TABLES

Table 1-A. 2001 Self-Monitoring Program and NPDES Parameters Schedule, Applied Materials Building 1 and Vicinity, Santa Clara, California

Sample Point	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Measure Water Levels (a)	X						X					
Measure Well Depths	X											
AM1-1	8010*											
AM1-2	8010											
AM1-3	8010*											
AM1-5												
AM1-5B	8010											
AM1-5E	8010											
AM1-6	8010											
AM1-7	8010											
AM1-9	8010											
AM1-10	8010*											
AM1-11	8010*											
AM1-12	8010											
AM1-14	8010											
AM1-EP	8010											
HP-2 (Bldg. 3)	8010											
HP-5 (Bldg. 3)	8010											
HP-6	8010											
HP-8	8010											
AV-1A	8010											
AV-1B	8010											
AV-7A	8010											
MW-1 (Bldg. 14)				8010						8010		
MW-2 (Bldg. 14)				8010						8010		
Influent (c)												
8010/8020 (b)												
8260			X									
pH			X			X						
Effluent: 8010/8020 (b)	X	X		X	X	X			***X***			***X***
8260			X									
pH	X	X	X	X	X	X	X	X	***X***			***X***
Turbidity	X	X	X	X	X	X	X	X	X			
Temperature	X	X	X	X	X	X	X	X	X			
Fish Toxicity												
Metals												
San Tomas Aquino Creek:												
8010 or 8260 (c)												
pH												
Temperature												
Dissolved Oxygen, %SAT.												
FLOW/VOLUMES (d)	X	X	X	X	X	X	X	X	X	X	X	X
NPDES Report	1/31			4/30			7/31			10/31		
WPCP SMP Report									9/30			
Building 3 Report											11/30	
Annual Report			3/15									

Notes:

a = Measure water levels in all AM and HP wells, and IM-7.

b = Low detection limits (0.5 ppb or less), report Freon 113.

c = Effluent currently discharges to the sanitary sewer; sampling from this point is not required unless discharge to the storm drain resumes

d = totalizer readings for AM1-1, -5E, -10 and system totalizer, flow rates if possible.

* = Also collect samples from these wells for analysis of the following natural attenuation parameters: Nitrate & Sulfate; Alkalinity; Methane & Carbon Dioxide; Ferrous Iron & Manganese; Ethane/Ethene; Chloride & Sulfide; Total Organic Carbon; Conductivity, Temperature, & pH; Oxidation/Reduction Potential; and, Dissolved Oxygen.

X **= Required per San Jose/Santa Clara Water Pollution Control Plant (WPCP) Industrial Wastewater Discharge Permit No. SC-043A.**

Table 1-B. 2002 Self-Monitoring Program and NPDES Parameters Schedule, Applied Materials Building 1 and Vicinity, Santa Clara, California

Sample Point	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Measure Water Levels (a)	X						X					
Measure Well Depths	X											
AM1-1	8010*+											
AM1-2	8010											
AM1-3	8010*+											
AM1-5B	8010											
AM1-5E	8010+											
AM1-6	8010											
AM1-7	8010											
AM1-9	8010											
AM1-10	8010*+											
AM1-11	8010*											
AM1-14	8010											
AM1-EP	8010											
HP-2 (Bldg. 3)	8010											
HP-5 (Bldg. 3)	8010											
HP-6	8010											
HP-8	8010											
AV-1A	8010											
AV-1B	8010											
AV-7A	8010											
MW-1 (Bldg. 14)				8010						8010		
MW-2 (Bldg. 14)				8010						8010		
Influent (c)												
8010/8020 (b)												
pH												
Effluent												
8010/8020 (b)			***X***			***X***			***X***			***X***
pH			***X***			***X***			***X***			***X***
Turbidity			X			X			X			X
Temperature			X			X			X			X
Fish Toxicity												
Metals												
Flow / Volumes (d)	X	X	X	X	X	X	X	X	X	X	X	X
WPCP Report			3/29						9/30			
Building 3 Report											11/29	
Annual Report			3/15									

Notes:

a = Measure water levels in all AM and HP wells, and IM-7.

b = Low detection limits (0.5 ppb or less), report Freon 113.

c = Effluent currently discharges to the sanitary sewer; sampling from this point is not required unless discharge to the storm drain resumes

d = totalizer readings for AM1-1, -5E, -10 and system totalizer, flow rates if possible.

