590.0	0.25 B	0.34 B	0.44 B	0.27 B	0.42 B	0.21 B	0.2 B
Cadmium	2.5	9.3	ND (0.03)	ND (0.04)	ND (0.03)	ND (0.03)	ND (0.04)	ND (0.03)	ND (0.03)
Chromium	30.0	1,500	8.2 E	11.0 E	12.5 E	8.7 E	13.5 E	7.1 E	7.2 E
Cobalt	NC	30 **	3.6 B	5.9 B	8.2	5.8	5.5 B	4.9 B	5.2 B
Copper	50.0	270.0	19.2 E	23.9 E	7.4 E	10.8 E	17.8 E	17.0 E	21.5 E
Iron	NC	2,000 **	NA	NA	NA	NA	NA	NA	NA
Lead ■	63.0	1,000	3.0	8.6	4.3	2.8	4.3	2.5	3.2
Manganese	1,600	10,000	NA	NA	NA	NA	NA	NA	NA
Mercury	0.18	2.8	0.06	0.046	ND (0.005)	ND (0.005)	0.019	ND (0.005)	ND (0.005)
Nickel	30.0	310.0	9.5 E	16.7 E	17.3 E	11.6 E	13.4 E	9.6 E	10.5 E
Vanadium	NC	100 **	14.3 E	16.7 E	19.0 E	14.6 E	22.6 E	12.4 E	12.2 E
Zinc ■	109.0	10,000	21.5 E	32.1 E	35.9 E	26.5 E	27.3 E	24.4 E	29.2 E



Department of Environmental Conservation

Sample Number	NYSDEC	NYSDEC	SB-1	SB-2	SB-3	SB-5	SB-6	SB-7	SB-10
Date Sampled	Part 375	Part 375	05/20/03	05/20/03	05/20/03	05/21/03	05/21/03	05/20/03	05/21/03
Sample Depth	Unrestricted	Commercial	0.0' - 4.0'	0.0' - 4.0'	9.0' - 9.8'	4.0' - 5.0'	0.0' - 4.0'	0.0' - 4.0'	4.0' - 8.0'
Sample Location	SCO *	SCO *	Near Road	Near Road	Gravel Rd.	Near Ditch	Chip Area	Near Chip Area	Filled Lagoon
Sample Location       SCO *       Near Road       Near Road       Gravel Rd.       Near Ditch       Chip Area       Near Chip Area       Filled         Miscellaneous Compounds (mg/kg or ppm)									
Sulfur	NC	NC	NA	NA	2,600	NA	NA	NA	2,200
Boron	NC	NC	2.9	2.5	8.6	4.4	2.4	3.6	3.7
Leachable pH (pH units)	≤2;≥12.5	NC	6.32	7.20	7.12	7.82	7.68	8.26	8.10

Notes:

\* = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted and Commercial Soil Cleanup Objectives, NYSDEC, 2006.

\*\* = Residential soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

• = Protection of ecological resources soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

**=** Environmental Protection Agency priority pollutant metal.

B = Analyte detected in the associated blank, as well as in the sample (organics); value is greater than or equal to the instrument detection limit, but less than the contract required detection limit (inorganics).

**E** = Estimated concentration due to the presence of interference (inorganics).

J = Compound is positively identified and reported at an estimated concentration below the reporting limit.

 ${\bf N}={\bf Spike}$  sample recovery is not within the quality control limits.

NA = Not analyzed.

NC = No criteria.

ND = Indicates that the compound was not detected at the method detection limit specified in parentheses.

P = >25% difference between the analytical results on two GC columns. The lower value is reported.

**PAH = Polycyclic aromatic hydrocarbon.** 

SCO = Soil cleanup objective.

Yellow shaded values exceed the 6 NYCRR Part 375 Unrestricted Soil Cleanup Objectives for arsenic.

Grey shaded values exceed the Commissioner's Policy CP-51 Residential Use Soil Cleanup Objectives.

Orange shaded values exceed the 6 NYCRR Part 375 Commercial Use Soil Cleanup Objectives.



Sample Number	NYSDEC	NYSDEC	SB-12	B-1	B-2	B-3	B-4	B-9	
Date Sampled	Part 375	Part 375	05/21/03	06/14/12	06/14/12	06/14/12	06/15/12	06/15/12	
Sample Depth	Unrestricted	Commercial	0.0' - 4.0'	8.0' - 10.0'	8.0' - 10.0'	8.0' - 10.0'	7.0' - 9.0'	5.0' - 7.0'	
Sample Location	SCO *	SCO *	Near Chip Area	Chip Area	Chip Area	Chip Area	Spill Area	Office Bldg.	
			Semivolatile (	Organic Compound	ls (µg/kg or ppb)				
Acenaphthene (PAH)	20,000	500,000	NA	ND (360)	ND (350)	ND (350)	ND (370)	ND (370)	
Anthracene (PAH)	100,000	500,000	"	ND (360)	ND (350)	ND (350)	ND (370)	ND (370)	
Benzo[a]anthracene (PAH)	1,000	5,600	"	ND (360)	ND (350)	ND (350)	ND (370)	ND (370)	
Benzo[a]pyrene (PAH)	1,000	1,000	"	ND (360)	ND (350)	ND (350)	ND (370)	ND (370)	
Benzo[b]fluoranthene (PAH)	1,000	5,600	"	ND (360)	ND (350)	ND (350)	ND (370)	ND (370)	
Benzo[k]fluoranthene (PAH)	800.0	56,000	"	ND (360)	ND (350)	ND (350)	ND (370)	ND (370)	
Bis[2-ethylhexyl]phthalate	NC	50,000 **	"	110 J	ND (350)	ND (350)	ND (370)	ND (370)	
Carbazole	NC	NC	"	ND (360)	ND (350)	ND (350)	ND (370)	ND (370)	
Chrysene (PAH)	1,000	56,000	"	ND (360)	ND (350)	ND (350)	ND (370)	ND (370)	
Dibenzofuran	7,000	350,000	"	ND (360)	ND (350)	ND (350)	ND (370)	ND (370)	
Fluoranthene (PAH)	100,000	500,000	"	ND (360)	ND (350)	ND (350)	ND (370)	ND (370)	
Fluorene	30,000	500,000	"	ND (360)	ND (350)	ND (350)	ND (370)	ND (370)	
Indeno[1,2,3-cd]pyrene (PAH)	500.0	5,600	"	ND (360)	ND (350)	ND (350)	ND (370)	ND (370)	
2-Methylnaphthalene	NC	410 **	"	ND (360)	ND (350)	ND (350)	ND (370)	ND (370)	
Naphthalene (PAH)	12,000	500,000	"	ND (360)	ND (350)	ND (350)	150 J	ND (370)	
Phenanthrene (PAH)	100,000	500,000	"	ND (360)	ND (350)	ND (350)	ND (370)	ND (370)	
Pyrene (PAH)	100,000	500,000	"	ND (360)	ND (350)	ND (350)	ND (370)	ND (370)	
			Pe	esticides (µg/kg or	ppb)				
Aldrin	5.0	680.0	ND (9.0)	ND (1.9)	ND (1.8)	ND (1.9)	ND (2.0)	ND (1.9)	
alpha-BHC	20.0	3,400	ND (9.0)	ND (1.9)	ND (1.8)	ND (1.9)	ND (2.0)	ND (1.9)	
beta-BHC	36.0	3,000	ND (9.0)	ND (1.9)	ND (1.8)	ND (1.9)	ND (2.0)	ND (1.9)	
delta-BHC	40.0	500,000	ND (9.0)	ND (1.9)	ND (1.8)	ND (1.9)	ND (2.0)	ND (1.9)	
gamma-BHC (Lindane)	100.0	9,200	ND (9.0)	ND (1.9)	ND (1.8)	ND (1.9)	ND (2.0)	ND (1.9)	
Chlordane	94.0	24,000	ND (45)	ND (1.9)	ND (1.8)	ND (1.9)	ND (2.0)	ND (1.9)	
4,4'-DDD	3.3	92,000	ND (18)	ND (3.6)	ND (3.5)	ND (3.6)	ND (3.8)	ND (3.7)	
4,4'-DDE	3.3	62,000	ND (18)	ND (3.6)	ND (3.5)	ND (3.6)	ND (3.8)	ND (3.7)	



Sample Number	NYSDEC	NYSDEC	SB-12	B-1	B-2	B-3	B-4	B-9	
Date Sampled	Part 375	Part 375	05/21/03	06/14/12	06/14/12	06/14/12	06/15/12	06/15/12	
Sample Depth	Unrestricted	Commercial	0.0' - 4.0'	8.0' - 10.0'	8.0' - 10.0'	8.0' - 10.0'	7.0' - 9.0'	5.0' - 7.0'	
Sample Location	SC0 *	SC0 *	Near Chip Area	Chip Area	Chip Area	Chip Area	Spill Area	Office Bldg.	
				Pesticides (Continu	lea)				
4,4'-DDT	3.3	47,000	ND (18)	ND (3.6)	ND (3.5)	ND (3.6)	ND (3.8)	ND (3.7)	
Dieldrin	5.0	1,400	ND (18)	ND (3.6)	ND (3.5)	ND (3.6)	ND (3.8)	ND (3.7)	
Endosulfan (I)	2,400	200,000	ND (18)	ND (1.9)	ND (1.8)	ND (1.9)	ND (2.0)	ND (1.9)	
Endosulfan (II)	2,400	200,000	ND (18)	ND (3.6)	ND (3.5)	ND (3.6)	ND (3.8)	ND (3.7)	
Endrin	14.0	89,000	ND (18)	ND (3.6)	ND (3.5)	ND (3.6)	ND (3.8)	ND (3.7)	
Endrin Ketone	NC	NC	ND (18)	ND (3.6)	ND (3.5)	ND (3.6)	ND (3.8)	ND (3.7)	
Heptachlor	42.0	15,000	ND (9.0)	ND (1.9)	ND (1.8)	ND (1.9)	ND (2.0)	ND (1.9)	
Methoxychlor	NS	100,000 **	ND (90)	ND (19)	ND (18)	ND (19)	ND (20)	ND (19)	
			He	erbicides (µg/kg or	ppb)				
2,4-D	NC	100,000 **	ND (900)	NA	NA	NA	NA	NA	
2,4,5-TP (Silvex)	3,800	500,000	ND (360)	"	"	"	"	"	
2,4,5-T	NC	100,000 **	ND (360)	"	"	"	"	"	
			N	/letals (mg/kg or p	pm)				
Aluminum	NC	10,000 •	NA	6,280	6,670	6,190	6,600	7,830	
Antimony	NC	12 •	1.1 BN	ND (0.40)	0.55 B	ND (0.35)	ND (0.33)	ND (0.39)	
Arsenic	13.0	16.0	2.1	3.6	3.0	2.1	1.7	2.3	
Barium	350.0	400.0	131 E	92.6	89.0	94.2	41.3	77.0	
Beryllium ∎	7.2	590.0	0.46 B	0.20 B	0.22 B	0.20 B	0.22	0.28	
Cadmium	2.5	9.3	ND (0.03)	0.53	0.56	0.50	0.57	0.63	
Chromium	30.0	1,500	11.6 E	9.6	9.9	8.5	7.7	11.0	
Cobalt	NC	30 **	4.1 B	6.6	6.5	6.0	6.9	7.6	
Copper	50.0	270.0	21.9 E	20.0	13.9	14.3	12.0	10.9	
Iron	NC	2,000 **	NA	14,100	14,500	13,000	11,300	15,700	
Lead	63.0	1,000	4.1	3.7	3.4	2.9	3.2	4.1	
Manganese	1,600	10,000	NA	696.0	716.0	647.0	190.0	708.0	
Mercury	0.18	2.8	0.021	ND (0.0024)	ND (0.0025)	ND (0.0024)	0.0059 B	0.0029 B	



Department of Environmental Conservation

Sample Number	NYSDEC	NYSDEC	SB-12	B-1	B-2	B-3	B-4	B-9	
Date Sampled	Part 375	Part 375	05/21/03	06/14/12	06/14/12	06/14/12	06/15/12	06/15/12	
Sample Depth	Unrestricted	Commercial	0.0' - 4.0'	8.0' - 10.0'	8.0' - 10.0'	8.0' - 10.0'	7.0' - 9.0'	5.0' - 7.0'	
Sample Location	SCO *	SCO *	Near Chip Area	Chip Area	Chip Area	Chip Area	Spill Area	Office Bldg.	
				Metals (continue	d)				
Nickel	30.0	310.0	10.1 E	13.0	13.5	12.2	12.7	15.7	
Thallium	NC	5•	ND (0.59)	0.60 B	1.1	0.36 B	0.39 B	0.94 B	
Vanadium	NC	100 **	19.4 E	14.5	14.6	13.0	13.0	15.1	
Zinc	109.0	10,000	29.7 E	29.6	30.4	28.2	74.4	33.8	
			Miscellane	ous Compounds (n	ng/kg or ppm)				
Sulfur	NC	NC	NA	136.0	103.0	105.0	22,400	117.0	
Boron	NC	NC	1.5	NA	NA	NA	NA	NA	
Leachable pH (pH units)	≤2;≥12.5	NC	6.83	8.4	8.8	8.6	4.6	8.4	

Notes:

\* = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted and Commercial Soil Cleanup Objectives, NYSDEC, 2006.

