SEPTEMBER 1996

SEMI-ANNUAL POST-CLOSURE WATER QUALITY DATA EVALUATION VAN DE MARK LANDFILL

I. BACKGROUND

Van De Mark (VDM) Landfill is located between Mill Street and Eighteen Mile Creek in Lockport, New York. The landfill consists of a 2.5 acre plateau located on a bluff approximately 80 feet above Eighteen Mile Creek.

The landfill was closed during the Summer of 1988 in accordance with the NYSDEC-approved closure plan. Closure was designed to minimize the potential for hazardous constituents to be leached from the wastes and released to the groundwater. Van DeMark is now required to monitor the effectiveness of the final cover system, inspect and maintain the integrity of the final cover, and continue to conduct groundwater monitoring for a minimum of 30 years from the date of closure.

Groundwater monitoring is performed on a semiannual basis in accordance with Module IV of VDM's RCRA permit. The groundwater monitoring program has been designed to assess groundwater quality impacts at the landfill site. The groundwater monitoring program consists of sample collection and analysis of groundwater from monitoring wells VDM-9, VDM-10, VDM-11, VDM-14 and D-55 (background) for volatile organic compounds and select inorganic parameters. Samples are also collected from Eighteen Mile Creek upstream and just downstream of the site. Groundwater and surface water from Eighteen Mile Creek is analyzed for volatile organic compounds, metals and pH. In addition, water level measurements are taken during each sampling event at all wells prior to purging. The groundwater quality for each analytical parameter at each well location is compared to background water quality data for downgradient monitoring wells having compounds with concentrations exceeding Groundwater protection standards. A statistical method is used to evaluate long-term changes in groundwater quality by plotting the two-year trend for wells in which compounds exceed groundwater protection standards. Attachment B provides the specific methodology used to perform the statistical analysis of water concentration comparisons.

II. DATA PRESENTATION

Analytical data for quarterly sampling events prior to 1996 and semiannually since 1996 is summarized on computerized spreadsheets in Attachment A. The analytical laboratory data report for the September 1996 monitoring event is provided as Attachment C along with water level data, well construction data, well location map, and field parameters.

III. RESULTS

A two-year moving average has been established for each parameter for wells VDM-9, -10, -11, and -14 (see Attachment A). The trend analysis results are summarized in Table 1. The trend is presented as increasing, decreasing, or neutral trend. Based on this analysis, a total of seven parameters demonstrated increasing trends with concentrations greater than NYSDEC Exceedance Values during the September 1996 monitoring event. Two of the exceedances were organic parameters from VDM-9 (the exceedance for tetrachloroethene exhibited a decreasing trend), four exceedances were organic parameters from VDM-14 and one exceedance was an inorganic parameter from VDM-14. Since the two-year Moving Average trend line has been increasing at two well locations, analytical results for 18-Mile Creek were evaluated to determine if groundwater quality impacts are detected as a result of the increasing trends. Analytical test results for surface water samples collected upstream and downstream of the landfill site did not detect organic compounds nor indicate that metal concentrations were increasing. These results indicate that the current trends in VDM-9 and -14 are not adversely impacting or degrading the water quality in the groundwater receptor (i.e. 18-Mile Creek).

TABLE 1

VAN DE MARK GROUP
POST-CLOSURE MONITORING MOVING AVERAGE TREND TEST

Parameter	TWO-YEAR TREND ANALYSIS[1]			
	Well VDM-9	Well VDM-10	Well VDM-11	Well VDM-14
Carbon Tetrachloride	Neutral	Decreasing	Neutral	Neutral
Chloroform	Neutral	Decreasing	Neutral	Increasing[2]
Chloromethane	Neutral	Neutral	Neutral	Increasing
1,2-Dichloroethane	Increasing	Increasing	Neutral	Increasing
Trans-1,2-Dichloroethene	Increasing[2]	Increasing	Decreasing	Increasing[2]
Methylene Chloride	Neutral	Neutral	Neutral	Increasing
1,1,2,2-Tetrachloroethane	Neutral	Increasing	Neutral	Increasing
Tetrachloroethene	Decreasing[2]	Increasing	Decreasing	Increasing[2]
Trichloroethene	Increasing	Increasing	Neutral	Increasing[2]
Vinyl Chloride	Increasing	Increasing	Increasing	Increasing
Toluene	Increasing	Decreasing	Increasing	Neutral
Phenols	Neutral	Neutral	Neutral	Neutral
Arsenic	Neutral	Decreasing	Neutral	Decreasing
Chromium	Increasing	Decreasing	Neutral	Decreasing
Copper	Neutral	Decreasing	Neutral	Decreasing
Lead	Neutral	Neutral	Neutral	Neutral
Mercury	Neutral	Neutral	Neutral	Neutral
Zinc	Decreasing	Neutral	Neutral	Increasing[3]

Note:

(1) Increasing - significant increasing trend identified on the plot for that parameter. Decreasing - significant decreasing trend identified on the plot for that parameter. Neutral - no significant increasing or decreasing trend identified on the plot for that parameter.

(2) The most recent semi-annual monitoring data (second event in 1996) is greater than the NYSDEC Exceedance Value for that parameter.

(3) The most recent semi-annual monitoring data (second event in 1996) exceeds three times the background water quality concentration standard deviation and is greater than the NYSDEC Exceedance Value for that parameter.