* = Also collect samples from these wells for analysis of the following natural attenuation parameters: Nitrate & Sulfate; Alkalinity; Methane & Carbon Dioxide; Ferrous Iron & Manganese; Ethane/Ethene; Chloride & Sulfide; Total Organic Carbon; Conductivity, Temperature, & pH; Oxidation/Reduction Potential; and, Dissolved Oxygen.

+ = Also collect samples from these wells for analysis of 1,4-dioxane (EPA Method 8270 Modified w/ isotope dilution); collect a duplicate from well AM1-10.

X **= Required per San Jose/Santa Clara Water Pollution Control Plant (WPCP) Industrial Wastewater Discharge Permit No. SC-043A.**

Table 2. Water Level Elevations, January 4, 2001 to January 15, 2002, Applied Materials Building 1 and Vicinity, Santa Clara, California

Well ID	Date	Top of Casing (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
AM1- 1	1/4/01	34.55	7.78	26.77
	7/11/01		7.13	27.42
	1/15/02		7.18	27.37
AM1- 2	1/5/01	34.74	6.07	28.67
	7/11/01		5.79	28.95
	1/15/02		5.43	29.31
AM1- 3	1/4/01	33.19	5.59	27.60
	7/11/01		4.69	28.50
	1/15/02		4.90	28.29
AM1- 5[1]	1/4/01	32.42	8.66	23.76
AM1- 5B	1/4/01	32.18	4.61	27.57
	7/11/01		4.43	27.75
	1/15/02		4.02	28.16
AM1- 5E	1/4/01	31.9	8.03	23.87
	7/11/01		7.71	24.19
	1/15/02		7.73	24.17
AM1- 6	1/4/01	33.21	10.36	22.85
	7/11/01		10.03	23.18
	1/15/02		9.98	23.23
AM1- 7	1/4/01	33.68	8.72	24.96
	7/11/01		8.50	25.18
	1/15/02		8.22	25.46
AM1- 9	1/5/01	34.26	7.65	26.61
	7/11/01		7.00	27.26
	1/15/02		6.90	27.36
AM1-10	1/4/01	35.64	30.36	5.28
	7/11/01		7.80	27.84
	1/15/02		9.24	26.40
AM1-11	1/4/01	32.3	7.32	24.98
	7/11/01		6.52	25.78
	1/15/02		6.99	25.31
AM1-12[1]	1/4/01	33.17	7.08	26.09
AM1-14	1/5/01	34.44	6.07	28.37
	7/11/01		8.38	26.06
	1/15/02		7.01	27.43
AM1-EP	1/4/01	36.03	7.56	28.47
	7/11/01	36.03	6.93	29.10
	1/15/02		6.97	29.06
AM1-P1[1]	1/5/01	33.82	6.99	26.83

Table 2. Water Level Elevations, January 4, 2001 to January 15, 2002, Applied Materials Building 1 and Vicinity, Santa Clara, California

Well ID	Date	Top of Casing (ft above msl)	Depth to Water (ft)	Ground Water Elevation (ft above msl)
AM1-P2[1]	1/5/01	35.02	7.80	27.22
AM1-P3[1]	1/5/01	34.94	8.03	26.91
HP- 2	1/5/01	32.91	10.32	22.59
	7/11/01		10.01	22.90
	1/15/02		9.96	22.95
HP- 3	1/5/01	31.54	7.83	23.71
	7/11/01		7.57	23.97
	1/15/02		7.58	23.96
HP- 4[1]	1/5/01	31.58	4.20	27.38
HP- 5	1/5/01	32.00	7.95	24.05
	7/11/01		7.58	24.42
	1/15/02		7.66	24.34
HP- 6	1/5/01	32.39	9.92	22.47
	7/11/01		9.69	22.70
	1/15/02		9.39	23.00
HP- 7[1]	01/05/01	31.73	NR	NA
HP- 8	1/4/01	31.23	6.86	24.37
	7/11/01		6.52	24.71
	1/15/02		6.48	24.75
IM- 7	1/5/01	35.59	7.03	28.56
	7/11/01		6.96	28.63
	1/15/02		7.34	28.25

