

**FOCUSED GROUNDWATER
REMEDIATION REPORT**
(Volume I of V)

For The:
**570 MAIN STREET PROPERTY
WESTBURY NEW YORK**
(NYSDEC SITE CODE # 130043A)

Prepared For:
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Hull
& associates, inc.

**FOCUSED GROUNDWATER REMEDIATION
FORMER IMC MAGNETICS FACILITY
WESTBURY, NEW YORK**

TABLE 1

SUMMARY OF MONITORING WELL AND APPLICATION WELL CONSTRUCTION

Well I.D.	Location Relative to LP2-B ^(1.)	Date of Installation	Drilling Method	Screened Interval (feet bgs)	Sand Pack Interval (feet bgs)	Bentonite Seal Interval (feet bgs)	Native Backfill Interval (feet bgs)	Concrete Interval (feet bgs)
GROUNDWATER MONITORING WELLS								
MW-5U	Downgradient	6/20/98	8.25" HSA	45 to 60	42 to 86	4 to 6; 40 to 42	6 to 40	0 to 1
MW-5M	Downgradient	6/20/98	8.25" HSA	90 to 100	88 to 126	86 to 88	6 to 40	0 to 1
MW-5L	Downgradient	6/20/98	8.25" HSA	130 to 140	128 to 141	126 to 128	6 to 40	0 to 1
MW-8U	Upgradient	9/7/01	6.25" HSA	45 to 60	43 to 61	1 to 43	NA	0 to 1
MW-8M	Upgradient	9/7/01	6.25" HSA	65 to 75	63 to 75.5	61 to 63	NA	0 to 1
MW-8L	Upgradient	9/7/01	6.25" HSA	78 to 88	77.5 to 90	75.5 to 77.5	NA	0 to 1
MW-9U	Downgradient	9/14/01	6.25" HSA	45 to 60	43 to 61	1 to 43	NA	0 to 1
MW-9L	Downgradient	9/14/01	6.25" HSA	65 to 80	63 to 81	61 to 63	NA	0 to 1
MW-10U	Side/downgradient	9/13/01	6.25" HSA	45 to 60	43 to 61	1 to 43	NA	0 to 1
MW-10L	Side/downgradient	9/13/01	6.25" HSA	65 to 80	63 to 81	61 to 63	NA	0 to 1
REAGENT APPLICATION WELLS								
AW-1U	Side-gradient	9/11/01	6.25" HSA	48 to 63	46 to 64	1 to 46	NA	0 to 1
AW-1L	Side-gradient	9/11/01	6.25" HSA	68 to 83	66 to 84	64 to 66	NA	0 to 1
AW-2U	Centered within LP2-B	9/11/01	6.25" HSA	48 to 63	46 to 63.5	1 to 46	NA	0 to 1
AW-2L	Centered within LP2-B	9/11/01	6.25" HSA	66 to 81	65.5 to 84	63.5 to 65.5	NA	0 to 1
AW-3U	Side/Upgradient	9/12/01	6.25" HSA	48 to 63	46 to 64	1 to 46	NA	0 to 1
AW-3L	Side/Upgradient	9/12/01	6.25" HSA	68 to 83	66 to 84	64 to 66	NA	0 to 1

(1.) LP2-B - Leach Pit 2-B (Source Area)

**FOCUSED GROUNDWATER REMEDIATION
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TABLE 2

**SUMMARY OF SATURATED SOIL SAMPLE ANALYTICAL RESULTS
DETECTED COMPOUNDS ONLY**

ANALYTE / WELL I.D.	AW-2	AW-2	AW-2	AW-2	AW-2 ^(1.)
Sample Date	9/12/02	9/12/02	9/12/02	9/12/02	9/12/02
Sample Depth (feet below ground surface)	60.0 to 62.0	62.0 to 64.0	64.0 to 66.0	60.0 to 66.0	60.0 to 66.0
VOLATILE ORGANIC COMPOUNDS (ug/kg)					
Tetrachloroethene (U.S. EPA Method 8260)	240	<5	49	NT	NT
INORGANIC ANALYTES (mg/kg)					
Total Organic Carbon (U.S. EPA Method 9060)	NT ^(2.)	NT	NT	<1.13	<339
Iron (U.S. EPA Method 6010)	NT	NT	NT	NT	6,920
Manganese (U.S. EPA Method 6010)	NT	NT	NT	NT	8.37

(1.) Sample analyzed by Integrated Analytical Laboratories as part of ISOTEC's laboratory treatability study.