ATTACHMENT A

WELL D-55 : ARSENIC

SAMPLING EVENT NO.	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS	
1	5	60	5	TOTAL STD	6.641
2	5	60	5	TOTAL Sx	1.156
3	5	60	5	TOTAL MEAN	5.794
4	5	60	5	TOTAL N	34.000
5	5	60	5	TOTAL df	33.000
6	26	60	5		
7	5	60	5		
8	5	60	5	Std Dev mult 3	19.923
9	5	60	5		
10	20	60	5		
11	20	60	20		
12		60	20		
13	20	60	20		
14	20	60	20		
15	2	60	2		
16	2	60	2		
17	2	60	2		
18		60	2		
19	2	60	2		
20	2	60	2		
21	2	60	2		
22	2	60	2		
23	2	60	2		
24	2	60	2		
25	2	60	2		
26	2	60	2		
27	2	60	2		
28	2	60	2		
29	2	60	2		
30	8	60	2		
31	2	60	2		
32	2	60	2		
33	2	60	2		
34	2	60	2		
35	2	60	2		
36	5	60	5		

WELL D-55 : CHROMIUM

SAMPLING EVENT NO.	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS	
1	29	80	5	TOTAL STD	12.276
2	8	80	5	TOTAL Sx	2.105
3	5	80	5	TOTAL MEAN	18.169
4	28	80	5	TOTAL N	35.000
5	5	80	5	TOTAL df	34.000
6	54	80	5		
7	8	80	5		
8	18	80	5	Std Dev mult 3	36.828
9	10	80	5		
10	30	80	30		
11	30	80	30		
12		80	30		
13	30	80	30		
14	30	80	30		
15	2	80	2		
16	6	80	1		
17	15	80	2		
18		80	2		
19	11	80	2		
20	6	80	2		
21	11	80	2		
22	36.3	80	10		
23	10	80	10		
24	20	80	2		
25	20	80	2		
26	2	80	2		
27	17	80	2		
28	35	80	2		
29	20	80	2		
30	19	80	2		
31	36	80	2		
32	33	80	2		
33	13	80	2		
34	4.6	80	2		
35	18	80	2		
36	11	80	2		
37	5	80	5		

WELL D-55 : COPPER

SAMPLING EVENT NO.	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS	
1	200	9500	200	TOTAL STD	83.789
2	200	9500	200	TOTAL Sx	14.370
3	200	9500	200	TOTAL MEAN	53.000
4	200	9500	200	TOTAL N	35.000
5	9	9500	200	TOTAL df	34.000
6	400	9500	200		
7	14	9500	200		
8	39	9500	200	Std Dev mult 3	251.368
9	13	9500	200		
10	50	9500	50		
11	50	9500	50		
12		9500	50		
13	50	9500	50		
14	50	9500	50		
15	9	9500	5		
16	6	9500	2		
17	50	9500	50		
18		9500	50		
19	50	9500	50		
20	50	9500	50		
21	50	9500	50		
22	10	9500	10		
23	10	9500	10		
24	20	9500	10		
25	2	9500	2		
26	5	9500	5		
27	10	9500	10		
28	10	9500	10		
29	10	9500	10		
30	10	9500	10		
31	10	9500	10		
32	10	9500	10		
33	10	9500	10		
34	10	9500	10		
35	18	9500	10		
36	10	9500	10		
37	10	9500	10		

WELL D-55 : LEAD

SAMPLING EVENT NO.	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS	
1	14	500	5	TOTAL STD	70.090
2	5	500	5	TOTAL Sx	12.201
3	9	500	5	TOTAL MEAN	29.632
4	5	500	5	TOTAL N	34.000
5	30	500	5	TOTAL df	33.000
6	60	500	5		
7	60	500	5		
8	50	500	5	Std Dev mult 3	210.271
9	70	500	5		
10	300	500	300		
11	300	500	300		
12		500	300		
13	20	500	20		
14	20	500	20		
15	6	500	1		
16	2	500	2		
17	8	500	2		
18		500	2		
19	3	500	2		
20	2	500	2		
21	2	500	2		
22	2	500	2		
23	2	500	2		
24	5.3	500	3		
25	3	500	3		
26	3	500	2		
27	2	500	2		
28	2	500	2		
29	2	500	2		
30	5	500	2		
31	2	500	2		
32	2	500	2		
33	2.2	500	2		
34	2	500	2		
35	2	500	2		
36	5	500	5		

WELL D-55 : MERCURY

SAMPLING EVENT NO.	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS	
1	1	5	1	TOTAL STD	0.232
2	1	5	1	TOTAL Sx	0.042
3	1	5	1	TOTAL MEAN	0.584
4	1	5	1	TOTAL N	32.000
5	0.2	5	1	TOTAL df	31.000
6	0.5	5	1		
7	0.2	5	1		
8	0.4	5	2	Std Dev mult 3	0.696
9	0.4	5	2		
10	1	5	2		
11		5	2		
12		5	2		
13		5	2		
14	1	5	1		
15	0.5	5	0.5		
16	0.5	5	0.5		
17	0.5	5	0.5		
18		5	2		
19	0.5	5	0.5		
20	0.5	5	0.5		
21	0.5	5	0.5		
22	0.5	5	0.5		
23	0.5	5	0.5		
24	0.5	5	0.5		
25	0.5	5	0.5		
26	0.5	5	0.5		
27	0.5	5	0.5		
28	0.5	5	0.5		
29	0.5	5	0.5		
30	0.5	5	0.5		
31	0.5	5	0.5		
32	0.5	5	0.5		
33	0.5	5	0.5		
34	0.5	5	0.5		
35	0.5	5	0.5		
36	1	5	1		