\*\* = Residential soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

• = Protection of ecological resources soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

**=** Environmental Protection Agency priority pollutant metal.

- B = Analyte detected in the associated blank, as well as in the sample (organics); value is greater than or equal to the instrument detection limit, but less than the contract required detection limit (inorganics).
- **E** = Estimated concentration due to the presence of interference (inorganics).
- J = Compound is positively identified and reported at an estimated concentration below the reporting limit.
- N = Spike sample recovery is not within the quality control limits.
- NA = Not analyzed.
- NC = No criteria.

ND = Indicates that the compound was not detected at the method detection limit specified in parentheses.

P = >25% difference between the analytical results on two GC columns. The lower value is reported.

**PAH = Polycyclic aromatic hydrocarbon.** 

SCO = Soil cleanup objective.

Yellow shaded values exceed the 6 NYCRR Part 375 Unrestricted Soil Cleanup Objectives for arsenic.

Grey shaded values exceed the Commissioner's Policy CP-51 Residential Use Soil Cleanup Objectives.

Orange shaded values exceed the 6 NYCRR Part 375 Commercial Use Soil Cleanup Objectives.



Sample Number Date Sampled Sample Location Sample Depth	NYSDEC Part 375 Unrestricted SCO *	NYSDEC Part 375 Commercial SCO *	A(-2) 08/07/13 Arsenic Area	A(-1) 08/05/13 Arsenic Area	A0 08/05/13 Arsenic Area	A1 07/10/13 Arsenic Area	A2 07/10/13 Arsenic Area	A3 07/10/13 Arsenic Area	A4 07/10/13 Arsenic Area	A5 07/10/13 Arsenic Area
				Arseni	ic (mg/kg or ppm	)				
2.0'	13.0	16.0	Misc. Fill	Excavated	Misc. Fill	Excavated	Misc. Fill	3.1	Excavated	Excavated
4.0'	13.0	16.0	Sludge	Excavated	7.1	Sludge	3.5	3.7 (3.2)	3.5	Excavated
6.0'	13.0	16.0	5.9	7.8	5.5	4.1	3.1	NS	3.6 (5.6')	3.6
8.0'	13.0	16.0	5.0	3.8	2.8	5.4	5.2	5.0	NS	5.8 (6.9')
10.0'	13.0	16.0	NS	NS	NS	4.4	NS	4.6 (8.3')	NS	

Sample Number Date Sampled Sample Location Sample Depth	NYSDEC Part 375 Unrestricted SCO *	NYSDEC Part 375 Commercial SCO *	A6 07/10/13 Arsenic Area	A7 07/10/13 Arsenic Area	B(-2) 08/07/13 Arsenic Area	B(-1) 08/06/13 Arsenic Area	B0 08/05/13 Arsenic Area	B1 07/12/13 Arsenic Area	B2 07/12/13 Arsenic Area	B3 07/12/13 Arsenic Area
				Arseni	ic (mg/kg or ppm	)				
2.0'	13.0	16.0	Excavated	2.6	Misc. Fill	Misc. Fill	Excavated	Excavated	Excavated	Excavated
4.0'	13.0	16.0	5.1	2.4	Sludge	Sludge	NS	Excavated	3.5	3.4
6.0'	13.0	16.0	6.4 (6.4')	4.1 (5.4')	Misc. Fill	3.1	3.4	5.1	6.1	4.3
8.0'	13.0	16.0			3.5	4.9	7.2	4.6 (6.9')		
10.0'	13.0	16.0								

Sample Number Date Sampled Sample Location Sample Depth	NYSDEC Part 375 Unrestricted SCO *	NYSDEC Part 375 Commercial SCO *	B4 07/12/13 Arsenic Area	B5 07/10/13 Arsenic Area	B6 07/10/13 Arsenic Area	B7 07/10/13 Arsenic Area	C(-2) 08/07/13 Arsenic Area	C(-1) 08/06/13 Arsenic Area	C0(-5) 07/12/13 Arsenic Area	C1 08/05/13 Arsenic Area
				Arseni	c (mg/kg or ppm	)				
2.0'	13.0	16.0	Excavated	6.1	Excavated	2.9	Misc. Fill	NS	Excavated	Excavated
4.0'	13.0	16.0	3.3	3.8	3.4	3.6	13.8	Sludge	Excavated	Excavated
6.0'	13.0	16.0	3.7 (5.8')	11.4 (6.4')	3.8	4.4 (5.8')	3.1	11.6	3.0	11.6
8.0'	13.0	16.0						3.1 (7.3')	3.6	3.7 (7.3')
10.0'	13.0	16.0							4.1 (8.8')	



Sample Number Date Sampled Sample Location	NYSDEC Part 375 Unrestricted	NYSDEC Part 375 Commercial	C2 07/12/13 Arsenic Area	C3 07/12/13 Arsenic Area	C4 07/12/13 Arsenic Area	C5 07/12/13 Arsenic Area	C6 07/12/13 Arsenic Area	C7 07/12/13 Arsenic Area	D(-2) 08/07/13 Arsenic Area	D(-1) 08/06/13 Arsenic Area
Sample Depth	SCO *	SCO *								
				Arseni	ic (mg/kg or ppm	)				
2.0'	13.0	16.0	Excavated	Excavated						
4.0'	13.0	16.0	3.0	Excavated	2.9	2.8	2.9	3.2	3.5	Excavated
6.0'	13.0	16.0	4.0	4.0	9.7	3.4 (5.6')	4.3 (5.0')	3.6 (5.0')	3.3	2.9
8.0'	13.0	16.0								3.7 (7.8')
10.0'	13.0	16.0								

Sample Number Date Sampled Sample Location Sample Depth	NYSDEC Part 375 Unrestricted SCO *	NYSDEC Part 375 Commercial SCO *	D0 07/15/13 Arsenic Area	D1 08/05/13 Arsenic Area	D2 07/15/13 Arsenic Area	D3 07/15/13 Arsenic Area	D4 07/15/13 Arsenic Area	D5 07/15/13 Arsenic Area	D6 07/15/13 Arsenic Area	D7 07/15/13 Arsenic Area
				Arseni	ic (mg/kg or ppm	)				
2.0'	13.0	16.0	10.8	3.7	Excavated	Excavated	4.7	2.0 J	2.2 J	Misc. Fill
4.0'	13.0	16.0	3.0	5.0	3.0	4.0	7.9	3.5	3.7	2.7
6.0'	13.0	16.0	3.0	2.9	3.1	3.7	3.7	2.9	3.0	3.3
8.0'	13.0	16.0	4.8 (7.5')	4.6 (7.8')	3.5 (7.0')	5.3 (7.6')				
10.0'	13.0	16.0								

Sample Number Date Sampled Sample Location Sample Depth	NYSDEC Part 375 Unrestricted SCO *	NYSDEC Part 375 Commercial SCO *	E(-2) 08/07/13 Arsenic Area	E(-1) 08/06/13 Arsenic Area	E0 07/16/13 Arsenic Area	E1 08/05/13 Arsenic Area	E2 07/16/13 Arsenic Area	E3 07/16/13 Arsenic Area	E4 07/15/13 Arsenic Area	E5 07/15/13 Arsenic Area
				Arseni	c (mg/kg or ppm	)				
2.0'	13.0	16.0	Excavated	Excavated	Excavated	9.6 (2.2')	Excavated	4.1	Excavated	4.0
4.0'	13.0	16.0	Excavated	4.2	3.4	2.8	4.1	3.8	3.8	3.0
6.0'	13.0	16.0	3.4	3.3	3.0	3.5	3.6 (5.6')	3.3	3.3 (5.8')	6.7
8.0'	13.0	16.0		4.4	5.1	3.1 (7.3')				
10.0'	13.0	16.0								



Sample Number Date Sampled Sample Location Sample Depth	NYSDEC Part 375 Unrestricted SCO *	NYSDEC Part 375 Commercial SCO *	E6 07/15/13 Arsenic Area	E7 07/15/13 Arsenic Area	F(-1) 08/06/13 Arsenic Area	F0 07/16/13 Arsenic Area	F1 07/16/13 Arsenic Area	F2 07/16/13 Arsenic Area	F3 07/16/13 Arsenic Area	F4 07/16/13 Arsenic Area
				Arseni	ic (mg/kg or ppm	)				
2.0'	13.0	16.0	NS	2.7	Excavated	Excavated	Excavated	3.1	8.7	3.7
4.0'	13.0	16.0	3.5	3.1	3.6	3.8	3.3	3.4	3.1	6.2
6.0'	13.0	16.0	3.2	2.5	3.3	2.5	2.8			2.5 (5.7')
8.0'	13.0	16.0			3.4	4.5	3.1			
10.0'	13.0	16.0								

Sample Number Date Sampled Sample Location Sample Depth	NYSDEC Part 375 Unrestricted SCO *	NYSDEC Part 375 Commercial SCO *	F5 07/16/13 Arsenic Area	F6 07/16/13 Arsenic Area	F7 07/17/13 Arsenic Area	G(-1) 08/06/13 Arsenic Area	G0 08/06/13 Arsenic Area	G1 08/07/13 Arsenic Area	G2 08/07/13 Arsenic Area	SB-1 07/16/13 Arsenic Area
				Arseni	ic (mg/kg or ppm	)				
2.0'	13.0	16.0	10.6	5.3	Excavated	Misc. Fill	Excavated	Misc. Fill	3.5	Excavated
4.0'	13.0	16.0	3.3	3.6	3.5	5.7	4.2	3.7	3.7	3.5
6.0'	13.0	16.0		2.9	2.7 (5.0')	NS	3.4	3.3	5.3 (5.8')	3.3
8.0'	13.0	16.0				NS				5.7
10.0'	13.0	16.0								

Sample Number Date Sampled Sample Location Sample Depth	NYSDEC Part 375 Unrestricted SCO *	NYSDEC Part 375 Commercial SCO *	SB-2 07/17/13 Arsenic Area	SB-3 07/17/13 Arsenic Area	SB-4 07/17/13 Arsenic Area	SB-5 07/17/13 Arsenic Area	SB-6 07/17/13 Arsenic Area	SB-7 07/17/13 Arsenic Area	B-5R 08/06/13 Arsenic Area	B-7R 08/05/13 Arsenic Area
	~~0	~ = 0		Arseni	c (mg/kg or ppm	)				
2.0'	13.0	16.0	15.0 (1.9')	Excavated	Excavated	2.4	3.6 (3.1')	18.0	Excavated	Excavated
4.0'	13.0	16.0	3.4	2.5	3.5	3.1	3.6	16.8	Excavated	4.0
6.0'	13.0	16.0		2.6	5.6 (5.5')	2.8		3.0	Misc. Fill	3.2
8.0'	13.0	16.0						3.2	4.5	8.9
10.0'	13.0	16.0								



Department of Environmental Conservation

Sample Number Date Sampled Sample Location Sample Depth	NYSDEC Part 375 Unrestricted SCO *	NYSDEC Part 375 Commercial SCO *	B-8R 08/07/13 Arsenic Area					
				Arseni	ic (mg/kg or ppm	)		
2.0'	13.0	16.0	Excavated					
4.0'	13.0	16.0	3.8					
6.0'	13.0	16.0	4.6					
8.0'	13.0	16.0						
10.0'	13.0	16.0						

Notes:

\* = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted and Commercial Soil Cleanup Objectives, NYSDEC, 2006.