Notes and Abbreviations:

1 = well destroyed on January 23, 2001

AM = Applied Materials

HP = Hewlett Packard

msl = mean sea level

NA = data not available

NR = data not recorded

Table 3. Extraction System Pumping Data, February 2000 through February 2002, Applied Materials Building 1 and Vicinity, Santa Clara, California

Extraction Well	Date	Reading (gallons)	Volume Pumped Since Last Reading	Flow Rate (gpm)	Pumping Days Since Last Reading	Volume Pumped from May 1990 to Present
AM1-1	09-Feb-00	11,067,822	442	0.0	27	28,799,237
AM1-1	15-Mar-00	11,067,898	77	0.0	35	28,799,313
AM1-1	06-Apr-00	11,067,947	49	0.0	22	28,799,362
AM1-1	02-May-00	11,067,947	0	0.0	26	28,799,362
AM1-1	05-Jun-00	11,068,001	54	0.0	34	28,799,416
AM1-1	06-Jul-00	11,068,026	25	0.0	31	28,799,441
AM1-1	03-Aug-00	11,068,175	149	0.0	28	28,799,590
AM1-1	06-Sep-00	11,068,199	24	0.0	34	28,799,614
AM1-1	04-Oct-00	11,068,199	0	0.0	28	28,799,614
AM1-1	06-Nov-00	11,193,182	124,983	2.6	33	28,924,597
AM1-1	05-Dec-00	11,194,420	1,238	0.0	29	28,925,835
AM1-1	05-Jan-01	11,195,426	1,006	0.0	31	28,926,841
AM1-1	6-Feb-01	11,195,426	0	0.0	32	28,926,841
AM1-1	12-Mar-01	11,195,426	0	0.0	34	28,926,841
AM1-1	4-Apr-01	11,195,426	0	0.0	23	28,926,841
AM1-1	8-May-01	11,195,426	0	0.0	34	28,926,841
AM1-1	25-Jun-01	11,195,426	0	0.0	48	28,926,841
AM1-1	11-Jul-01	11,195,426	0	0.0	16	28,926,841
AM1-1	10-Aug-01	11,195,426	0	0.0	30	28,926,841
AM1-1	6-Sep-01	11,195,426	0	0.0	27	28,926,841
AM1-1	4-Oct-01	11,195,426	0	0.0	28	28,926,841
AM1-1	6-Nov-01	11,195,426	0	0.0	33	28,926,841
AM1-1	4-Dec-01	11,195,426	0	0.0	28	28,926,841
AM1-1	15-Jan-02	11,195,426	0	0.0	42	28,926,841
AM1-1	20-Feb-02	11,195,426	0	0.0	36	28,926,841
AM1-5E	09-Feb-00	23,234,194	0	0.0	27	16,132,015
AM1-5E	15-Mar-00	23,234,194	0	0.0	35	16,132,015
AM1-5E	06-Apr-00	23,234,194	0	0.0	22	16,132,015
AM1-5E	02-May-00	23,234,194	0	0.0	26	16,132,015
AM1-5E	05-Jun-00	23,234,194	0	0.0	34	16,132,015
AM1-5E	06-Jul-00	23,234,194	0	0.0	31	16,132,015
AM1-5E	03-Aug-00	23,234,194	0	0.0	28	16,132,015
AM1-5E	6-Sep-00	23,234,194	0	0.0	34	16,132,015
AM1-5E	4-Oct-00	23,234,194	0	0.0	28	16,132,015
AM1-5E	6-Nov-00	23,234,194	0	0.0	33	16,132,015
AM1-5E	5-Dec-00	23,234,194	0	0.0	29	16,132,015
AM1-5E	5-Jan-01	23,234,194	0	0.0	31	16,132,015
AM1-5E	6-Feb-01	23,234,194	0	0.0	32	16,132,015
AM1-5E	12-Mar-01	23,234,194	0	0.0	34	16,132,015
AM1-5E	4-Apr-01	23,234,194	0	0.0	23	16,132,015
AM1-5E	8-May-01	23,234,194	0	0.0	34	16,132,015
AM1-5E	25-Jun-01	23,234,194	0	0.0	48	16,132,015
AM1-5E	11-Jul-01	23,234,194	0	0.0	16	16,132,015
AM1-5E	10-Aug-01	23,234,194	0	0.0	30	16,132,015
AM1-5E	6-Sep-01	23,234,194	0	0.0	27	16,132,015
AM1-5E	4-Oct-01	23,234,194	0	0.0	28	16,132,015
AM1-5E	6-Nov-01	23,234,194	0	0.0	33	16,132,015