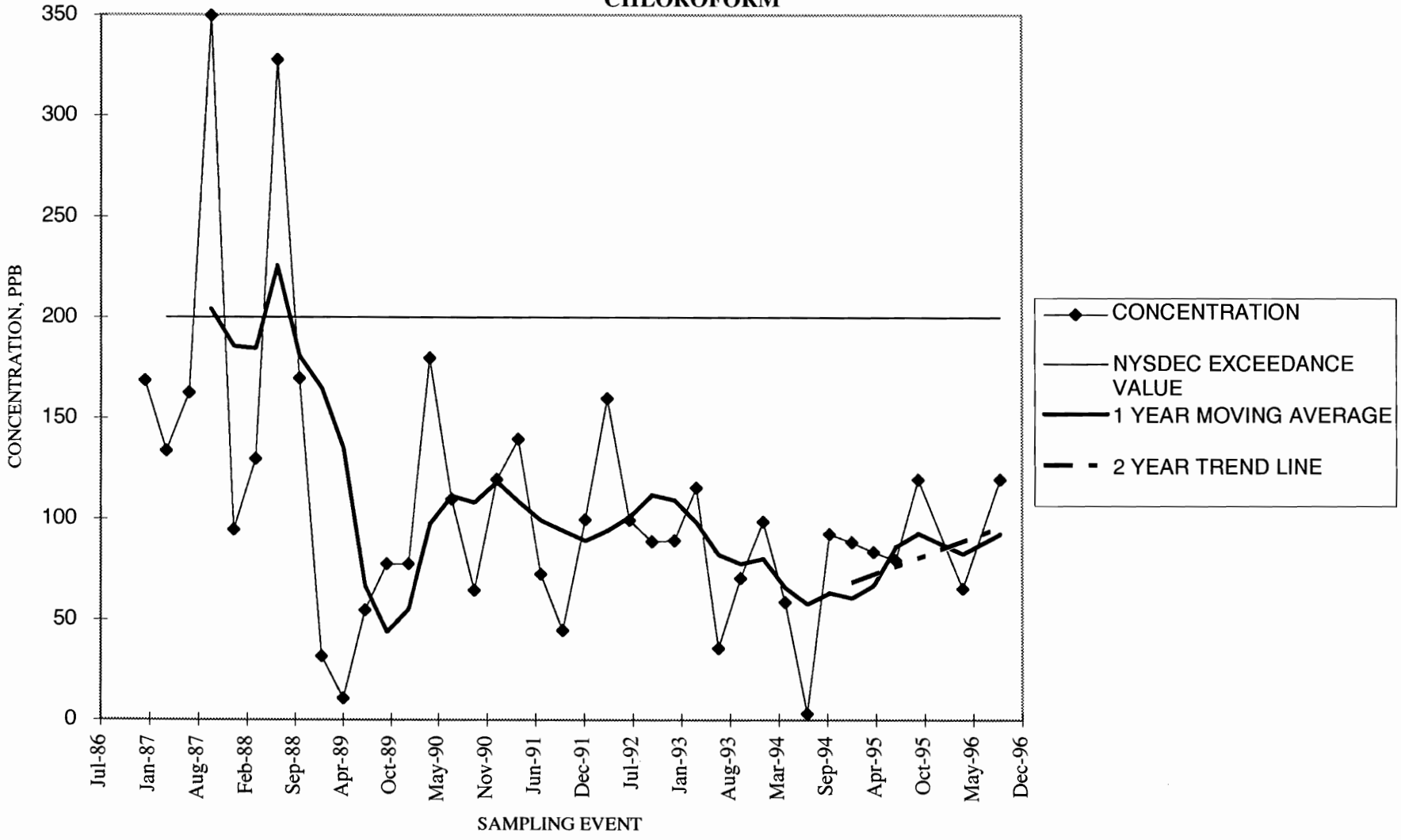
WELL D-55 : ZINC

SAMPLING EVENT NO.	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS	
1	50	4000	50	TOTAL STD	65.015
2	70	4000	50	TOTAL Sx	11.150
3	60	4000	50	TOTAL MEAN	60.097
4	60	4000	50	TOTAL N	35.000
5	41	4000	50	TOTAL df	34.000
6	280	4000	50		
7	47	4000	50		
8	36	4000	50	Std Dev mult 3	195.046
9	210	4000	50		
10	150	4000	50		
11	140	4000	50		
12		4000	50		
13	120	4000	50		
14	50	4000	50		
15	30	4000	20		
16	50	4000	10		
17	10	4000	10		
18		4000	10		
19	10	4000	10		
20	30	4000	10		
21	30	4000	10		
22	20.7	4000	10		
23	23.7	4000	10		
24	40	4000	20		
25	220	4000	4		
26	4	4000	4		
27	20	4000	20		
28	20	4000	20		
29	20	4000	20		
30	20	4000	20		
31	20	4000	20		
32	20	4000	20		
33	20	4000	20		
34	31	4000	20		
35	110	4000	20		
36	20	4000	20		