SCO = Soil cleanup objective.

Grey shaded cells indicate that bedrock was encountered before the associated depth.

Yellow shaded values exceed the 6 NYCRR Part 375 Unrestricted Soil Cleanup Objectives for arsenic.

Orange shaded values exceed the 6 NYCRR Part 375 Commercial Use Soil Cleanup Objective for arsenic.

(3.2) = Duplicate sample collected on August 5, 2013.

(6.4') = Depth of sample collection when it is different from the standards depths of 2.0', 4.0', 6.0', 8.0' and 10.0'.

Results for miscellaneous fill and sludge samples are in other tables.



Department of Environmental Conservation

Sample Number	NYSDEC	NYSDEC	C(-1)	C(-2)								
Date Sampled	Part 375	Part 375	08/06/13	08/07/13								
Sample Depth	Unrestricted	Commercial	7.3'	4.0'								
Sample Type	SCO *	SCO *	Stained Soil	Stained Soil								
		Ν	/letals (mg/kg or p	pm)								
Aluminum         NC         10,000 •         NA         NA												
Arsenic	13.0	16.0	3.1	13.8								
Barium	350	400	64.8	222								
Beryllium ■	7.2	590	NA	NA								
Cadmium	2.5	9.3	0.072 J	0.37								
Chromium	30.0	1,500	6.4	14.5								
Cobalt	NC	30 **	NA	NA								
Copper ■	50.0	270	NA	NA								
Iron	NC	2,000 **	NA	NA								
Lead	63.0	1,000	2.7	41.4								
Manganese	1,600	10,000	NA	NA								
Mercury ■	0.18	2.8	ND (0.022)	2.3								
Nickel	30.0	310	NA	NA								
Selenium	3.9	1,500	ND (4.9)	0.52 J								
Silver ■	2.0	1,500	ND (0.61)	ND (0.63)								
Vanadium	NC	100 **	NA	NA								
Zinc	109	10,000	NA	NA								

Notes:

\* = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted and Commercial Soil Cleanup Objectives, NYSDEC, 2006.

\*\* = Residential soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

• = Protection of ecological resources soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

**=** Environmental Protection Agency priority pollutant metal.

J = Compound is positively identified and reported at an estimated concentration below the reporting limit.

NA = Not analyzed.

NC = No criteria.

ND = Indicates that the compound was not detected at the method detection limit specified in parentheses.



Department of Environmental Conservation

Notes (continued):

SCO = Soil cleanup objective.

Yellow shaded values exceed the 6 NYCRR Part 375 Unrestricted Soil Cleanup Objectives for arsenic. Grey shaded values exceed the Commissioner's Policy CP-51 Residential Use Soil Cleanup Objectives. Orange shaded values exceed the 6 NYCRR Part 375 Commercial Use Soil Cleanup Objectives.



Sample Number	NYSDEC	NYSDEC	CONF-1	CONF-2	CONF-3	CONF-4	CONF-5	CONF-6
Date Sampled	Part 375	Part 375	11/15/00	11/15/00	11/15/00	12/14/00	12/14/00	12/14/00
Sample Depth	Unrestricted	Commercial	1.5'	1.5'	1.5'	NR	NR	NR
Sample Location	SCO *	SCO *	Barren Strip	Barren Strip	Barren Strip	Ponded Water	Low pH Trough	Low pH Trough
			Pesticides (	µg/kg or ppb)				
Aldrin	5.0	680.0	ND (170)	ND (50)	ND (50)	ND (50)	ND (50)	ND (170)
alpha-BHC	20.0	3,400	ND (170)	ND (50)	56.0	ND (50)	ND (50)	ND (170)
delta-BHC	40.0	500,000	ND (170)	ND (50)	ND (50)	ND (50)	ND (50)	ND (170)
gamma-BHC (Lindane)	100.0	9,200	ND (170)	ND (50)	ND (50)	ND (50)	ND (50)	ND (170)
Chlordane	94.0	24,000	ND (340)	ND (100)	ND (100)	ND (100)	ND (100)	ND (340)
4,4'-DDD	3.3	92,000	490.0	ND (100)	ND (100)	ND (100)	970.0	2,400
4,4'-DDE	3.3	62,000	5,600	ND (100)	ND (100)	ND (100)	120.0	ND (340)
4,4'-DDT	3.3	47,000	1,500	ND (100)	ND (100)	ND (100)	890.0	3,000
Dieldrin	5.0	1,400	ND (340)	ND (100)	ND (100)	ND (100)	ND (100)	ND (340)
Endosulfan (I)	2,400	200,000	ND (170)	ND (50)	ND (50)	ND (50)	ND (50)	ND (170)
Endosulfan (II)	2,400	200,000	ND (340)	ND (100)	ND (100)	ND (100)	ND (100)	ND (340)
Endrin	14.0	89,000	ND (340)	ND (100)	ND (100)	ND (100)	ND (100)	440.0
Endrin Ketone	NC	NC	ND (340)	ND (100)	ND (100)	ND (100)	ND (100)	ND (340)
Heptachlor	42.0	15,000	ND (170)	ND (50)	ND (50)	ND (50)	ND (50)	ND (170)
Methoxychlor	NS	100,000 **	ND (1,700)	ND (500)	ND (500)	ND (500)	ND (500)	ND (1,700)
			Herbicides	(µg/kg or ppb)				
2,4-D	NC	100,000 **	NA	NA	NA	NA	NA	NA
2,4,5-TP (Silvex)	3,800	500,000	"	"	"	"	"	"
2,4,5-T	NC	100,000 **	"	"	"	"	"	"
	·		PCBs (µį	g/kg or ppb)				
PCBs (Total)	12,000	500,000	ND (1,000)	ND (1,000)	ND (1,000)	ND (1,000)	ND (1,000)	ND (1,000)
			Metals (m	g/kg or ppm)				
Aluminum	NC	10,000 •	2,400	1,700	1,400	3,700	3,700	2,800
Arsenic	13.0	16.0	2.8	4.9	31.0	1.5	7.4	5.3
Beryllium ∎	7.2	590.0	ND (0.2)	ND (0.2)	ND (0.2)	0.23	ND (0.2)	ND (0.2)
Cadmium	2.5	9.3	0.40	1.2	0.55	1.3	1.2	0.78



Department of Environmental Conservation

Sample Number	NYSDEC	NYSDEC	CONF-1	CONF-2	CONF-3	CONF-4	CONF-5	CONF-6
Date Sampled	Part 375	Part 375	11/15/00	11/15/00	11/15/00	12/14/00	12/14/00	12/14/00
Sample Depth	Unrestricted	Commercial	1.5'	1.5'	1.5'	NR	NR	NR
Sample Location	SCO *	SCO *	Barren Strip	Barren Strip	Barren Strip	Ponded Water	Low pH Trough	Low pH Trough
			Metals (	(continued)				
Chromium	30.0	1,500	3.0	2.3	1.7	4.9	6.3	4.5
Cobalt	NC	30 **	ND (1)	ND (1)	3.4	3.4	3.7	2.3
Copper	50.0	270.0	6.2	3.2	280.0	21.0	19.0	22.0
Iron	NC	2,000 **	2,400	7,100	1,500	6,300	5,500	3,300
Lead ■	63.0	1,000	6.3	4.0	5.3	2.4	9.8	12.0
Manganese	1,600	10,000	31.0	13.0	19.0	380.0	210.0	140.0
Mercury	0.18	2.8	0.23	0.19	ND (0.1)	ND (0.1)	0.18	0.64
Nickel	30.0	310.0	ND (2)	ND (2)	5.3	6.6	6.8	4.6
Vanadium	NC	100 **	5.3	7.8	2.8	7.5	7.7	4.9
Zinc ∎	109.0	10,000	4.3	1.9	13.0	14.0	14.0	23.0

Notes:

\* = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted and Commercial Soil Cleanup Objectives, NYSDEC, 2006.

\*\* = Residential soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

• = Protection of ecological resources soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

**=** Environmental Protection Agency priority pollutant metal.

NA = Not analyzed.

NC = No criteria.

ND = Indicates that the compound was not detected at the method detection limit specified in parentheses.

SCO = Soil cleanup objective.

Yellow shaded values exceed the 6 NYCRR Part 375 Unrestricted Soil Cleanup Objectives for arsenic.

Grey shaded values exceed the Commissioner's Policy CP-51 Residential Use Soil Cleanup Objectives.

Orange shaded values exceed the 6 NYCRR Part 375 Commercial Use Soil Cleanup Objectives.

# Table 2-8B Analytical Results for EPA Confirmatory Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Sample Number	NYSDEC	NYSDEC	CONF-7	CONF-8	CONF-9	CONF-10	CONF-11	
Date Sampled	Part 375	Part 375	05/15/01	05/15/01	05/15/01	06/25/01	06/25/01	
Sample Depth	Unrestricted	Commercial		2.0'	2.0'	NR	NR	
Sample Location	SCO *	SCO *	Drainage Ditch	Prod. Bldg.	Prod. Bldg.	North Lagoon	North Lagoon	
	1		Pesticiaes (	µg/kg or ppb)		1		
Aldrin	5.0	680.0	NA	NA	NA	ND (1.4)	ND (1)	
alpha-BHC	20.0	3,400		"	"	ND (1.4)	ND (1)	
delta-BHC	40.0	500,000	"	"	"	ND (1.4)	ND (1)	
gamma-BHC (Lindane)	100.0	9,200		"	"	ND (1.4)	ND (1)	
Chlordane	94.0	24,000	"	"	"	ND (28)	ND (20)	
4,4'-DDD	3.3	92,000	"	"	"	10.0	ND (6)	
4,4'-DDE	3.3	62,000	"	"	"	3.3	ND (2)	
4,4'-DDT	3.3	47,000	"	"		ND (8.3)	ND (6)	
Dieldrin	5.0	1,400		"		ND (2.8)	ND (2)	
Endosulfan (I)	2,400	200,000	"	"	"	ND (2.8)	ND (2)	
Endosulfan (II)	2,400	200,000	"	"	"	ND (2.8)	ND (2)	
Endrin	14.0	89,000	"	"	"	ND (2.8)	ND (2)	
Endrin Ketone	NC	NC	"	"	"	NA	NA	
Heptachlor	42.0	15,000	"	"	"	ND (1.4)	ND (1)	
Methoxychlor	NS	100,000 **	"	"	"	ND (28)	ND (20)	
			Herbicides	(µg/kg or ppb)				
2,4-D	NC	100,000 **	NA	NA	NA	ND (5,000)	ND (5,000)	
2,4,5-TP (Silvex)	3,800	500,000	"	"	"	ND (5,000)	ND (5,000)	
2,4,5-T	NC	100,000 **	"	"	"	ND (5,000)	ND (5,000)	
			PCBs (µ	g/kg or ppb)				
PCBs (Total)	12,000	500,000	NA	NA	NA	NA	NA	
			Metals (m	g/kg or ppm)				
Aluminum	NC	10,000 •	6,800	3,400	1,300	6,200	7,400	
Arsenic	13.0	16.0	3.4	8.3	17.0	4.7	2.4	
Beryllium ∎	7.2	590.0	0.35	ND (0.2)	ND (0.2)	ND (0.28)	0.36	
Cadmium	2.5	9.3	0.23	0.56	0.43	0.28	0.36	



Department of Environmental Conservation

Sample Number Date Sampled	NYSDEC Part 375	NYSDEC Part 375	CONF-7 05/15/01	CONF-8 05/15/01	CONF-9 05/15/01	CONF-10 06/25/01	CONF-11 06/25/01				
Sample Depth	Unrestricted	Commercial	NR	2.0'	2.0'	NR	NR				
Sample Location	SCO *	SCO *	Drainage Ditch	Prod. Bldg.	Prod. Bldg.	North Lagoon	North Lagoon				
Metals (continued)											
Chromium	30.0	1,500	9.3	20.0	2.0	9.1	11.0				
Cobalt	NC	30 **	8.4	5.9	3.0	3.2	6.1				
Copper	50.0	270.0	290.0	32.0	160.0	36.0	34.0				
Iron	NC	2,000 **	17,000	12,000	5,200	9,000	14,000				
Lead	63.0	1,000	12.0	21.0	15.0	7.8	7.6				
Manganese	1,600	10,000	1,800	70.0	53.0	220.0	360.0				
Mercury	0.18	2.8	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.138)	ND (0.1)				
Nickel	30.0	310.0	8.3	12.0	ND (2.5)	7.8	12.0				
Vanadium	NC	100 **	12.0	43.0	3.6	15.0	19.0				
Zinc ■	109.0	10,000	84.0	820.0	29.0	23.0	35.0				

Notes:

\* = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted and Commercial Soil Cleanup Objectives, NYSDEC, 2006.