(2.) NT - Not Tested.

**FOCUSED GROUNDWATER REMEDIATION
FORMER IMC MAGNETICS FACILITY
WESTBURY, NEW YORK**

TABLE 3

**SUMMARY OF BASELINE GROUNDWATER ANALYTICAL RESULTS (DETECTED ANALYTES ONLY)
SEPTEMBER 29, 2001 SAMPLING EVENT**

ANALYTE	ANALYTICAL RESULTS FOR VOCs (ug/L) - SW-846 Method 8021B						
	GROUNDWATER MONITORING WELLS						
	MW-1	MW-3	MW-3 (Dup)	MW-4U	MW-4M	MW-4L	MW-4L (Dup)
1,1,1-TRICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	9.5	12
1,1-DICHLOROETHENE	<1.0	<1.0	<1.0	<1.0	<1.0	1.7	2.2
1,1-DICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0
CHLOROFORM	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CIS-1,2-DICHLOROETHENE	<1.0	16	17	<1.0	<1.0	<1.0	<1.0
TETRACHLOROETHENE	2.8	26	27	4.5	<1.0	<1.0	<1.0
TOLUENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TRICHLOROETHENE	<1.0	19	19	2.5	<1.0	<1.0	<1.0
ANALYTE	ANALYTICAL RESULTS FOR INORGANIC ANALYTES (mg/L)						
IRON ⁽¹⁾	NT ⁽⁵⁾	NT	NT	NT	NT	NT	NT
TOTAL DISSOLVED SOLIDS ⁽²⁾	NT	NT	NT	NT	NT	NT	NT
TOTAL ORGANIC CARBON ⁽³⁾	NT	NT	NT	NT	NT	NT	NT
SULFATE ⁽⁴⁾	NT	NT	NT	NT	NT	NT	NT

Table Continues

FOCUSED GROUNDWATER REMEDIATION
FORMER IMC MAGNETICS FACILITY
WESTBURY, NEW YORK

TABLE 3 (continued)

SUMMARY OF BASELINE GROUNDWATER ANALYTICAL RESULTS (DETECTED ANALYTES ONLY)
SEPTEMBER 29, 2001 SAMPLING EVENT

ANALYTE	ANALYTICAL RESULTS FOR VOCs (ug/L) - SW-846 Method 8021B								
	GROUNDWATER MONITORING WELLS								
	MW-5U	MW-5M	MW-5L	MW-6U	MW-6M	MW-6L	MW-7U	MW-7M	MW-7L
1,1,1-TRICHLOROETHANE	<1.0	19	21	<1.0	14	<1.0	<1.0	<1.0	<1.0
1,1-DICHLOROETHENE	<1.0	3.3	4.6	<1.0	4.3	<1.0	<1.0	<1.0	<1.0
1,1-DICHLOROETHANE	<1.0	1.1	1.6	<1.0	3.4	<1.0	<1.0	<1.0	<1.0
CHLOROFORM	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CIS-1,2-DICHLOROETHENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.5
TETRACHLOROETHENE	19	<1.0	<1.0	31	1.1	<1.0	1.4	1.1	13
TOLUENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.9	5.8	4.4
TRICHLOROETHENE	7.5	<1.0	<1.0	3.9	1.0	<1.0	<1.0	<1.0	6.0
ANALYTE	ANALYTICAL RESULTS FOR INORGANIC ANALYTES (mg/L)								
IRON ⁽¹⁾	NT ⁽⁵⁾	NT	NT	NT	NT	NT	NT	NT	NT
TOTAL DISSOLVED SOLIDS ⁽²⁾	NT	NT	NT	NT	NT	NT	NT	NT	NT
TOTAL ORGANIC CARBON ⁽³⁾	NT	NT	NT	NT	NT	NT	NT	NT	NT
SULFATE ⁽⁴⁾	NT	NT	NT	NT	NT	NT	NT	NT	NT