WELL VDM - 9 : CHLOROFORM

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87	169	200	8	TOTAL STD	68.749121	
Apr-87	134	200	8	TOTAL Sx	11.302286	
Jul-87	163	200	8	TOTAL MEAN	107.92105	
Oct-87	350	200	8	TOTAL N	38	204.00
Jan-88	95	200	8	TOTAL df	37	185.50
Apr-88	130	200	8			184.50
Jul-88	328	200	8			225.75
Oct-88	170	200	8			180.75
Jan-89	32	200	8			165.00
Apr-89	11	200	8			135.25
Jul-89	55	200	8			67.00
Oct-89	78	200	8			44.00
Jan-90	78	200	8			55.50
Apr-90	180	200	8			97.75
Jul-90	110	200	8			111.50
Oct-90	65	200	8			108.25
Jan-91	120	200	8			118.75
Apr-91	140	200	8			108.75
Jul-91	73	200	8			99.50
Oct-91	45	200	8			94.50
Jan-92	100	200	8			89.50
Apr-92	160	200	8			94.50
Jul-92	99.7	200	8			101.18
Oct-92	89.1	200	8			112.20
Jan-93	89.6	200	8			109.60
Apr-93	116	200	8			98.60
Jul-93	36	200	8			82.68
Oct-93	71	200	8			78.15
Jan-94	99	200	8			80.50
Apr-94	59	200	8			66.25
Jul-94	4	200	8			58.15
Oct-94	93	200	8			63.65
Jan-95	89	200	8			61.15
Apr-95	84	200	8			67.40
Jul-95	80	200	8			86.50
Oct-95	120	200	8			93.25
Apr-96	66	200	8			83
Sep-96	120	200	10			93