\*\* = Residential soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

• = Protection of ecological resources soil cleanup objective from Commissioner's Policy CP-51 entitled "Soil Cleanup Guidance", NYSDEC, 2010.

**=** Environmental Protection Agency priority pollutant metal.

NA = Not analyzed.

NC = No criteria.

ND = Indicates that the compound was not detected at the method detection limit specified in parentheses.

SCO = Soil cleanup objective.

Yellow shaded values exceed the 6 NYCRR Part 375 Unrestricted Soil Cleanup Objectives for arsenic.

Grey shaded values exceed the Commissioner's Policy CP-51 Residential Use Soil Cleanup Objectives.

Orange shaded values exceed the 6 NYCRR Part 375 Commercial Use Soil Cleanup Objectives.



Sample Number	NYSDEC	NYSDEC	F-1	F-2	W-1	W-2	W-3	F-3
Date Sampled	Part 375	Part 375	02/26/14	02/26/14	02/26/14	02/26/14	02/26/14	02/26/14
Sample Depth	Unrestricted	Commercial	≈ 3'	≈ 3'	≈1 <b>.5'</b>	≈ <b>1.5'</b>	≈ <b>1.5'</b>	≈ 2'
Sample Location	SCO *	SCO *	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area
			Metals (mg/k	kg or ppm)				
Arsenic	13.0	16.0	4.9	3.7	4.3	3.9	21.0	4.2

Sample Number	NYSDEC	NYSDEC	W-4	F-5	F-6	W-5	<b>F-7</b>	F-8			
Date Sampled	Part 375	Part 375	02/26/14	02/28/14	02/28/14	02/28/14	02/28/14	02/28/14			
Sample Depth	Unrestricted	Commercial	≈1'	≈ 2'	≈ 3'	≈ <b>1.5</b> '	≈ <b>5'</b>	≈ 5'			
Sample Location	SCO *	SCO *	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area			
	Metals (mg/kg or ppm)										
Arsenic	13.0	16.0	7.3	3.1	3.2	4.9	4.2	3.3			

Sample Number	NYSDEC	NYSDEC	W-6	W-7	F-9	F-10	W-9	W-10		
Date Sampled	Part 375	Part 375	03/03/14	03/03/14	03/03/14	03/03/14	03/03/14	03/03/14		
Sample Depth	Unrestricted	Commercial	≈1'	≈1'	≈ 2'	≈ 2'	≈1'	≈1'		
Sample Location	SCO *	SCO *	Arsenic Area							
Metals (mg/kg or ppm)										
Arsenic	13.0	16.0	3.1	3.2	5.8	4.3	4.1	3.4		

Sample Number	NYSDEC	NYSDEC	F-11	F-12	W-11	W-12	W-13	F-13		
Date Sampled	Part 375	Part 375	03/03/14	03/03/14	03/03/14	03/03/14	03/03/14	03/03/14		
Sample Depth	Unrestricted	Commercial	≈ 2'	≈ 2'	≈ <b>1.5</b> '	≈ <b>1.5</b> ′	≈ 1.5'	≈ 3'		
Sample Location	SCO *	SCO *	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area		
Metals (mg/kg or ppm)										
Arsenic	13.0	16.0	5.0	2.8	3.7	5.2	4.2	4.7		

# Table 2-8C Analytical Results for NYSDEC Confirmatory Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Sample Number	NYSDEC	NYSDEC	F-14	W-14	W-15	F-15	W-16	F-16			
Date Sampled	Part 375	Part 375	03/03/14	03/03/14	03/03/14	03/03/14	03/03/14	03/04/14			
Sample Depth	Unrestricted	Commercial	≈ 3'	≈ <b>1.5'</b>	≈ <b>1.5</b> '	≈ 3'	≈ <b>1.5'</b>	≈ 5'			
Sample Location	SCO *	SCO *	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area			
Metals (mg/kg or ppm)											
Arsenic	13.0	16.0	3.7	4.8	4.3	3.5	5.6	6.1			

Sample Number	NYSDEC	NYSDEC	F-17	F-18	F-19	F-20	F-21	W-17			
Date Sampled	Part 375	Part 375	03/04/14	03/04/14	03/04/14	03/04/14	03/04/14	03/04/14			
Sample Depth	Unrestricted	Commercial	≈ <b>5'</b>	≈ 3'	≈ 3'	≈ 2'	≈ 2'	≈1'			
Sample Location	SCO *	SCO *	Arsenic Area								
	Metals (mg/kg or ppm)										
Arsenic	13.0	16.0	5.4	5.6	11.0	6.2	6.6	21.0			

Sample Number	NYSDEC	NYSDEC	F-4R	F-22	F-23	F-24	F-25	F-26		
Date Sampled	Part 375	Part 375	03/04/14	03/04/14	03/04/14	03/05/14	03/05/14	03/05/14		
Sample Depth	Unrestricted	Commercial	≈ 2.5'	≈ <b>5'</b>	≈ <b>5'</b>	≈ 2'	≈ 2'	≈ 3'		
Sample Location	SCO *	SCO *	Arsenic Area							
Metals (mg/kg or ppm)										
Arsenic	13.0	16.0	5.2	5.7	7.0	6.7	5.4	7.7		

Sample Number	NYSDEC	NYSDEC	F-27	W-18	W-19	W-20	W-21	W-22		
Date Sampled	Part 375	Part 375	03/05/14	03/05/14	03/05/14	03/05/14	03/05/14	03/05/14		
Sample Depth	Unrestricted	Commercial	≈ 3'	≈1'	≈1'	≈1'	≈1'	≈ <b>1.5'</b>		
Sample Location	SCO *	SCO *	Arsenic Area							
Metals (mg/kg or ppm)										
Arsenic	13.0	16.0	5.2	4.1	3.2	3.3	4.8	4.0		



Sample Number	NYSDEC	NYSDEC	W-23	W-24	F-28	W-25	F-29	W-26			
Date Sampled	Part 375	Part 375	03/05/14	03/05/14	03/05/14	03/05/14	03/07/14	03/07/14			
Sample Depth	Unrestricted	Commercial	≈1.5'	≈ <b>1.5'</b>	≈ 3'	≈ <b>2.5'</b>	≈ 5'	≈ <b>2.5'</b>			
Sample Location	SCO *	SCO *	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area			
Metals (mg/kg or ppm)											
Arsenic	13.0	16.0	4.1	3.0	4.1	3.4	6.7	5.0			

Sample Number	NYSDEC	NYSDEC	W-27	W-28	F-30	F-31	W-29	<b>F-32</b>
Date Sampled	Part 375	Part 375	03/07/14	03/07/14	03/07/14	03/07/14	03/07/14	03/10/14
Sample Depth	Unrestricted	Commercial	≈ <b>2.5</b> '	≈1'	≈ 2'	≈ 2'	≈1'	≈ 5'
Sample Location	SCO *	SCO *	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area
			Metals (mg/k	g or ppm)				
Arsenic	13.0	16.0	8.9	5.0	5.6	5.1	5.8	8.1

Sample Number	NYSDEC	NYSDEC	F-33	W-30	W-31	W-32	W-33	F-34		
Date Sampled	Part 375	Part 375	03/10/14	03/10/14	03/10/14	03/10/14	03/10/14	03/10/14		
Sample Depth	Unrestricted	Commercial	≈ 5'	≈ <b>2.5'</b>	≈ 2.5'	≈ <b>2.5'</b>	≈ 2.5'	≈ 3'		
Sample Location	SCO *	SCO *	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area		
	Metals (mg/kg or ppm)									
Arsenic	13.0	16.0	7.5	9.3	4.2	8.9	7.7	6.6		

Sample Number	NYSDEC	NYSDEC	F-35	W-34	F-36	<b>F-37</b>	W-36	W-37			
Date Sampled	Part 375	Part 375	03/10/14	03/10/14	03/10/14	03/10/14	03/10/14	03/10/14			
Sample Depth	Unrestricted	Commercial	≈ 3'	≈ <b>1.5'</b>	≈ 5 <b>'</b>	≈ 5'	≈ 2.5'	≈ 2.5'			
Sample Location	SCO *	SCO *	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area			
	Metals (mg/kg or ppm)										
Arsenic	13.0	16.0	10.0	7.9	5.4	5.8	4.4	4.8			

# Table 2-8C Analytical Results for NYSDEC Confirmatory Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Sample Number	NYSDEC	NYSDEC	F-38	F-39	W-38	W-39	W-40	F-40		
Date Sampled	Part 375	Part 375	03/11/14	03/11/14	03/11/14	03/11/14	03/11/14	03/11/14		
Sample Depth	Unrestricted	Commercial	≈ 3'	≈ 3'	≈1.5 <b>'</b>	≈ <b>1.5'</b>	≈ <b>1.5</b> '	≈ 3'		
Sample Location	SCO *	SCO *	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area		
	Metals (mg/kg or ppm)									
Arsenic	13.0	16.0	9.2	5.7	5.5	5.4	6.2	6.2		

Sample Number	NYSDEC	NYSDEC	W-41	W-42	W-43	W-44	F-41	F-42
Date Sampled	Part 375	Part 375	03/11/14	03/11/14	03/11/14	03/11/14	03/11/14	03/11/14
Sample Depth	Unrestricted	Commercial	≈ <b>1.5</b> '	≈ <b>1.5'</b>	≈1.5'	≈ <b>1.5</b> '	≈ 3'	≈ 3'
Sample Location	SCO *	SCO *	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area
			Metals (mg/k	g or ppm)				
Arsenic	13.0	16.0	6.0	5.8	5.9	5.7	6.2	5.5

Sample Number	NYSDEC	NYSDEC	W-45	W-46	W-47	F-43	<b>F-44</b>	W-48			
Date Sampled	Part 375	Part 375	03/11/14	03/11/14	03/11/14	03/14/14	03/14/14	03/14/14			
Sample Depth	Unrestricted	Commercial	≈ <b>1.5</b> '	≈ <b>1.5'</b>	≈ <b>1.5'</b>	≈ 3'	≈ 3'	≈ <b>1.5</b> '			
Sample Location	SCO *	SCO *	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area			
	Metals (mg/kg or ppm)										
Arsenic	13.0	16.0	6.4	5.2	5.5	5.9	6.4	9.8			

Sample Number	NYSDEC	NYSDEC	W-49	W-50	F-45	F-46	<b>F-47</b>	F-48			
Date Sampled	Part 375	Part 375	03/14/14	03/14/14	03/14/14	03/14/14	03/14/14	03/14/14			
Sample Depth	Unrestricted	Commercial	≈ <b>1.5</b> '	≈ <b>1.5</b> '	≈ 3'	≈ 3'	≈ 3'	≈ 3'			
Sample Location	SCO *	SCO *	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area			
	Metals (mg/kg or ppm)										
Arsenic	13.0	16.0	6.2	6.8	7.3	7.2	7.1	6.0			



Sample Number	NYSDEC	NYSDEC	F-49	F-50	W-51	F-51	F-52	W-52				
Date Sampled	Part 375	Part 375	03/17/14	03/17/14	03/17/14	03/17/14	03/17/14	03/17/14				
Sample Depth	Unrestricted	Commercial	≈ 3'	≈ 3'	≈1 <b>.5'</b>	≈ <b>5'</b>	≈ 5'	≈ <b>2.5'</b>				
Sample Location	SCO *	SCO *	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area				
	Metals (mg/kg or ppm)											
Arsenic	13.0	16.0	3.7	4.0	4.9	3.8	3.9	4.4				

Sample Number	NYSDEC	NYSDEC	W-53	W-54	F-53	F-54	W-55	W-56
Date Sampled	Part 375	Part 375	03/17/14	03/17/14	03/18/14	03/18/14	03/18/14	03/18/14
Sample Depth	Unrestricted	Commercial	≈ <b>2.5</b> '	≈ <b>1.5</b> '	≈ 3'	≈ 3'	≈ <b>1.5'</b>	≈ <b>1.5</b> ′
Sample Location	SCO *	SCO *	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area	Arsenic Area
		Metals (mg/kg or ppm)						
Arsenic	13.0	16.0	5.5	2.5	3.9	3.5	4.7	3.5

Sample Number	NYSDEC	NYSDEC	F-55	F-56	W-57	W-58	F-57	F-58	
Date Sampled	Part 375	Part 375	03/18/14	03/18/14	03/18/14	03/18/14	03/18/14	03/18/14	
Sample Depth	Unrestricted	Commercial	≈ 5'	≈ 5'	≈ 2.5'	≈ 2.5'	≈ 2'	≈ 2'	
Sample Location	SCO *	SCO *	Arsenic Area						
		Metals (mg/kg or ppm)							
Arsenic	13.0	16.0	3.4	4.0	3.9	3.4	5.0	3.5	

Sample Number	NYSDEC	NYSDEC	W-59	W-60	W-61	W-62	W-63		
Date Sampled	Part 375	Part 375	03/18/14	03/18/14	03/18/14	03/18/14	03/18/14		
Sample Depth	Unrestricted	Commercial	≈1'	≈1'	≈1'	≈1'	≈1'		
Sample Location	SCO *	SCO *	Arsenic Area						
Metals (mg/kg or ppm)									
Arsenic	13.0	16.0	4.9	2.9	4.1	4.2	3.7		



Notes:

\* = 6 NYCRR Part 375: Environmental Remediation Programs, Unrestricted and Commercial Soil Cleanup Objectives, NYSDEC, 2006.