Table 3. Extraction System Pumping Data, February 2000 through February 2002, Applied Materials Building 1 and Vicinity, Santa Clara, California

Extraction Well	Date	Reading (gallons)	Volume Pumped Since Last Reading	Flow Rate (gpm)	Pumping Days Since Last Reading	Volume Pumped from May 1990 to Present
AM1-5E	4-Dec-01	23,234,194	0	0.0	28	16,132,015
AM1-5E	15-Jan-02	23,234,194	0	0.0	42	16,132,015
AM1-5E	20-Feb-02	23,234,194	0	0.0	36	16,132,015
AM1-10	09-Feb-00	1,157,124	4,964	0.1	27	1,601,792
AM1-10	15-Mar-00	1,158,649	1,525	0.0	35	1,603,317
AM1-10	06-Apr-00	1,166,577	7,928	0.3	22	1,611,245
AM1-10	02-May-00	1,176,436	9,859	0.3	26	1,621,104
AM1-10	05-Jun-00	1,191,893	15,457	0.3	34	1,636,561
AM1-10	06-Jul-00	1,192,065	172	0.0	31	1,636,733
AM1-10	07-Aug-00	1,194,417	2,352	0.1	32	1,639,085
AM1-10	06-Sep-00	1,219,998	25,581	0.6	30	1,664,666
AM1-10	04-Oct-00	1,246,474	26,476	0.7	28	1,691,142
AM1-10	06-Nov-00	1,269,214	22,740	0.5	33	1,713,882
AM1-10	05-Dec-00	1,294,813	25,599	0.6	29	1,739,481
AM1-10	05-Jan-01	1,314,220	19,407	0.4	31	1,758,888
AM1-10	6-Feb-01	1,339,820	25,600	0.6	32	1,784,488
AM1-10	12-Mar-01	1,367,498	27,678	0.6	34	1,812,166
AM1-10	4-Apr-01	1,386,187	18,689	0.6	23	1,830,855
AM1-10	8-May-01	1,414,689	28,502	0.6	34	1,859,357
AM1-10	25-Jun-01	1,444,642	29,953	0.4	48	1,889,310
AM1-10	11-Jul-01	1,445,040	398	0.0	16	1,889,708
AM1-10	10-Aug-01	1,454,450	9,410	0.2	30	1,899,118
AM1-10	6-Sep-01	1,477,450	23,000	0.6	27	1,922,118
AM1-10	4-Oct-01	1,502,876	25,426	0.6	28	1,947,544
AM1-10	6-Nov-01	1,516,144	13,268	0.3	33	1,960,812
AM1-10	4-Dec-01	1,534,729	18,585	0.5	28	1,979,397
AM1-10	15-Jan-02	1,568,912	34,183	0.6	42	2,013,580
AM1-10	20-Feb-02	1,594,173	25,261	0.5	36	2,038,841

EXTRACTION SUMMARY:	AM1-1	AM1-5E	AM1-10	***Total***
Volume Pumped from February 2001 to February 2002	0	0	279,953	279,953
Volume Pumped from May 1990 to Present	28,926,841	16,132,015	2,038,841	47,097,697
CUMULATIVE TOTAL SINCE START-UP[3] :				***85,183,249***

Notes and Abbreviations:

1 = AM1-1 totalizer replaced 3/36/97 with final reading of 6,014,810

2 = totalizer replaced 5/4/95 with a final reading of 422,365

3 = total includes 38,085,552 gallons pumped prior to installation of individual totalizers on extraction wells in May 1990