MOVING AVERAGE TREND TEST
VDM-9
CHLOROFORM

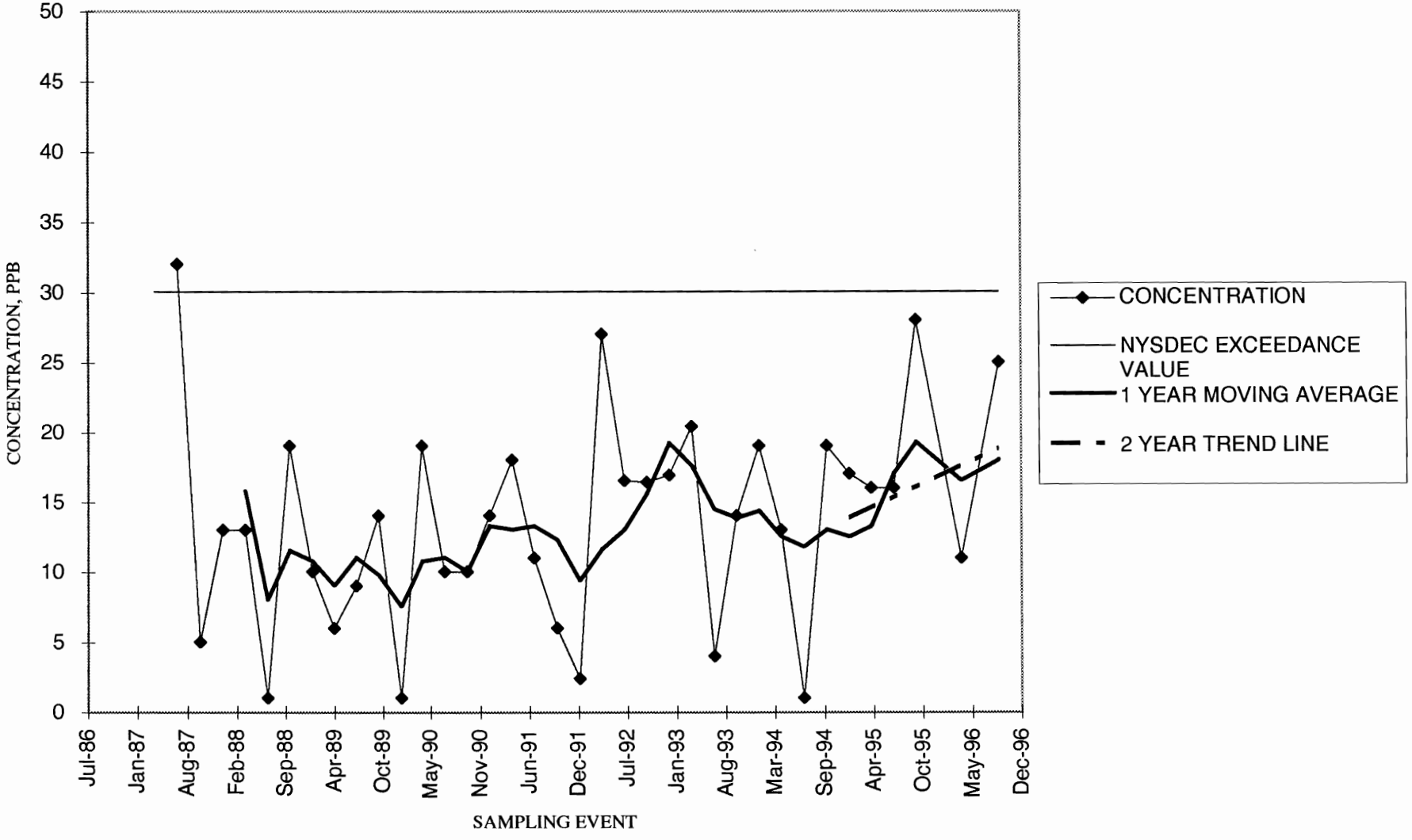


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WELL VDM - 9 : 1,2-DICHLOROETHANE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87		30	5	TOTAL STD	7.5386699	
Apr-87		30	5	TOTAL Sx	1.2742678	
Jul-87	32	30	5	TOTAL MEAN	13.711111	
Oct-87	5	30	5	TOTAL N	36	
Jan-88	13	30	5	TOTAL df	35	
Apr-88	13	30	5			15.75
Jul-88	1	30	5			8.00
Oct-88	19	30	5			11.50
Jan-89	10	30	5			10.75
Apr-89	6	30	5			9.00
Jul-89	9	30	5			11.00
Oct-89	14	30	5			9.75
Jan-90	1	30	5			7.50
Apr-90	19	30	5			10.75
Jul-90	10	30	5			11.00
Oct-90	10	30	5			10.00
Jan-91	14	30	5			13.25
Apr-91	18	30	5			13.00
Jul-91	11	30	5			13.25
Oct-91	6	30	5			12.25
Jan-92	2.4	30	5			9.35
Apr-92	27	30	5			11.60
Jul-92	16.5	30	5			12.98
Oct-92	16.4	30	5			15.58
Jan-93	16.9	30	5			19.20
Apr-93	20.4	30	5			17.55
Jul-93	4	30	5			14.43
Oct-93	14	30	5			13.83
Jan-94	19	30	5			14.35
Apr-94	13	30	5			12.50
Jul-94	1	30	5			11.75
Oct-94	19	30	5			13.00
Jan-95	17	30	5			12.50
Apr-95	16	30	5			13.25
Jul-95	16	30	5			17.00
Oct-95	28	30	2			19.25
Apr-96	11	30	2			16.5
Sep-96	25	30	10			18