**=** Environmental Protection Agency priority pollutant metal.

SCO = Soil cleanup objective.

Yellow shaded values exceed the 6 NYCRR Part 375 Unrestricted Soil Cleanup Objectives for arsenic.

Orange shaded values exceed the 6 NYCRR Part 375 Commercial Use Soil Cleanup Objective for arsenic.



Sample Number Date Sampled	1	NYSDEC Sedin	ment Criteria	*	SED-1 06/21/00	SED-2 06/21/00	SED-5 12/14/00	SED-6 09/03/03
Sample Depth Sample Location	Class A	Class B	Class C	PAH or Wildlife Bioaccum- ulation **	NR Boundary Ditch Downstream of Trough	NR Boundary Ditch Upstream of Trough	NR Boundary Ditch East of 90 <sup>0</sup> Bend	0.0' - 0.08' Boundary Ditch at Road
		S	emivolatile O	rganic Compo	unds (µg/kg or ppb)			
Benzo[a]anthracene (PAH)	NC	NC	NC	16,820	NA	NA	ND (330)	200 J
Benzo[a]pyrene (PAH)	NC	NC	NC	19,280	"	"	ND (330)	170 J
Benzo[b]fluoranthene (PAH)	NC	NC	NC	19,580	"	"	ND (330)	180 J
Benzo[g,h,i]perylene (PAH)	NC	NC	NC	21,900	"	"	ND (330)	120 J
Benzo[k]fluoranthene (PAH)	NC	NC	NC	19,600	"	"	ND (330)	120 J
Bis[2-ethylhexyl]phthalate	NC	NC	NC	NC	"	"	ND (330)	ND (2,100)
Chrysene (PAH)	NC	NC	NC	16,860	"	"	ND (330)	220 J
Di-n-butylphthalate	NC	NC	NC	NC	"	"	750.0	ND (2,100)
Fluoranthene (PAH)	NC	NC	NC	14,160	"	"	ND (330)	550 J
Indeno[1,2,3-cd]pyrene (PAH)	NC	NC	NC	22,300	"	"	ND (330)	100 J
Phenanthrene (PAH)	NC	NC	NC	11,940	"	"	ND (330)	450 J
Pyrene (PAH)	NC	NC	NC	13,960	"	"	ND (330)	440 J
			Pes	ticides (µg/kg	or ppb)			
Aldrin	NC	NC	NC	1.1	NA	NA	ND (50)	ND (40)
alpha-BHC	NC	NC	NC	21.0	"	"	ND (50)	ND (40)
delta-BHC	NC	NC	NC	21.0	"	"	ND (50)	ND (40)
gamma-BHC (Lindane)	< 47	47 - 78	> 78	21.0	"	"	ND (50)	ND (40)
Chlordane	< 68	68 - 38,000	> 38,000	7.6	"	"	ND (100)	ND (200)
4,4'-DDD	NC	NC	NC	NC	"	"	100.0	7 J
4,4'-DDE	NC	NC	NC	NC	"	"	ND (100)	28 J
4,4'-DDT	< 44	44 - 48,000	> 48,000	0.48	"	"	ND (100)	7.5 J
Dieldrin	< 180	180 - 780	> 780	1.1	"	"	ND (100)	ND (80)
Endosulfan (I)	< 1	1 - 20	> 20	NC	"	"	ND (50)	ND (80)
Endosulfan (II)	< 1	1 - 20	> 20	NC	"	"	ND (100)	ND (80)
Endosulfan Sulfate	NC	NC	NC	NC	"	"	ND (100)	ND (80)



Sample Number Date Sampled	1	NYSDEC Sedin	ment Criteria	*	SED-1 06/21/00	SED-2 06/21/00	SED-5 12/14/00	SED-6 09/03/03			
Sample Depth Sample Location	Class A	Class B	Class C	PAH or Wildlife Bioaccum- ulation **	NR Boundary Ditch Downstream of Trough	NR Boundary Ditch Upstream of Trough	NR Boundary Ditch East of 90 <sup>0</sup> Bend	0.0' - 0.08' Boundary Ditch at Road			
			Р	esticides (cont	inued)						
Endrin	< 90	90 - 220	> 220	1.4	NA	NA	ND (100)	ND (80)			
Endrin Ketone	NC	NC	NC	NC	"	"	ND (100)	ND (80)			
Heptachlor	< 75	75 - 10,000	> 10,000	5.2	"	"	ND (50)	ND (40)			
Methoxychlor	< 59	> 59	NC	NC	"	"	ND (500)	ND (400)			
			Her	bicides (µg/kg	or ppb)						
2,4-D	NC	NC	NC	NC	2.5 JBP	8.7 B	NA	ND (1000)			
2,4,5-TP (Silvex)	NC	NC	NC	NC	0.39 JBP	0.22 JBP	"	ND (400)			
2,4,5-T	NC	NC	NC	NC	0.95 JBP	1.2 JBP	"	ND (400)			
PCBs (µg/kg or ppb)											
PCBs (Total)	< 100	100 - 1,000	> 1,000	4.1	NA	NA	ND (1,000)	NA			
			М	etals (mg/kg o	r ppm)						
Aluminum	NC	NC	NC	NC	6,340	6,160	6,400	11,300			
Arsenic	< 10	10 - 33	> 33	NC	23.5 N	22.1 N	23.0	5.5			
Beryllium ■	NC	NC	NC	NC	0.25 B	0.33 B	0.27	0.59 B			
Cadmium ■	< 1	1 - 5	> 5	NC	ND (0.032)	ND (0.034)	1.1	ND (0.04)			
Chromium	< 43	43 - 110	> 110	NC	11.2	69.6	16.0	13.7			
Cobalt	NC	NC	NC	NC	3.9	4.5	2.0	6.5 B			
Copper	< 32	32 - 150	> 150	NC	65.8 N	53.4 N	27.0	18.6 N			
Iron	NC	NC	NC	NC	14,900	15,300	5,100	15,500			
Lead	< 36	36 - 130	> 130	NC	15.5 N	314 N	22.0	48.9			
Manganese	NC	NC	NC	NC	326 N	309 N	48.0	563.0			
Mercury ■	< 0.2	0.2 - 1	> 1	NC	0.27 N	0.19 N	0.51	0.025 B			
Nickel	< 23	23 - 49	> 49	NC	10.1	10.4	5.6	16.2			
Vanadium	NC	NC	NC	NC	17.7	17.2	16.0	19.2			
Zinc	< 120	120 - 460	>460	NC	54.7	83.9	21.0	106 E			



Department of Environmental Conservation

Sample Number Date Sampled	NYSDEC Sediment Criteria *				SED-1 06/21/00	SED-2 06/21/00	SED-5 12/14/00	SED-6 09/03/03		
Sample Depth				PAH or	NR	NR	NR	0.0' - 0.08'		
Sample Location	Class	Class	Class	Wildlife	<b>Boundary Ditch</b>	<b>Boundary Ditch</b>	<b>Boundary Ditch</b>	<b>Boundary Ditch</b>		
	Α	В	С	Bioaccum-	Downstream	Upstream	East of 90 <sup>0</sup>	at Road		
				ulation **	of Trough	of Trough	Bend			
Miscellaneous Compounds (mg/kg or ppm)										
Sulfur	NC	NC	NC	NC	2,530	2,260	NA	NA		
Boron	NC	NC	NC	NC	30.6	25.2	"	5.1 B		
Leachable pH (pH units)	NC	NC	NC	NC	NA	NA	"	6.86		

#### Notes:

- \* = Screening and Assessment of Contaminated Sediment, NYSDEC, 2014.
- \*\* = Sediment criteria using the default total organic carbon content of 2%. Sediment criteria for PAHs are from Table 7 of the NYSDEC screening document, while wildlife bioaccumulation criteria are from Table 8.
- **=** Environmental Protection Agency priority pollutant metal.
- B = Analyte detected in the associated blank, as well as in the sample (organics); value is greater than or equal to the instrument detection limit, but less than the contract required detection limit (inorganics).
- **E** = Estimated concentration due to the presence of interference (inorganics).
- J = Compound is positively identified and reported at an estimated concentration below the reporting limit.
- N = Spike sample recovery is not within the quality control limits.
- NA = Not analyzed.
- NC = No criteria.
- ND = Indicates that the compound was not detected at the method detection limit specified in parentheses.
- P = >25% difference between the analytical results on two GC columns. The lower value is reported.
- **PAH = Polycyclic aromatic hydrocarbon.**
- SCO = Soil cleanup objective.
- Unshaded values are Class A sediments (sediments are considered to be of low risk to aquatic life) or do not exceed the PAH or Wildlife Bioaccumulation sediment criteria.
- Purple shaded values are Class B sediments (sediments are slightly to moderately contaminated and additional testing is required to evaluate the potential risks to aquatic life).
- Yellow shaded values are Class C sediments (sediments are considered to be highly contaminated and likely to pose a risk to aquatic life). Orange shaded values exceed the PAH or Wildlife Bioaccumulation sediment criteria.