~ = approximate value calculated using total flow between 9\18\96 and 12\5\96 divided by 3 purging events

gpm = gallons per minute

Table 4. Signature VOCs in Ground Water at Selected Wells, Pumping Modification Program, Applied Materials Building 1 and Vicinity, Santa Clara, California

WELL NAME	DATE	**1,1-DCA** *MCL = 5*	**1,1-DCE** *MCL = 6*
		<----------ppb---------->	
AM1-5 [1]	*BASELINE (1/94 - 1/96)*		
	mean	*10.37*	*15.79*
	standard deviation	*4.86*	*6.82*
	99% trigger concentration	***21.70***	***31.67***
	PHASE I		
	18-Apr-96	12.0	19.0
	01-May-96	12.0	19.0
	15-May-96	8.7	11.0
	29-May-96	8.6	11.0
	18-Jul-96	11.0	16.0
	PHASE II		
	17-Oct-96	12.0	17.0
	07-Nov-96	9.6	13.0
	05-Dec-96	9.3	14.0
	07-Jan-97	9.2	15.0
	06-Mar-97	11.0	16.0
	05-May-97	10.0	17.0
	03-Jul-97	8.1	13.0
	04-Sep-97	7.3	10.0
	08-Jan-98	7.4	12.0
	07-May-98	9.6	16.0
	03-Sep-98	9.0	6.8
	14-Jan-99	9.8	14.0
	12-May-99	8.7	14.0
AM1-5E	*BASELINE (1/94 - 1/96)*		
	mean	*14.03*	*15.22*
	standard deviation	*4.84*	*3.49*
	99% trigger concentration	***25.31***	***23.36***
	PHASE I		
	18-Apr-96	<0.5 [2]	13.0
	01-May-96	9.1	14.0
	15-May-96	5.4	6.6
	29-May-96	8.2	10.0
	18-Jul-96	8.1	12.0
	PHASE II		
	17-Oct-96	5.3	8.8
	07-Nov-96	8.1	10.0
	05-Dec-96	9.9	12.0
	07-Jan-97	6.2	10.0
	06-Mar-97	9.0	13.0
	05-May-97	8.8	15.0
	03-Jul-97	7.1	11.0
	04-Sep-97	7.1	10.0
	08-Jan-98	5.2	4.3
	29-May-98	7.2	14.0

Table 4. Signature VOCs in Ground Water at Selected Wells, Pumping Modification Program, Applied Materials Building 1 and Vicinity, Santa Clara, California

WELL NAME	DATE	**1,1-DCA** *MCL = 5*	**1,1-DCE** *MCL = 6*
		<----------ppb---------->	
AM1-5E	02-Jul-98	4.0	8.5
	03-Sep-98	6.2	4.0
	14-Jan-99	9.9	17.0
	01-Jul-99	8.3	13.0
	05-Aug-99	8.2	14.0
	09-Sep-99	6.5	9.9
	11-Nov-99	7.9	15.0
	17-Jan-00	7.5	12.0
	15-Mar-00	2.1	3.8
	02-May-00	6.0	12.0
	04-Jan-01	6.3	11.0
	16-Jan-02	0.94 [2]	1.1 [2]
AM1-6	*BASELINE (1/94 - 1/96)*		
	mean	*3.96*	*11.56*
	standard deviation	*0.74*	*3.3*
	99% trigger concentration	***5.69***	***19.24***
	PHASE I		
	18-Apr-96	3.1	9.9
	01-May-96	3.2	11
	15-May-96	1.5	3.7
	29-May-96	2.6	7.6
	18-Jul-96	2.9	10
	PHASE II		
	17-Oct-96	3.2	11
	07-Nov-96	2.9	9.4
	05-Dec-96	3.5	11
	07-Jan-97	2.7	9.8
	06-Mar-97	3.1	11
	05-May-97	1.9	11
	03-Jul-97	<2.5	7.6
	04-Sep-97	2.5	8.3
	08-Jan-98	2.2	5.2
	07-May-98	3.1	12
	03-Sep-98	1.7	2.5
	14-Jan-99	2.3	8.1
	12-May-99	1.0	<0.5
	01-Jul-99	1.4	5.0
	05-Aug-99	1.6	7.1
	09-Sep-99	2.0	7.3
	11-Nov-99	3.7	14
	13-Jan-00	3.0	8.7
	15-Mar-00	1.9	4.6
	02-May-00	2.9	11.0
	04-Jan-01	2.4	6.0
	15-Jan-02	3.0	9.0