MOVING AVERAGE TREND TEST
VDM-9
1,2-DICHLOROETHANE

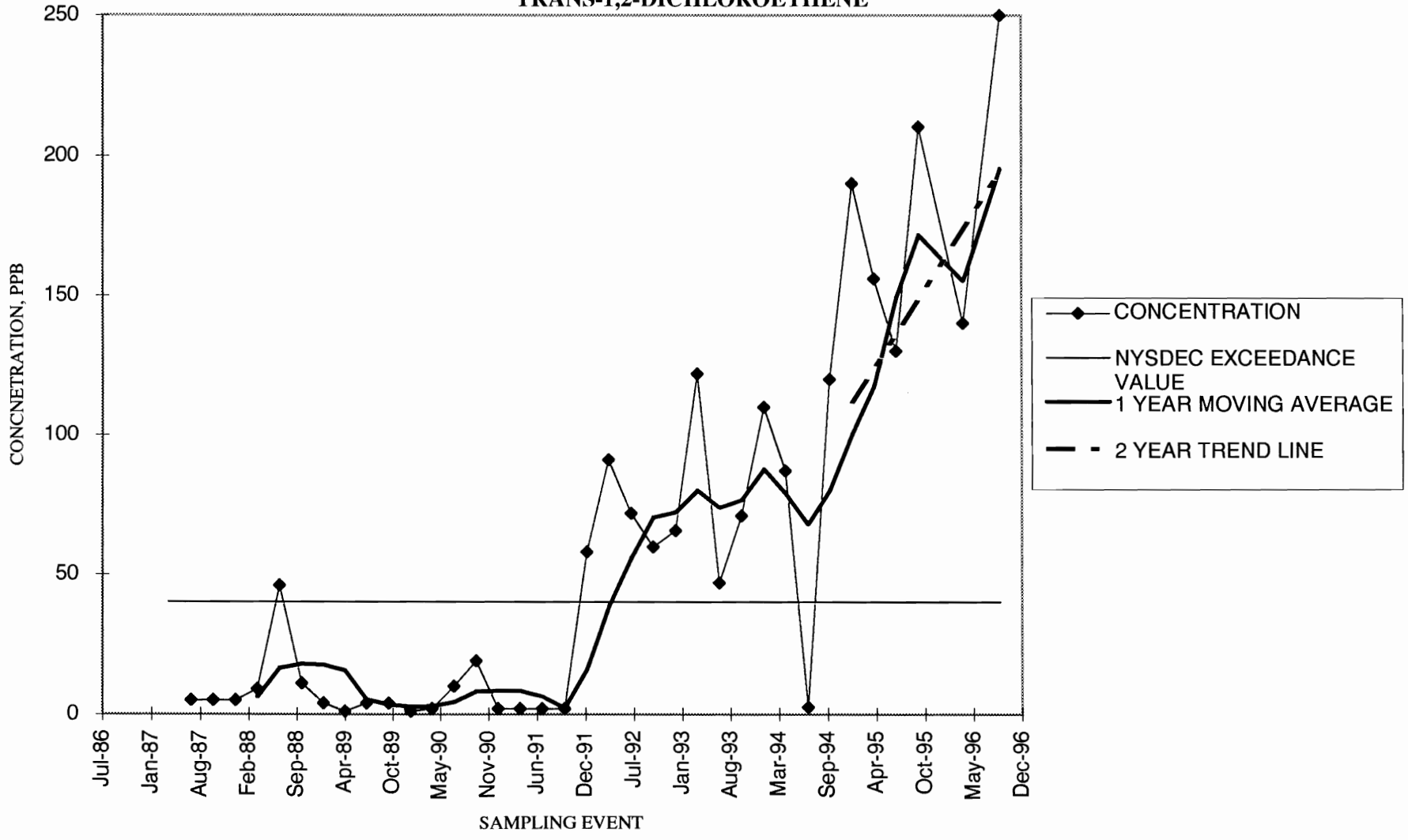


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WELL VDM - 9 : TRANS-1,2-DICHLOROETHENE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87		40	5	TOTAL STD	67.29119	
Apr-87		40	5	TOTAL Sx	11.374287	
Jul-87	5	40	5	TOTAL MEAN	58.772222	
Oct-87	5	40	5	TOTAL N	36	
Jan-88	5	40	5	TOTAL df	35	
Apr-88	9	40	5			6.00
Jul-88	46	40	5			16.25
Oct-88	11	40	5			17.75
Jan-89	4	40	5			17.50
Apr-89	1	40	5			15.50
Jul-89	4	40	5			5.00
Oct-89	4	40	5			3.25
Jan-90	1	40	5			2.50
Apr-90	2	40	5			2.75
Jul-90	10	40	5			4.25
Oct-90	19	40	5			8.00
Jan-91	2	40	5			8.25
Apr-91	2	40	5			8.25
Jul-91	2	40	5			6.25
Oct-91	2	40	5			2.00
Jan-92	58	40	5			16.00
Apr-92	91	40	5			38.25
Jul-92	71.8	40	5			55.70
Oct-92	59.8	40	5			70.15
Jan-93	65.7	40	5			72.08
Apr-93	122	40	5			79.83
Jul-93	47	40	5			73.63
Oct-93	71	40	5			76.43
Jan-94	110	40	5			87.50
Apr-94	87	40	5			78.75
Jul-94	3	40	5			67.63
Oct-94	120	40	5			79.88
Jan-95	190	40	5			99.88
Apr-95	156	40	5			117.13
Jul-95	130	40	5			149.00
Oct-95	210	40	5			171.50
Apr-96	140	40	5			155
Sep-96	250	40	10			195