Table Continues

FOCUSED GROUNDWATER REMEDIATION
FORMER IMC MAGNETICS FACILITY
WESTBURY, NEW YORK

TABLE 3 (continued)

SUMMARY OF BASELINE GROUNDWATER ANALYTICAL RESULTS (DETECTED ANALYTES ONLY)
SEPTEMBER 29, 2001 SAMPLING EVENT

ANALYTE	ANALYTICAL RESULTS FOR VOCs (ug/L) - SW-846 Method 8021B						
	GROUNDWATER MONITORING WELLS						
	MW-8U	MW-8M	MW-8L	MW-9U	MW-9L	MW-10U	MW-10L
1,1,1-TRICHLOROETHANE	<1.0	1.1	25	<1.0	<1.0	<1.0	<1.0
1,1-DICHLOROETHENE	<1.0	<1.0	5.0	<1.0	<1.0	<1.0	<1.0
1,1-DICHLOROETHANE	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0
CHLOROFORM	<1.0	5.3	4.3	<1.0	<1.0	<1.0	<1.0
CIS-1,2-DICHLOROETHENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TETRACHLOROETHENE	11	3.5	3.2	29	17	76	17
TOLUENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TRICHLOROETHENE	2.5	1.1	<1.0	1.9	1.8	<1.0	<1.0
ANALYTE	ANALYTICAL RESULTS FOR INORGANIC ANALYTES (mg/L)						
IRON ⁽¹⁾	NT ⁽⁵⁾	1.31	1.6	5.78	0.434	578	0.423
TOTAL DISSOLVED SOLIDS ⁽²⁾	NT	220	269	445	279	850	257
TOTAL ORGANIC CARBON ⁽³⁾	NT	2.4	3.0	3.6	3.0	7.4	3.2
SULFATE ⁽⁴⁾	NT	64	68	<250	76	<2,500	76

Table Continues

**FOCUSED GROUNDWATER REMEDIATION
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WESTBURY, NEW YORK**

TABLE 3 (continued)

**SUMMARY OF BASELINE GROUNDWATER ANALYTICAL RESULTS (DETECTED ANALYTES ONLY)
SEPTEMBER 29, 2001 SAMPLING EVENT**

ANALYTE	ANALYTICAL RESULTS FOR VOCs (ug/L) - SW-846 Method 8021B						
	REAGENT APPLICATION WELLS						
	AW-1U	AW-1U (Dup)	AW-1L	AW-2U	AW-2L	AW-3U	AW-3L
1,1,1-TRICHLOROETHANE	1.6	1.6	11	<100	<10	<1.0	<1.0
1,1-DICHLOROETHENE	<1.0	<1.0	2.4	<100	<10	<1.0	<1.0
1,1-DICHLOROETHANE	<1.0	<1.0	<1.0	<100	<10	<1.0	<1.0
CHLOROFORM	<1.0	<1.0	<1.0	<100	<10	<1.0	<1.0
CIS-1,2-DICHLOROETHENE	1.5	2.4	<1.0	<100	<10	4.3	1.3
TETRACHLOROETHENE	10	16	16	4,000	460	22	14
TOLUENE	<1.0	<1.0	<1.0	<100	<10	<1.0	<1.0
TRICHLOROETHENE	2.2	2.8	<1.0	<100	<10	2.5	<1.0
ANALYTE	ANALYTICAL RESULTS FOR INORGANIC ANALYTES (mg/L)						
IRON ⁽¹⁾	NT ⁽⁵⁾	103	0.464	4.84	1.62	0.765	0.974
TOTAL DISSOLVED SOLIDS ⁽²⁾	NT	321	213	592	212	335	252
TOTAL ORGANIC CARBON ⁽³⁾	NT	2.5	2.2	3.4	2.2	4.3	2.6
SULFATE ⁽⁴⁾	NT	<170	50	190	53	180	56

Notes:

- (1.) Analyzed using SW0846 Method 7380
- (2.) Analyzed using EPA Method 160.1
- (3.) Analyzed using WE-846 Method 9060
- (4.) Analyzed using EPA Method 375.4 (turbidimetric)
- (5.) NT - Not Tested.