Table 4. Signature VOCs in Ground Water at Selected Wells, Pumping Modification Program, Applied Materials Building 1 and Vicinity, Santa Clara, California

WELL NAME	DATE	**1,1-DCA** *MCL = 5*	**1,1-DCE** *MCL = 6*
		<----------ppb---------->	
AM1-7	*BASELINE (1/94 - 1/96)*		
	mean	*6.43*	*12.30*
	standard deviation	*1.42*	*3.33*
	99% trigger concentration	***9.73***	***20.07***
	PHASE I		
	18-Apr-96	6.3	14
	01-May-96	6.6	17
	15-May-96	4.8	9.5
	29-May-96	5.0	10
	18-Jul-96	5.3	14
	PHASE II		
	17-Oct-96	5.9	14
	07-Nov-96	4.9	10
	05-Dec-96	6.2	13
	07-Jan-97	5.4	13
	06-Mar-97	6.0	22
	18-Mar-97	5.3	11
	05-May-97	4.8	12
	03-Jul-97	4.9	12
	04-Sep-97	4.9	10
	08-Jan-98	5.7	13
	07-May-98	5.6	15
	03-Sep-98	4.2	4.5
	14-Jan-99	4.9	10.0
	12-May-99	3.1	7.0
	01-Jul-99	3.0	3.2
	05-Aug-99	2.2	5.3
	09-Sep-99	3.9	7.0
	11-Nov-99	6.2	15.0
	13-Jan-00	5.2	11.0
	15-Mar-00	3.9	7.6
	02-May-00	5.4	13.0
	04-Jan-01	4.3	9.8
	16-Jan-02	5.8	10.0
AM1-11	*BASELINE (1/94 - 1/96)*		
	mean	*17.00*	*23.75*
	standard deviation	*2.16*	*3.69*
	99% trigger concentration	***20.00***	***28.00***
	PHASE II		
	07-Jan-97	9.3	13.0
	08-Jan-98	8.9	11.0
	14-Jan-99	8.8	11.0
	01-Jul-99	<0.5	<0.5
	05-Aug-99	5.5	6.4

Table 4. Signature VOCs in Ground Water at Selected Wells, Pumping Modification Program, Applied Materials Building 1 and Vicinity, Santa Clara, California

WELL NAME	DATE	**1,1-DCA** *MCL = 5*	**1,1-DCE** *MCL = 6*
		<----------ppb---------->	
AM1-11	09-Sep-99	7.0	6.9
	11-Nov-99	10.0	14.0
	14-Jan-00	9.3	12.0
	15-Mar-00	6.1	6.9
	02-May-00	11.0	18.0
	04-Jan-01	6.9	11.0
	15-Jan-02	6.8	10.0
AV-1A	*BASELINE (1/94 - 1/96)*		
	mean	*3.73*	*0.50*
	standard deviation	*4.02*	*0.91*
	99% trigger concentration	***13.10***	***2.63***
	PHASE I		
	18-Jul-96	4.0	<0.5
	PHASE II		
	17-Oct-96	4.1	<0.5
	07-Nov-96	9.1	1.3
	05-Dec-96	5.1	<0.5
	07-Jan-97	6.0	<1.0
	04-Sep-97	3.5	<0.5
	08-Jan-98	2.4	<0.5
	02-Jul-98	1.7	<0.5
	14-Jan-99	1.7	<0.5
	09-Sep-99	2.9	<0.5
	11-Nov-99	4.0	<0.5
	13-Jan-00	6.7	0.58
	13-Mar-00	3.5	<0.5
	02-May-00	3.0	<0.5
	06-Jul-00	2.3	<0.5
	04-Jan-01	3.2	<0.5
	16-Jan-02	2.6	<0.5
AV-1B	*BASELINE (1/94 - 1/96)*		
	mean	*3.09*	*1.09*
	standard deviation	*3.89*	*1.19*
	99% trigger concentration	***12.16***	***3.87***
	PHASE I		
	13-Jun-96	12	2.1
	18-Jul-96	8.4	1.6
	PHASE II		
	17-Oct-96	14	3.2
	07-Nov-96	4.3	<0.5
	05-Dec-96	6.4	0.8
	07-Jan-97	9.2	2.0
	06-Mar-97	6.2	1.4
	05-May-97	7.0	1.1