MOVING AVERAGE TREND TEST
VDM-9
TRANS-1,2-DICHLOROETHENE

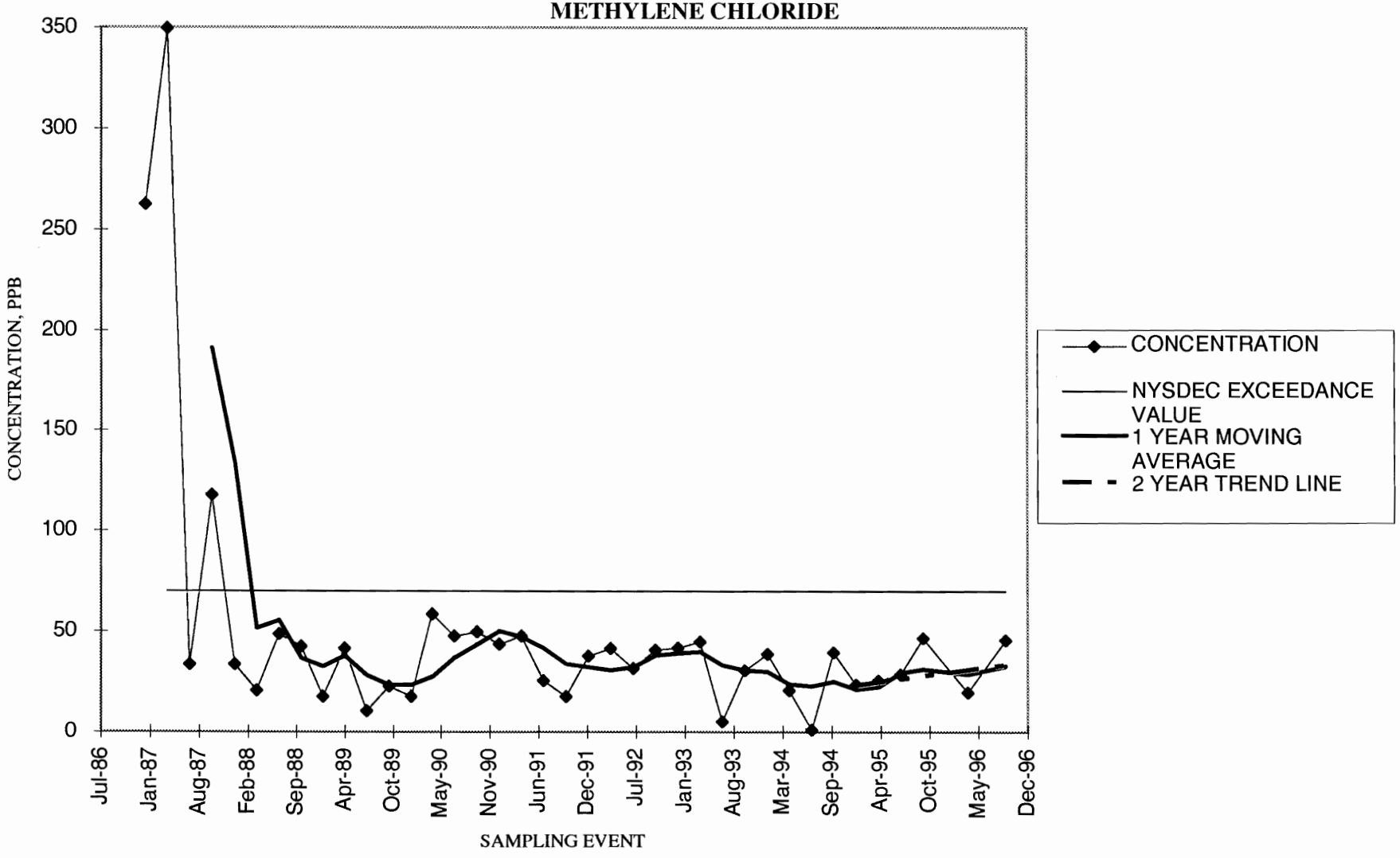


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WELL VDM - 9 : METHYLENE CHLORIDE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87	263	70	5	TOTAL STD	64.181004	
Apr-87	350	70	5	TOTAL Sx	10.551292	
Jul-87	34	70	5	TOTAL MEAN	49.676316	
Oct-87	118	70	5	TOTAL N	38	191.25
Jan-88	34	70	5	TOTAL df	37	134.00
Apr-88	21	70	5			51.75
Jul-88	49	70	5			55.50
Oct-88	43	70	5			36.75
Jan-89	18	70	5			32.75
Apr-89	42	70	5			38.00
Jul-89	11	70	5			28.50
Oct-89	23	70	5			23.50
Jan-90	18	70	5			23.50
Apr-90	59	70	5			27.75
Jul-90	48	70	5			37.00
Oct-90	50	70	5			43.75
Jan-91	44	70	5			50.25
Apr-91	48	70	5			47.50
Jul-91	26	70	5			42.00
Oct-91	18	70	5			34.00
Jan-92	38	70	5			32.50
Apr-92	42	70	5			31.00
Jul-92	32	70	5			32.50
Oct-92	41.2	70	5			38.30
Jan-93	42.1	70	5			39.33
Apr-93	45.2	70	5			40.13
Jul-93	5.7	70	5			33.55
Oct-93	31	70	5			31.00
Jan-94	39	70	5			30.23
Apr-94	21	70	5			24.18
Jul-94	2	70	5			23.13
Oct-94	40	70	5			25.38
Jan-95	24	70	5			21.63
Apr-95	26	70	5			22.88
Jul-95	29	70	5			29.75
Oct-95	47	70	5			31.50
Apr-96	20	70	5			29
Sep-96	46	70	10			33