Sample Number Date Sampled	I	NYSDEC Sedin	ment Criteria	*	SED-7 03/03/09	SED-8 03/03/09	SED-11 03/03/09			
Sample Depth Sample Location	Class A	Class B	Class C	PAH or Wildlife Bioaccum- ulation **	0.0' - 0.17' Boundary Ditch at 90 <sup>0</sup> Bend	0.17' - 0.33' Historic Ditch	0.0' - 0.17' Ponded Water Area			
Semivolatile Organic Compounds (µg/kg or ppb)										
Benzo[a]anthracene (PAH)	NC	NC	NC	16,820	25 J	13 J	ND (2,800)			
Benzo[a]pyrene (PAH)	NC	NC	NC	19,280	33 J	13 J	ND (2,800)			
Benzo(b)fluoranthene (PAH)	NC	NC	NC	19,580	17 J	16 J	ND (2,800)			
Benzo(g,h,i)perylene (PAH)	NC	NC	NC	21,900	16 J	ND (440)	ND (2,800)			
Benzo(k)fluoranthene (PAH)	NC	NC	NC	19,600	28 J	ND (440)	ND (2,800)			
Bis(2-ethylhexyl)phthalate	NC	NC	NC	NC	16 J	14 J	ND (2,800)			
Chrysene (PAH)	NC	NC	NC	16,860	38 J	16 J	ND (2,800)			
Di-n-butylphthalate	NC	NC	NC	NC	ND (440)	ND (440)	ND (2,800)			
Fluoranthene (PAH)	NC	NC	NC	14,160	56 J	33 J	140 J			
Indeno(1,2,3-cd)pyrene (PAH)	NC	NC	NC	22,300	13 J	ND (440)	ND (2,800)			
Phenanthrene (PAH)	NC	NC	NC	11,940	38 J	21 J	110 J			
Pyrene (PAH)	NC	NC	NC	13,960	66 J	26 J	100 J			
			Pes	ticides (µg/kg	or ppb)					
Aldrin	NC	NC	NC	1.1	ND (86)	ND (42)	ND (130)			
alpha-BHC	NC	NC	NC	21.0	ND (86)	ND (42)	ND (130)			
delta-BHC	NC	NC	NC	21.0	15 J	ND (42)	ND (130)			
gamma-BHC (Lindane)	< 47	47 - 78	> 78	21.0	ND (86)	ND (42)	ND (130)			
Chlordane	< 68	68 - 38,000	> 38,000	7.6	34 J	ND (210)	ND (670)			
4,4'-DDD	NC	NC	NC	NC	390	8 J	220 J			
4,4'-DDE	NC	NC	NC	NC	57 J	21 J	47 J			
4,4'-DDT	< 44	44 - 48,000	> 48,000	0.48	50 J	8.7 J	250 J			
Dieldrin	< 180	180 - 780	> 780	1.1	ND (170)	ND (85)	ND (270)			
Endosulfan (I)	< 1	1 - 20	> 20	NC	ND (170)	ND (85)	ND (270)			
Endosulfan (II)	< 1	1 - 20	> 20	NC	17 J	ND (85)	ND (270)			
Endosulfan Sulfate	NC	NC	NC	NC	23 J	ND (85)	ND (270)			



Sample Number Date Sampled	NYSDEC Sediment Criteria *				SED-7 03/03/09	SED-8 03/03/09	SED-11 03/03/09	
Sample Depth Sample Location	Class A	Class B	Class C	PAH or Wildlife Bioaccum- ulation **	0.0' - 0.17' Boundary Ditch at 90 <sup>0</sup> Bend	0.17' - 0.33' Historic Ditch	0.17' - 0.33' 0.0' - 0.17' Historic Ditch Ponded Water Area	
			P	esticides (cont	inued)			
Endrin	< 90	90 - 220	> 220	1.4	ND (170)	ND (85)	ND (270)	
Endrin Ketone	NC	NC	NC	NC	ND (170)	ND (85)	ND (270)	
Heptachlor	< 75	75 - 10,000	> 10,000	5.2	ND (86)	ND (42)	ND (130)	
Methoxychlor	< 59	> 59	NC	NC	ND (860)	ND (420)	ND (1300)	
			Her	bicides (µg/kg	or ppb)			
2,4-D	NC	NC	NC	NC	ND (1100)	ND (1000)	ND (1300)	
2,4,5-TP (Silvex)	NC	NC	NC	NC	ND (430)	ND (420)	ND (540)	
2,4,5-T	NC	NC	NC	NC	ND (430)	ND (420)	ND (540)	
			F	PCBs (µg/kg or	. ppb)			
PCBs (Total)	< 100	100 - 1,000	> 1,000	4.1	NA	NA	NA	
			М	etals (mg/kg o	r ppm)			
Aluminum	NC	NC	NC	NC	7,820	12,000	7,860	
Arsenic	< 10	10 - 33	> 33	NC	53.0	8.4	33.3	
Beryllium ■	NC	NC	NC	NC	0.23 B	0.63 B	0.40 B	
Cadmium ■	< 1	1 - 5	> 5	NC	ND (0.04)	ND (0.04)	ND (0.05)	
Chromium	< 43	43 - 110	> 110	NC	17.8	11.3	7.8	
Cobalt	NC	NC	NC	NC	2.6 B	3.8 B	2.9 B	
Copper	< 32	32 - 150	> 150	NC	27.9 N	15.8 N	114 N	
Iron	NC	NC	NC	NC	10,100	9,590	13,100	
Lead	< 36	36 - 130	>130	NC	34.1	57.8	19.5	
Manganese	NC	NC	NC	NC	55.8	75.5	122.0	
Mercury	< 0.2	0.2 - 1	> 1	NC	0.037 B	0.05	ND (0.021)	
Nickel	< 23	23 - 49	> 49	NC	7.0	11.7	8.7	
Vanadium	NC	NC	NC	NC	22.7	18.0	14.6	
Zinc	< 120	120 - 460	>460	NC	28.2 E	60.7 E	35.3 E	



Department of Environmental Conservation

Sample Number Date Sampled	NYSDEC Sediment Criteria *				SED-7 03/03/09	SED-8 03/03/09	SED-11 03/03/09			
Sample Depth Sample Location	Class A	Class B	Class C	PAH or Wildlife Bioaccum- ulation **	0.0' - 0.17' Boundary Ditch at 90 <sup>0</sup> Bend	0.17' - 0.33' Historic Ditch	- 0.33' 0.0' - 0.17' ric Ditch Ponded Water Area			
	Miscellaneous Compounds (mg/kg or ppm)									
Sulfur	NC	NC	NC	NC	NA	NA	670			
Boron	NC	NC	NC	NC	3.6 B	1.9 B	3.4 B			
Leachable pH (pH units)	NC	NC	NC	NC	4.35	4.45	3.80			

#### Notes:

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- \*\* = Sediment criteria using the default total organic carbon content of 2%. Sediment criteria for PAHs are from Table 7 of the NYSDEC screening document, while wildlife bioaccumulation criteria are from Table 8.
- **=** Environmental Protection Agency priority pollutant metal.
- B = Analyte detected in the associated blank, as well as in the sample (organics); value is greater than or equal to the instrument detection limit, but less than the contract required detection limit (inorganics).
- **E** = Estimated concentration due to the presence of interference (inorganics).
- J = Compound is positively identified and reported at an estimated concentration below the reporting limit.
- N = Spike sample recovery is not within the quality control limits.
- NA = Not analyzed.
- NC = No criteria.
- ND = Indicates that the compound was not detected at the method detection limit specified in parentheses.
- P = >25% difference between the analytical results on two GC columns. The lower value is reported.
- **PAH = Polycyclic aromatic hydrocarbon.**
- SCO = Soil cleanup objective.
- Unshaded values are Class A sediments (sediments are considered to be of low risk to aquatic life) or do not exceed the PAH or Wildlife Bioaccumulation sediment criteria.
- Purple shaded values are Class B sediments (sediments are slightly to moderately contaminated and additional testing is required to evaluate the potential risks to aquatic life).
- Yellow shaded values are Class C sediments (sediments are considered to be highly contaminated and likely to pose a risk to aquatic life). Orange shaded values exceed the PAH or Wildlife Bioaccumulation sediment criteria.



Sample Number Date Sampled Somple Location	Surface Water Standard *	SW-7 04/30/08 Bondad	SW-8 05/01/08 North	SW-9 04/30/08	SW-1 06/13/12 Boundary	SW-2 06/13/12 North			
Sample Location	Stanuaru	Water	Lagoon	Trough	Ditch	Lagoon			
Volatile Organic Compounds (µg/L or ppb)									
Acetone	50 G	22.0	ND (5.0)	5.3	ND (5.0)	ND (5.0)			
2-Butanone	50 G	2.6 J	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)			
Carbon Disulfide	NC	2.2	ND (1.0)	0.63 J	ND (5.0)	ND (5.0)			
Toluene	5.0	ND (1.0)	0.67 J	ND (1.0)	ND (5.0)	ND (5.0)			
Semivolatile Organic Compounds (µg/L or ppb)									
Pentachlorophenol	1.0	ND (10.0)	ND (10.0)	12.0	ND (20.0)	ND (20.0)			
Phenol	1.0	ND (5.0)	ND (5.0)	5.0	ND (10.0)	ND (10.0)			
Pesticides (µg/L or ppb)									
Aldrin	0.002 G	ND (0.051)	ND (0.048)	ND (0.25)	ND (0.050)	ND (0.050)			
alpha-BHC	0.01	ND (0.051)	ND (0.048)	1.1	ND (0.050)	ND (0.050)			
beta-BHC	0.04	ND (0.051)	ND (0.048)	0.19 J	ND (0.050)	ND (0.050)			
delta-BHC	0.04	ND (0.051)	ND (0.048)	0.27	ND (0.050)	ND (0.050)			
gamma-BHC (Lindane)	0.05	ND (0.051)	0.025 J	1.2	ND (0.050)	ND (0.050)			
Chlordane	0.05	0.026 J	ND (0.048)	ND (0.25)	ND (0.050)	ND (0.050)			
4,4'-DDD	0.3	0.020 J	0.024 J	ND (0.25)	ND (0.10)	ND (0.10)			
4,4'-DDE	0.2	0.018 J	0.030 J	0.11 J	ND (0.10)	ND (0.10)			
4,4'-DDT	0.2	0.046 J	ND (0.048)	ND (0.25)	ND (0.10)	ND (0.10)			
Dieldrin	0.002 G	0.017 J	ND (0.048)	0.11 J	ND (0.10)	ND (0.10)			
Endosulfan (I)	0.009	ND (0.051)	ND (0.048)	ND (0.25)	ND (0.050)	ND (0.050)			
Endosulfan (II)	0.009	ND (0.051)	ND (0.048)	0.19 J	ND (0.10)	ND (0.10)			
Endrin	0.20	ND (0.051)	ND (0.048)	ND (0.25)	ND (0.10)	ND (0.10)			
Endrin Ketone	5.0 G	ND (0.051)	0.0095 J	0.10 J	ND (0.10)	ND (0.10)			
Heptachlor	0.04	0.028 J	0.014 J	0.086 J	ND (0.050)	ND (0.050)			
Methoxychlor	35.0	ND (0.051)	ND (0.048)	ND (0.25)	ND (0.50)	ND (0.50)			



Sample Number	Surface	SW-7	SW-8	SW-9	SW-1	SW-2				
Date Sampled	Water	04/30/08	05/01/08	04/30/08	06/13/12	06/13/12				
Sample Location	Standard *	Ponded	North	Low pH	Boundary	North				
		Water	Lagoon	Trough	Ditch	Lagoon				
	Metals (µg/L or ppb)									
Aluminum	100.0	57,400 N	1,030 N	2,970 N	340.0	4,200				
Arsenic	50.0	14.4 N	ND (10.0)	106 N	ND (4.3)	4.3 B				
Barium	1,000	15.3 N	56.8 N	61.1 N	93.1 B	56.9 B				
Beryllium ■	3.0 G	5.8 N	ND (2.0)	ND (2.0)	ND (0.26)	ND (0.26)				
Cadmium	5.0	1.6	ND (1.0)	ND (1.0)	ND (0.89)	ND (0.89)				
Calcium	NC	281,000	91,100	291,000	95,800	81,400				
Chromium	50.0	5.1 N	ND (4.0)	4.0 N	0.67 B	6.6 B				
Cobalt	5.0	92.3 N	ND (4.0)	6.9 N	0.76 B	3.4 B				
Copper ■	200.0	16.8 N	ND (10.0)	50.3 N	5.4 B	12.7 B				
Iron	300.0	104,000 N	1,520 N	17,900 N	1,090	6,490				
Lead	50.0	5.2 N	ND (5.0)	19.1 N	ND (4.2)	6.3 B				
Magnesium	35,000	68,200 E	13,100 E	102,000 E	18,800	24,400				
Manganese	300	14,100 N	476 N	2,340 N	430.0	694.0				
Mercury ■	0.7	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.028)	ND (0.028)				
Nickel	100.0	144 N	ND (10.0)	16.4 N	1.5 B	8.2 B				
Potassium	NC	3,630 EN	8,620 EN	6,820 EN	4,650	4,500				
Silver	50.0	ND (3.0)	ND (3.0)	ND (3.0)	ND (6.9)	ND (6.9)				
Sodium	NC	8,370	3,730	62,000	44,100	4,180				
Vanadium	14.0	10.8 N	ND (5.0)	ND (5.0)	ND (1.1)	7.8 B				
Zinc ■	2,000 G	260 N	11.1 N	99.3 N	7.6 B	41.8 B				
Miscellaneous Compounds (µg/L or ppb)										
Sulfate	250,000	2,600,000	118,000	1,270,000	92,000	210,000				
Sulfide	2.0	1,200	ND (1,000)	3,200	ND (30)	400.0				
pH (Standard Units)	6.5-8.5	3.30	7.02	3.21	7.17	7.07				

# Table 2-10 Analytical Results for Surface Water Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Notes:

- \* = NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998, with addenda through 2004.
- **=** Environmental Protection Agency priority pollutant metal.
- **B** = Analyte detected in the associated blank, as well as in the sample (organics); value is greater than or equal to the instrument detection limit, but less than the contract required detection limit (inorganics).
- **E** = Estimated concentration due to the presence of interference (inorganics).
- G = Guidance value.
- J = Compound is positively identified and reported at an estimated concentration below the reporting limit.
- N = Spike sample recovery is not within the quality control limits.
- NA = Not analyzed.
- NC = No criteria.
- ND = Indicates that the compound was not detected at the method detection limit specified in parentheses.
- Yellow shaded values exceed the NYSDEC surface water standards or guidance values.