FOCUSED GROUNDWATER REMEDIATION
FORMER IMC MAGNETICS FACILITY
WESTBURY, NEW YORK

TABLE 4

SUMMARY OF INITIAL POST-TREATMENT GROUNDWATER ANALYTICAL RESULTS (DETECTED ANALYTES ONLY)
DECEMBER 19, 2001 SAMPLING EVENT

ANALYTE	ANALYTICAL RESULTS FOR VOCs (ug/L) - SW-846 Method 8021B									
	GROUNDWATER MONITORING WELLS									
	MW-5U	MW-5M	MW-5L	MW-8U	MW-8M	MW-8L	MW-9U	MW-9L	MW-10U	MW-10L
1,1,1-TRICHLOROETHANE	<10	8.4	21	<1.0	<1.0	35	<1.0	<1.0	<1.0	<1.0
1,1-DICHLOROETHENE	<10	1.8	5.3	<1.0	<1.0	8.8	<1.0	<1.0	<1.0	<1.0
1,1-DICHLOROETHANE	<10	<1.0	1.9	<1.0	<1.0	2.5	<1.0	<1.0	<1.0	<1.0
CHLOROFORM	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CIS-1,2-DICHLOROETHENE	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TETRACHLOROETHENE	310	1.7	1.4	24	4.2	6.7	11	18	83	9.2
TOLUENE	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TRICHLOROETHENE	11	<1.0	<1.0	2.6	<1.0	<1.0	1.2	1.0	2.6	<1.0
ANALYTE	ANALYTICAL RESULTS FOR INORGANIC ANALYTES (mg/L)									
IRON ⁽¹⁾	253	8.7	0.821	397	1.68	1.39	278	1.54	79.6	62.9
TOTAL DISSOLVED SOLIDS ⁽²⁾	247	156	188	407	305	252	1,370	440	915	2,530
TOTAL ORGANIC CARBON ⁽³⁾	3.3	2.3	<2.0	6.9	2.7	<2.0	95	12.1	11.5	277
SULFATE ⁽⁴⁾	<500	22	31	<1,000	100	36	<1,000	166	<1,000	1,130

Table Continues

FOCUSED GROUNDWATER REMEDIATION
FORMER IMC MAGNETICS FACILITY
WESTBURY, NEW YORK

TABLE 4 (Continued)

SUMMARY OF INITIAL POST-TREATMENT GROUNDWATER ANALYTICAL RESULTS (DETECTED ANALYTES ONLY)
DECEMBER 19, 2001 SAMPLING EVENT

ANALYTE	ANALYTICAL RESULTS FOR VOCs (ug/L) - SW-446 Method 8021B					
	AW-1U	AW-1U (Dup)	AW-1L	AW-2U	AW-2L	AW-3U
1,1,1-TRICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-DICHLOROETHENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-DICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CHLOROFORM	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CIS-1,2-DICHLOROETHENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TETRACHLOROETHENE	<1.0	<1.0	<1.0	2.6	<1.0	<1.0
TOLUENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TRICHLOROETHENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ANALYTE	ANALYTICAL RESULTS FOR INORGANIC ANALYTES (mg/L)					
IRON ⁽¹⁾	111	176	65.9	131	174	127
TOTAL DISSOLVED SOLIDS ⁽²⁾	4,260	3,990	3,330	2,980	5,120	3,660
TOTAL ORGANIC CARBON ⁽³⁾	3.2	407	265	106	546	222
SULFATE ⁽⁴⁾	<100	1,790	1,090	570	2,070	1,220

Notes:

- (1) Analyzed using SW0846 Method 7380
- (2) Analyzed using EPA Method 160.1
- (3) Analyzed using WC-846 Method 9060
- (4) Analyzed using EPA Method 375.4 (turbidimetric)