Table 4. Signature VOCs in Ground Water at Selected Wells, Pumping Modification Program, Applied Materials Building 1 and Vicinity, Santa Clara, California

WELL NAME	DATE	**1,1-DCA** *MCL = 5*	**1,1-DCE** *MCL = 6*
		<----------ppb---------->	
AV-1B	03-Jul-97	4.2	0.8
	04-Sep-97	8.0	2.0
	08-Jan-98	3.7	1.0
	02-Jul-98	2.2	0.7
	14-Jan-99	<0.5	<0.5
	09-Sep-99	3.9	<0.5
	11-Nov-99	6.4	2.0
	13-Jan-00	3.2	0.86
	13-Mar-00	8.4	2.9
	02-May-00	8.1	2.0
	06-Jul-00	6.2	1.6
	04-Jan-01	6.7	1.9
	16-Jan-02	5.9	1.3
AV-7A	*BASELINE (1/94 - 1/96)*		
	mean	*0.72*	*0.72*
	standard deviation	*1.03*	*1.03*
	99% trigger concentration	***3.13***	***3.13***
	PHASE I		
	18-Jul-96	0.6	<0.5
	PHASE II		
	17-Oct-96	0.9	<0.5
	07-Nov-96	0.9	<0.5
	05-Dec-96	0.7	<0.5
	07-Jan-97	<1.0	<1.0
	08-Jan-98	<1.0	<1.0
	14-Jan-99	<0.5	<0.5
	13-Jan-00	<0.5	<0.5
	04-Jan-01	<0.5	<0.5
	16-Jan-02	<0.5	<0.5

Notes and Abbreviations:

1 = Well destroyed on January 23, 2001

2 = laboratory was queried about result and confirmed its accuracy

< # = not detected at a detection limit of "#" ppb

AM = Applied Materials

AV = 3175 Bowers Avenue

MCL = Maximum Contaminant Level

ppb = parts per billion

Table 5. Well Details and Depths, Applied Materials Building 1 and Vicinity, Santa Clara, California

WELL NAME	DATE INSTALLED	ORIGINAL WELL DEPTH [1] (ft)	SOUNDED WELL DEPTH 04-Jan-01 (ft)	SOUNDED WELL DEPTH 15-Jan-02 (ft)	SCREENED INTERVAL (ft)
A-Zone Wells					
AM1-1	11/83	24.0	NR[2]	NR[2]	13.5-24.0
AM1-3	4/84	21.0	18.94	18.86	8.7-21.0
AM1-5	6/84	23.0	47.81	NR[3]	15.0-23.0
AM1-5E	1/85	24.0	24.00	NR[2]	14.0-24.0
AM1-6	4/85	21.5	22.85	22.71	11.5-21.5
AM1-7	4/85	27.5	27.78	27.91	17.5-27.0
AM1-9	4/85	24.0	22.96	22.76	14.0-24.0
AM1-11	2/91	23.0	22.49	22.45	13.0-23.0
AM1-12	2/91	23.0	24.14	NR[3]	13.0-23.0
AM1-EP	1/85	16.0	13.78	13.77	7.0-16.2
AM1-P1	11/84	20.0	17.45	NR[3]	15.0-19.8
AM1-P2	11/84	19.5	16.73	NR[3]	14.5-19.5
AM1-P3	11/84	19.0	18.00	NR[3]	14.0-19.0
HP-2	8/83	25.0	24.16	24.52	5.0-20.0
HP-4	9/83	30.0	28.68	NR[3]	7.0-27.0
HP-5	9/83	31.5	25.22	25.10	9.0-29.0
HP-6	9/83	31.5	30.00	30.05	9.0-29.0
HP-7	9/83	31.5	NR[3]	NR[3]	7.5-27.5
HP-8	10/88	20.0	19.30	19.30	5.0-20.0
A2-Zone Wells					
AM1-10	3/90	37.5	NR[2]	NR[2]	30.0-37.5
AM1-14	9/91	35.0	34.63	34.80	29.8-35.0
B-Zone Wells					
AM1-2	6/84	46.0	45.25	45.42	42.0-46.0
AM1-5B	1/85	47.5	47.81	48.30	37.5-47.0

Notes and Abbreviations:

1 = Original well depth determined during well installation from ground level. Subsequent depth measurements are typically from a different datum after grading.