Table 2-11

NEW YORK STATE OF OPPORTUNITY Summary of Surface Water pH and Temperature Measurements for 2008 Former Barker Chemical Site, Site No. 932119 Somerset, New York

Location	Date	рН	Temp	Comments					
Number			( <b>°F</b> )						
	T		Spill Area						
pH-1	04/16/08	6.81	49.1						
"	05/22/08	7.21	52.3						
"	06/25/08	NM	NM	not measured because location was dry					
pH-2	04/16/08	6.77	52.9						
"	05/22/08	7.05	54.2						
"	06/25/08	NM	NM	not measured because location was dry					
		Central Draina	ge Ditch and Lo	ow pH Trough					
pH-15	04/30/08	3.21	68.2						
"	05/22/08	3.04	57.4						
"	06/25/08	NM	NM	not measured because location was dry					
pH-3	04/16/08	5.91	55.6						
"	04/30/08	6.32	66.1						
"	05/22/08	6.53	NM						
"	06/25/08	NM	NM	not measured because location was dry					
pH-13	04/16/08	5.72	48.7						
"	05/22/08	5.31	NM						
"	06/25/08	NM	NM	not measured because location was dry					
pH-4	04/16/08	6.25	48.1						
"	05/22/08	6.55	NM						
"	06/25/08	NM	NM	not measured because location was dry					
		Por	nded Water Are	ea					
pH-5	04/16/08	3.39	49						
"	04/30/08	3.30	61						
"	05/22/08	3.48	NM						
"	06/25/08	3.18	NM						
pH-14	04/16/08	3.75	50.8						
"	04/30/08	3.30	61						
"	05/22/08	3.24	NM						
"	06/25/08	3.15	NM						
	Eastern Boundary Ditch								
pH-6	04/16/08	7.31	48.4						
"	05/22/08	7.24	NM						
"	06/25/08	6.74	NM						
pH-12	04/16/08	7.16	50.2						
"	05/22/08	7.37	NM						
"	06/25/08	6.88	NM						

Table 2-11

NEW YORK STATE OF OPPORTUNITY Summary of Surface Water pH and Temperature Measurements for 2008 5 Former Barker Chemical Site, Site No. 932119 1\_\_\_\_ Somerset, New York

Department of Environmental Conservation

Location	Date	pH	Temp	Comments					
Number			(°F)						
North Lagoon									
pH-7	04/16/08	7.01	52.1						
"	05/01/08	7.02	60.4						
"	05/22/08	7.32	NM						
"	06/25/08	7.20	NM						
pH-8	04/16/08	6.92	50.6						
"	05/22/08	7.49	NM						
"	06/25/08	6.90	NM						
pH-9	04/16/08	7.15	51.9						
"	05/22/08	7.37	NM						
"	06/25/08	7.01	NM						
pH-11	04/16/08	7.04	51.2						
"	05/22/08	7.27	NM						
"	06/25/08	7.18	NM						
	Chip Area								
pH-10	04/16/08	5.92	49.3						
"	05/22/08	7.81	NM						
"	06/25/08	NM	NM	not measured because location was dry					

Notes:

NM = Not Measured.

Yellow shaded values exceed the regulatory limit for corrosivity.

Orange shaded values are outside the acceptable limits for pH (6.5-8.5) in surface water.
## Table 2-12A Analytical Results for Groundwater Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Sample Number	Ground	MW-1	MW-2	MW-3		MW-4	MW-5	
Date Sampled	Water	04/30/08	04/30/08	04/30/08 06/15/12		04/30/08	04/30/08	06/15/12
Sample Location	Standard *	West Side	East Side	West of	90 <sup>0</sup> Bend	Filled	West of North	
		of Site	of Site	in Ea	stern	Lagoon	Lagoon	
		Near Road	Near Road	Bounda	ry Ditch			
		Volatile (	Organic Compo	unds (µg/L or p	pb)			
Acetone	50 G	ND (5.0)	ND (5.0)	92.0	NA	21.0	30.0	NA
Benzene	1.0	ND (1.0)	ND (1.0)	0.87 J	"	ND (1.0)	ND (1.0)	"
2-Butanone	50 G	ND (5.0)	ND (5.0)	59.0	"	4.9 J	12.0	"
Carbon Disulfide	NC	ND (1.0)	ND (1.0)	93.0	"	15.0	1.5	"
Chlorobenzene	5.0	ND (1.0)	ND (1.0)	ND (1.0)	"	ND (1.0)	6.5	"
cis-1,2-Dichloroethene	5.0	ND (1.0)	0.77 J	0.50 J	"	ND (1.0)	ND (1.0)	"
1,2-Dichloroethane	0.6	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (1.0)	
1,2-Dichloropropane	1.0	ND (1.0)	ND (1.0)	ND (1.0)	"	ND (1.0)	ND (1.0)	"
Ethylbenzene	5.0	ND (1.0)	ND (1.0)	ND (1.0)	-	ND (1.0)	ND (1.0)	"
Isopropylbenzene	5.0	ND (1.0)	ND (1.0)	ND (1.0)	"	ND (1.0)	ND (1.0)	"
n-Propylbenzene	5.0	NA	NA	NA	"	NA	NA	"
Toluene	5.0	ND (1.0)	0.75 J	0.60 J	"	ND (1.0)	0.59 J	"
1,2,4-Trichlorobenzene	5.0 G	ND (1.0)	0.64 J	ND (1.0)	"	ND (1.0)	ND (1.0)	"
1,2,4-Trimethylbenzene	5.0	NA	NA	NA	"	NA	NA	"
1,3,5-Trimethylbenzene	5.0	NA	NA	NA	-	NA	NA	
Xylene (Total)	5.0	ND (3.0)	ND (3.0)	ND (3.0)		ND (3.0)	ND (3.0)	"
		Semivolatil	e Organic Comj	pounds (µg/L or	: ppb)			
Acenaphthene (PAH)	20 G	NA	NA	NA	NA	ND (5.0)	NA	NA
Carbazole	NC	"	"	"	"	ND (5.0)	"	"
Dibenzofuran	NC	"	"	"	"	ND (5.0)	"	"
2,4-Dichlorophenol	5.0	"	"	"	"	ND (5.0)	"	"
Fluorene (PAH)	50 G	"	"	"	"	ND (5.0)	"	"
2-Methylnaphthalene	NC	"	"	"	"	ND (5.0)	"	"
Naphthalene (PAH)	10 G	"	"	"	"	ND (5.0)	"	"
Phenanthrene (PAH)	50 G	"	"	"	"	ND (5.0)	"	"

## Table 2-12A Analytical Results for Groundwater Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Sample Number	Ground	MW-1	MW-2	MW-3		<b>MW-4</b>	MV	N-5
Date Sampled	Water	04/30/08	04/30/08	04/30/08 06/15/12		04/30/08	04/30/08 06/15/12	
Sample Location	Standard *	West Side	East Side	West of	90 <sup>0</sup> Bend	Filled	West of North	
		of Site	of Site	in Ea	stern	Lagoon	Lagoon	
		Near Road	Near Road	Bounda	ry Ditch			
			Pesticides (µg/l	L or ppb)				
Aldrin	ND	ND (0.051)	ND (0.077)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)
alpha-BHC	0.01	ND (0.051)	ND (0.077)	0.029 J	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)
beta-BHC	0.04	ND (0.051)	ND (0.077)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)
delta-BHC	0.04	ND (0.051)	ND (0.077)	0.025 J	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)
gamma-BHC (Lindane)	0.05	ND (0.051)	ND (0.077)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)
Chlordane	0.05	0.039 J	0.025 J	0.030 J	ND (0.050)	0.038 J	0.029 J	ND (0.050)
4,4'-DDD	0.3	0.022 J	ND (0.077)	ND (0.050)	ND (0.10)	ND (0.050)	0.024 J	ND (0.10)
4,4'-DDE	0.2	0.043 J	ND (0.077)	ND (0.050)	ND (0.10)	ND (0.050)	0.028 J	ND (0.10)
4,4'-DDT	0.2	ND (0.051)	ND (0.077)	ND (0.050)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)
Dieldrin	0.004	ND (0.051)	ND (0.077)	ND (0.050)	ND (0.10)	ND (0.050)	0.028 J	ND (0.10)
Endosulfan (I)	NC	ND (0.051)	ND (0.077)	ND (0.050)	ND (0.050)	0.032 J	ND (0.050)	ND (0.050)
Endosulfan (II)	NC	ND (0.051)	ND (0.077)	ND (0.050)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)
Endrin	ND	ND (0.051)	ND (0.077)	ND (0.050)	ND (0.10)	ND (0.050)	ND (0.050)	ND (0.10)
Endrin Ketone	5.0	ND (0.051)	ND (0.077)	ND (0.050)	ND (0.10)	0.011 J	ND (0.050)	ND (0.10)
Heptachlor	0.04	ND (0.051)	ND (0.077)	0.020 J	ND (0.050)	0.016 J	ND (0.050)	ND (0.050)
Heptachlor Epoxide	0.03	0.016 J	ND (0.077)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)	ND (0.050)
Methoxychlor	35.0	ND (0.051)	ND (0.077)	ND (0.050)	ND (0.50)	ND (0.050)	ND (0.050)	ND (0.50)
			Metals (µg/L	or ppb)				
Aluminum	NC	33,000 N	64,600 N	5,460 N	NA	586 N	90,300 N	275,000
Antimony	3.0	ND (100)	ND (100)	ND (20.0)	"	ND (20.0)	ND (20.0)	ND (9.3)
Arsenic	25.0	10.9 N	31.1 N	365 N	"	10.4 N	65.2 N	202.0
Barium	1,000	482 N	798 N	234 N	"	107 N	1,090 N	2,120
Beryllium ■	3.0 G	ND (2.0)	2.7 N	3.8 N	"	ND (2.0)	6.2 N	9.6
Cadmium	5.0	2.2	1.8	ND (20.0)	"	ND (1.0)	ND (1.0)	2.6 B
Calcium	NC	238,000	508,000	6,870,000	"	663,000	4,500,000	5,760,000

#### Table 2-12A Analytical Results for Groundwater Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Sample Number	Ground	MW-1	MW-2	MW-3		MW-4	M	N-5	
Date Sampled	Water	04/30/08	04/30/08	04/30/08	06/15/12	04/30/08	04/30/08	06/15/12	
Sample Location	Standard *	West Side	East Side	West of	90 <sup>0</sup> Bend	Filled	West of North		
		of Site	of Site	in Ea	stern	Lagoon	Lagoon		
		Near Road	Near Road	Bounda	ry Ditch				
Metals (Continued)									
Chromium	50.0	96.6 N	106 N	11.8 N	NA	ND (4.0)	149 N	460.0	
Cobalt	NC	ND (4.0)	33.0 N	ND (4.0)	"	ND (4.0)	72.1 N	216.0	
Copper	200.0	85.8 N	141 N	ND (10.0)	"	ND (10.0)	218 N	953.0	
Iron	300.0	39,900 N	102,000 N	9,140 N	-	13,800 N	165,000 N	617,000	
Lead	25.0	25.8 N	29.4 N	ND (100)		ND (5.0)	45.5 N	127.0	
Magnesium	35,000 G	66,900 E	65,600 E	189,000 E	-	315,000 E	376,000 E	666,000	
Manganese	300.0	11,300 N	8,080 N	540 N	"	2,470 N	13,500 N	29,200	
Mercury ■	0.7	ND (0.2)	ND (0.2)	ND (1.2)	-	ND (0.2)	ND (0.4)	1.7	
Nickel	100.0	74.8 N	97.4 N	ND (10.0)	"	ND (10.0)	141 N	466.0	
Potassium	NC	11,700 EN	21,000 EN	7,790 EN	-	6,550 EN	31,300 EN	28,800	
Selenium	10.0	ND (15.0)	ND (15.0)	ND (15.0)	-	ND (15.0)	ND (15.0)	45.8	
Silver	50.0	ND (3.0)	ND (3.0)	12.4 N	"	ND (3.0)	5.6 N	ND (6.9)	
Sodium	20,000	50,400	19,700	78,500	"	12,800	139,000	159,000	
Thallium	0.5 G	ND (100)	ND (100)	ND (20.0)	"	ND (20.0)	ND (20.0)	27.9	
Vanadium	NC	53.0 N	132 N	17.9 N	"	ND (5.0)	207 N	508.0	
Zinc ■	2,000 G	476.0 N	319 N	ND (200)	"	ND (10.0)	319 N	954.0	
Miscellaneous Compounds (µg/L or ppb)									
Sulfate	250,000	434,000	32,100	1,210,000	NA	1,450,000	1,660,000	1,700,000	
Sulfide	50.0 G	ND (1,000)	ND (1,000)	2,470,000	"	46,000	1,590,000	43.0	
pH (Standard Units)	6.5-8.5	7.09	7.57	7.63	6.47	7.85	6.53	6.63	

Notes:

\* = NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998, with addenda through 2004.