FOCUSED GROUNDWATER REMEDIATION
FORMER IMC MAGNETICS FACILITY
WESTBURY, NEW YORK

TABLE 5

SUMMARY OF SECOND POST-TREATMENT GROUNDWATER ANALYTICAL RESULTS (DETECTED ANALYTES ONLY)
JANUARY 4, 2002 SAMPLING EVENT

ANALYTE	ANALYTICAL RESULTS FOR VOCs (ug/L) - SW-846 Method 8021B									
	GROUNDWATER MONITORING WELLS									
	MW-5U	MW-5M	MW-5L	MW-8U	MW-8M	MW-8L	MW-8U	MW-9L	MW-10U	MW-10L
1,1,1-TRICHLOROETHANE	<10	11	31	<1.0	<1.0	27	<1.0	<1.0	<1.0	<1.0
1,1-DICHLOROETHENE	<10	2.2	8	<1.0	<1.0	6.3	<1.0	<1.0	<1.0	<1.0
1,1-DICHLOROETHANE	<10	<1.0	2.6	<1.0	<1.0	2.1	<1.0	<1.0	<1.0	<1.0
CHLOROFORM	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CIS-1,2-DICHLOROETHENE	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TETRACHLOROETHENE	110	<1.0	1.3	12	3.2	5.6	6.5	17	74	11
TOLUENE	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TRICHLOROETHENE	7.1	<1.0	<1.0	2.8	<1.0	<1.0	1.2	3.4	3	<1.0
ANALYTE	ANALYTICAL RESULTS FOR INORGANIC ANALYTES (mg/L)									
IRON ⁽¹⁾	NT ⁽⁵⁾	8.7	0.821	64.6	3.91	5	150	20.7	35.6	56.3
TOTAL DISSOLVED SOLIDS ⁽²⁾	NT	156	188	355	378	246	1,690	560	784	2,020
TOTAL ORGANIC CARBON ⁽³⁾	NT	2.3	<2.0	3	<2.0	<2.0	103	15.8	5.2	157
SULFATE ⁽⁴⁾	NT	22	31	<500	98	33	<1,000	225	<1,000	910

Table Continues

**FOCUSED GROUNDWATER REMEDIATION
FORMER IMC MAGNETICS FACILITY
WESTBURY, NEW YORK**

TABLE 5 (Continued)

**SUMMARY OF SECOND POST-TREATMENT GROUNDWATER ANALYTICAL RESULTS (DETECTED ANALYTES ONLY)
JANUARY 4, 2002 SAMPLING EVENT**

ANALYTE	ANALYTICAL RESULTS FOR VOCs (ug/L) - SW-846 Method 8021B							
	REAGENT APPLICATION WELLS							
	AW-1U	AW-1U (Dup)	AW-1L	AW-2U	AW-2U (Dup)	AW-2L	AW-3U	AW-3L
1,1,1-TRICHLOROETHANE	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-DICHLOROETHENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-DICHLOROETHANE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CHLOROFORM	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
CIS-1,2-DICHLOROETHENE	1.4	1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TETRACHLOROETHENE	1.3	1.3	4.9	14	16	3.9	<1.0	<1.0
TOLUENE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TRICHLOROETHENE	1.6	1.6	<1.0	1.1	1.2	<1.0	1.4	<1.0
ANALYTE	ANALYTICAL RESULTS FOR INORGANIC ANALYTES (mg/L)							
IRON ⁽¹⁾	47.4	49.9	24.8	164	100	67.1	19.3	83.2
TOTAL DISSOLVED SOLIDS ⁽²⁾	1,270	1,230	1,350	2,540	2,500	3,340	1,830	4,420
TOTAL ORGANIC CARBON ⁽³⁾	43	43	96	28	25.6	245	27.6	324
SULFATE ⁽⁴⁾	380	370	500	950	880	1,340	450	1,780

Notes:

- (1.) Analyzed using SW0846 Method 7380
- (2.) Analyzed using EPA Method 160.1
- (3.) Analyzed using WE-846 Method 9060
- (4.) Analyzed using EPA Method 375.4 (turbidimetric)
- (5.) NT - Not Tested.

UN-24

UN-22

GP-20
(APPROXIMATE
LOCATION)

SKID-MOUNTED
SVE SYSTEM WITH
AIR EMISSION
CONTROLS AND
ENCLOSURE

CONSTRUCTED 1953

TOILETS &
DRESSING ROOMS

2 STORY

ROOF
OVER

Main Street