2 = depth not measured due to submersible pump in well

3 = well destroyed January 23, 2001

NR = not recorded

Table 6. Chemical Analytical Results for Natural Attenuation Parameters in Ground Water, Applied Materials Building 1 and Vicinity, Santa Clara, California

Well ID	Sample Date	1,1-DCE	1,1-DCA	1,1,1-TCA	Nitrate	Sulfate	Chloride	Sulfide	Alkalinity[1]	Methane	CO_2	Ethane	Ethene	Ferrous Iron	Manganese	TOC	ORP	Dissolved Oxygen	pH	Conductivity	Temperature
UNITS----------->		µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	%	%	%	%	mg/L	mg/L	mg/L	mV	mg/L	---	µS/cm	°C
SOURCE WELLS																					
AM1-1	04-Jan-01	4.5	<0.5	8.6	6.7	152	50	<0.5	510	<0.010	66	<0.020	<0.020	<0.10	0.2	2.4	125	7.4	6.13	1270	18.7
	15-Jan-02	1.4	1.6	2.3	13	97	44	<1.0	490	<0.010	27	<0.020	<0.020	<0.20	0.2	1.4	249	0.9	6.91	1310	21.8
AM1-10	04-Jan-01	<0.5	130	130	1.1	231	55	<0.5	380	<0.010	63	<0.020	<0.020	<0.10	1.4	1.4	157	8.4	6.5	1105	21.7
	15-Jan-02	<1	57	44	1.3	180	49	<1.0	320	<0.010	17	<0.020	<0.020	<0.20	0.02	1.1	10.0	8.7	8.11	536	24.7
DOWNGRADIENT WELL																					
AM1-11	04-Jan-01	11	6.9	<0.5	1.1	249	56	<0.5	400	<0.010	64	<0.020	<0.020	<0.10	0.36	1.7	40	7	7.39	1193	18.8
	15-Jan-02	10	6.8	<0.5	1.1	170	48	<1.0	410	<0.010	27	<0.020	<0.020	0.42	0.35	1.3	216	1.4	7.15	1256	21.7
UPGRADIENT WELL																					
AM1-3	04-Jan-01	<0.5	<0.5	<0.5	3.6	126	43	<0.5	490	<0.010	76	<0.020	<0.020	<0.10	0.78	2.1	164	5.8	6.8	1101	20.3
	15-Jan-02	<0.5	<0.5	<0.5	13	97	44	<1.0	540	<0.010	27	<0.020	<0.020	<0.20	0.29	1.4	120	2.1	7.14	1335	20.2
USEPA CUTOFF VALUE [2]		NA	NA	NA	<1	<20	>2X	>1	>2X	<0.00005, >0.000052	>2X	>0.000001	>0.00001	>1	---	>20	<50, >-1003	<0.5, <54	>5, <9.5	---	>20
ANALYTIC METHOD [3]		8260	8260	8260	9056	9056	9056	376.1	310.1	3810M	3810M	3810M	3810M	6010B	6010B	field meter	field meter	field meter	field meter	field meter	field meter

Abbreviations:
1,1-DCA = 1,1-dichloroethane
1,1-DCA = 1,1-dichloroethene
1,1,1-TCA = 1,1,1-trichloroethane
2X = two times background value
% = parts per hundred
< # = not detected at a method detection limit of "#"
BTEX = benzene, toluene, ethyl benzene, and total xylenes
ORP = oxidation/reduction potential
TOC = total organic carbon
USEPA = United States Environmental Protection Agency

Notes:
1 = Alkalinity as $CaCO_3$
2 = From Tables 2.1, 2.2, and 2.3 of USEPA's "Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water", EPA/600/R-98/128EPA, September 1998.
3 = USEPA test method