**=** Environmental Protection Agency priority pollutant metal.

B = Analyte detected in the associated blank, as well as in the sample (organics); value is greater than or equal to the instrument detection limit, but less than the contract required detection limit (inorganics).

# Table 2-12A Analytical Results for Groundwater Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Notes (Continued):

**E** = **E**stimated concentration due to the presence of interference (inorganics).

G = Guidance value.

- J = Compound is positively identified and reported at an estimated concentration below the reporting limit.
- N = Spike sample recovery is not within the quality control limits.

NA = Not analyzed.

NC = No criteria.

ND = Indicates that the compound was not detected at the method detection limit specified in parentheses.

P = >25% difference between the analytical results on two GC columns. The lower value is reported.

**PAH = Polycyclic aromatic hydrocarbon.** 

Yellow shaded values exceed the NYSDEC groundwater standards or guidance values.

## Table 2-12B Analytical Results for Groundwater Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Sample Number	Ground	MW-6	MW-12	TPMW-3					
Date Sampled	Water	04/30/08	04/30/08	06/15/12					
Sample Location	Standard *	Northwest	Northeast	Storage					
		of North	of North	Tank Spill					
Valatile Organic Compounds (ug/L or npb)									
Acetone	50 G	7.4	4.0 J	ND (5.0)					
Benzene	1.0	ND (1.0)	ND (1.0)	1.2 J					
2-Butanone	50 G	ND (5.0)	ND (5.0)	ND (5.0)					
Carbon Disulfide	NC	ND (1.0)	ND (1.0)	14.0					
Chlorobenzene	5.0	ND (1.0)	ND (1.0)	ND (5.0)					
cis-1,2-Dichloroethene	5.0	ND (1.0)	ND (1.0)	ND (5.0)					
1,2-Dichloroethane	0.6	ND (1.0)	ND (1.0)	2.7 J					
1,2-Dichloropropane	1.0	ND (1.0)	ND (1.0)	13.0					
Ethylbenzene	5.0	ND (1.0)	ND (1.0)	34.0					
Isopropylbenzene	5.0	ND (1.0)	ND (1.0)	1.0 J					
n-Propylbenzene	5.0	NA	NA	2.4 J					
Toluene	5.0	ND (1.0)	ND (1.0)	ND (5.0)					
1,2,4-Trichlorobenzene	5.0 G	ND (1.0)	ND (1.0)	ND (5.0)					
1,2,4-Trimethylbenzene	5.0	NA	NA	19.0					
1,3,5-Trimethylbenzene	5.0	NA	NA	5.4					
Xylene (Total)	5.0	ND (3.0)	ND (3.0)	31.0					
		Semivolatil	e Organic Com	pounds (µg/L or	. ppb)				
Acenaphthene (PAH)	20 G	NA	ND (5.0)	6.0 J					
Carbazole	NC	"	ND (5.0)	2.3 J					
Dibenzofuran	NC	"	ND (5.0)	2.9 J					
2,4-Dichlorophenol	5.0	"	ND (5.0)	1.9 J					
Fluorene (PAH)	50 G	"	ND (5.0)	2.5 J					
2-Methylnaphthalene	NC	"	ND (5.0)	13.0					
Naphthalene (PAH)	10 G	"	ND (5.0)	190 E					
Phenanthrene (PAH)	50 G	"	ND (5.0)	2.2 J					

## Table 2-12B Analytical Results for Groundwater Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Sample Number	Ground	MW-6	MW-12	TPMW-3						
Date Sampled Sample Location	Water Standard *	04/30/08 Northwest	04/30/08 Northeast	06/15/12 Storage						
Sumpe Docution	Standard	of North	of North	Tank Spill						
		Lagoon	Lagoon	Area						
Pesticides (µg/L or ppb)										
Aldrin	ND	ND (0.047)	ND (0.050)	ND (0.050)						
alpha-BHC	0.01	ND (0.047)	ND (0.050)	0.10 P						
beta-BHC	0.04	ND (0.047)	ND (0.050)	ND (0.050)						
delta-BHC	0.04	ND (0.047)	ND (0.050)	ND (0.050)						
gamma-BHC (Lindane)	0.05	ND (0.047)	ND (0.050)	ND (0.050)						
Chlordane	0.05	0.040 J	ND (0.050)	ND (0.050)						
4,4'-DDD	0.3	0.022 J	ND (0.050)	0.25						
4,4'-DDE	0.2	0.034 J	ND (0.050)	ND (0.10)						
4,4'-DDT	0.2	ND (0.047)	ND (0.050)	ND (0.10)						
Dieldrin	0.004	0.032 J	ND (0.050)	ND (0.10)						
Endosulfan (I)	NC	ND (0.047)	ND (0.050)	ND (0.050)						
Endosulfan (II)	NC	0.029 J	ND (0.050)	0.18 P						
Endrin	ND	ND (0.047)	ND (0.050)	ND (0.10)						
Endrin Ketone	5.0	ND (0.047)	ND (0.050)	ND (0.10)						
Heptachlor	0.04	ND (0.047)	ND (0.050)	ND (0.050)						
Heptachlor Epoxide	0.03	ND (0.047)	ND (0.050)	0.11						
Methoxychlor	35.0	ND (0.047)	ND (0.050)	ND (0.50)						
			Metals (µg/L	or ppb)						
Aluminum	NC	62,100 N	269,000 N	236,000						
Antimony	3.0	ND (20.0)	ND (20.0)	ND (9.3)						
Arsenic	25.0	20.5 N	82.1 N	103.0						
Barium	1,000	569 N	2,700 N	782.0						
Beryllium	3.0 G	3.5 N	11.7 N	12.7						
Cadmium	5.0	2.1	ND (1.0)	21.4						
Calcium	NC	1,160,000	1,620,000	655,000						

#### Table 2-12B Analytical Results for Groundwater Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Sample Number Date Sampled Sample Location	Ground Water Standard *	MW-6 04/30/08 Northwest of North Lagoon	MW-12 04/30/08 Northeast of North Lagoon	TPMW-3 06/15/12 Storage Tank Spill Area						
Metals (Continued)										
Chromium	50.0	89.9 N	435 N	247.0						
Cobalt	NC	14.4 N	178 N	61.8						
Copper	200.0	112 N	467 N	868.0						
Iron	300.0	83,000 N	381,000 N	892,000						
Lead	25.0	27.4 N	107 N	125.0						
Magnesium	35,000 G	272,000 E	213,000 E	185,000						
Manganese	300.0	4,610 N	16,400 N	25,200						
Mercury	0.7	0.99	2.5	0.81						
Nickel	100.0	75.8 N	388 N	158.0						
Potassium	NC	16,700 EN	43,200 EN	49,600						
Selenium ■	10.0	ND (15.0)	ND (15.0)	15.7 B						
Silver	50.0	ND (3.0)	ND (3.0)	ND (6.9)						
Sodium	20,000	102,000	10,200	31,900						
Thallium	0.5 G	ND (200)	ND (200)	26.0						
Vanadium	NC	107 N	497 N	371.0						
Zinc	2,000 G	194 N	959 N	1,140						
Miscellaneous Compounds (µg/L or ppb)										
Sulfate	250,000	2,570,000	1,650,000	3,400,000						
Sulfide	50.0 G	ND (1,000)	1,200	2,100						
pH (Standard Units)	6.5-8.5	7.29	7.07	5.69						

Notes:

- \* = NYSDEC Ambient Water Quality Standards and Guidance Values, June 1998, with addenda through 2004.
- **=** Environmental Protection Agency priority pollutant metal.
- B = Analyte detected in the associated blank, as well as in the sample (organics); value is greater than or equal to the instrument detection limit, but less than the contract required detection limit (inorganics).

# Table 2-12B Analytical Results for Groundwater Samples that Represent Remaining Contamination Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Notes (Continued):

**E** = **E**stimated concentration due to the presence of interference (inorganics).

G = Guidance value.

- J = Compound is positively identified and reported at an estimated concentration below the reporting limit.
- N = Spike sample recovery is not within the quality control limits.

NA = Not analyzed.

NC = No criteria.

ND = Indicates that the compound was not detected at the method detection limit specified in parentheses.

P = >25% difference between the analytical results on two GC columns. The lower value is reported.

**PAH = Polycyclic aromatic hydrocarbon.** 

Yellow shaded values exceed the NYSDEC groundwater standards or guidance values.

#### Table 4-2 Micro-Well Construction Summary Former Barker Chemical Site, Site No. 932119 Somerset, New York



Department of Environmental Conservation

Well Number	New York Coord	State Plane linates	Ground Surface	Top of Riser	Total Boring	Sandpack Interval	Sandpack Interval	Well Screen Interval	Well Screen Interval	Monitored Water-Bearing
	Easting (x)	Northing (y)	Elevation (ft. amsl)	Elevation (ft. amsl)	Depth (feet)	(ft. bgs)	(ft. amsl)	(ft. bgs)	(ft. amsl)	Zone
1660 Niagara Street (Site No. C915311)										
MW-1	1153874.4000	1211866.7000	496.58	498.69	7.0	3.0 to 7.0	493.58 to 489.58	4.0 to 6.0	492.58 to 490.58	(see note 1)
MW-2	1154126.4000	1211858.5000	496.08	499.80	6.2	3.0 to 6.2	493.08 to 489.88	4.0 to 6.0	492.08 to 490.08	(see note 1)
MW-3	1154137.2000	1212308.1000	492.47	496.09	9.8	4.0 to 9.8	488.47 to 482.67	5.0 to 9.0	487.47 to 483.47	glacial till
MW-4	1153939.5000	1212192.1000	497.95	501.03	10.5	3.0 to 10.5	494.95 to 487.45	3.5 to 10.5	494.45 to 487.45	(see note 2)
MW-5	1153886.5000	1212328.9000	496.08	499.11	13.2	2.5 to 13.2	493.58 to 482.88	3.0 to 13.0	493.08 to 483.08	glacial till
MW-6	1153909.4000	1212532.6000	496.60	500.48	7.5	3.0 to 7.5	493.60 to 489.10	4.0 to 7.5	492.60 to 489.10	glacial till
MW-11	1153968.3000	1212595.2000	495.92	499.75	8.0	3.0 to 8.0	492.92 to 487.92	4.0 to 7.0	491.92 to 488.92	glacial till
MW-12	1154063.6000	1212530.0000	494.49	498.05	8.0	3.0 to 8.0	491.49 to 486.49	4.0 to 8.0	490.49 to 486.49	glacial till

Notes:

Horizontal coordinates are relative to the State Plane New York West Zone of the North American Datum (NAD) of 1983.

ft. amsl = feet above mean sea level.

ft. bgs = Feet below ground surface.

(1) = glacial till and weathered bedrock.

(2) = lime-like waste, lagoon sludge and glacial till.

Orange shaded coordinates are not reliable because the Percentage of Dilution of Position (PDOP) > 9%.