MOVING AVERAGE TREND TEST
VDM-9
METHYLENE CHLORIDE

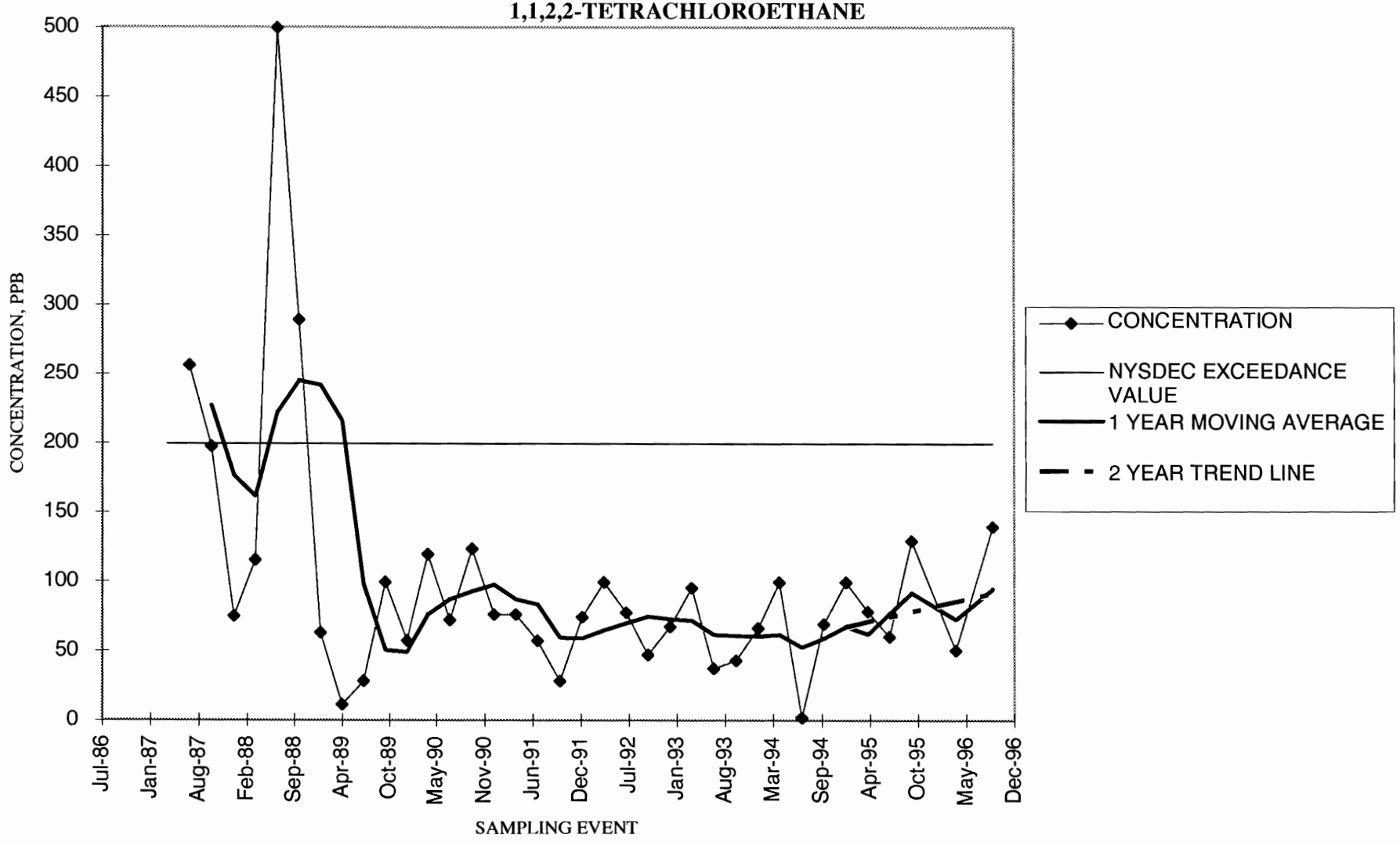


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WELL VDM - 9 : 1,1,2,2-TETRACHLOROETHANE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87		200	5	TOTAL STD	89.250864	
Apr-87		200	5	TOTAL Sx	15.08615	
Jul-87	257	200	5	TOTAL MEAN	100.16389	
Oct-87	198	200	5	TOTAL N	36	227.50
Jan-88	76	200	5	TOTAL df	35	177.00
Apr-88	116	200	5			161.75
Jul-88	500	200	5			222.50
Oct-88	290	200	5			245.50
Jan-89	64	200	5			242.50
Apr-89	12	200	5			216.50
Jul-89	29	200	5			98.75
Oct-89	100	200	5			51.25
Jan-90	58	200	5			49.75
Apr-90	120	200	5			76.75
Jul-90	73	200	5			87.75
Oct-90	124	200	5			93.75
Jan-91	77	200	5			98.50
Apr-91	77	200	5			87.75
Jul-91	58	200	5			84.00
Oct-91	29	200	5			60.25
Jan-92	75	200	5			59.75
Apr-92	100	200	5			65.50
Jul-92	78.4	200	5			70.60
Oct-92	47.8	200	5			75.30
Jan-93	68.1	200	5			73.58
Apr-93	96	200	5			72.58
Jul-93	38	200	5			62.48
Oct-93	44	200	5			61.53
Jan-94	67	200	5			61.25
Apr-94	100	200	5			62.25
Jul-94	3	200	5			53.40
Oct-94	70	200	5			59.90
Jan-95	100	200	5			68.15
Apr-95	79	200	5			62.90
Jul-95	61	200	5			77.50
Oct-95	130	200	2			92.50
Apr-96	51	200	2			73.25
Sep-96	140	200	10			95.5

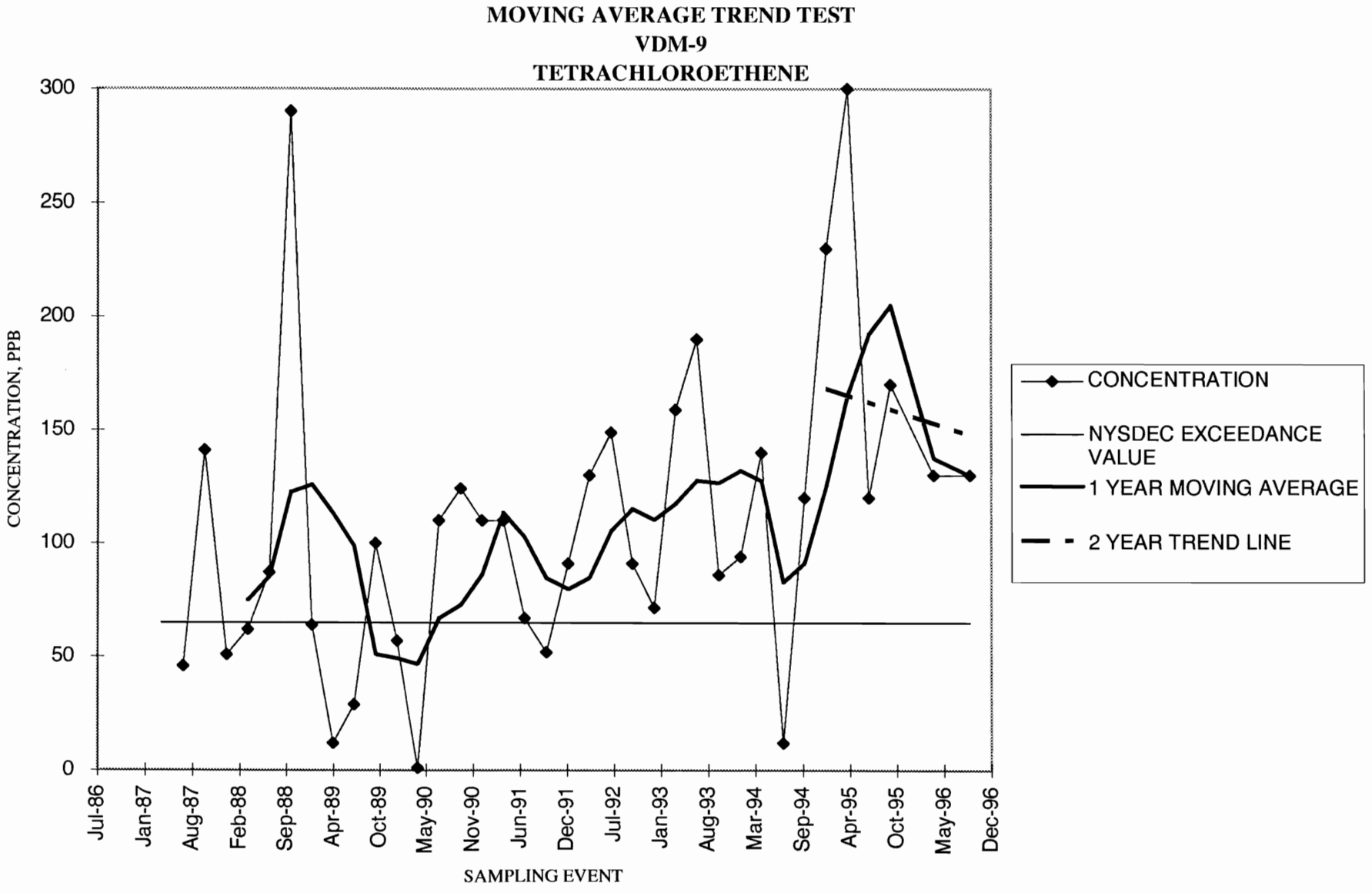
MOVING AVERAGE TREND TEST
VDM-9
1,1,2,2-TETRACHLOROETHANE



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WELL VDM - 9 : TETRACHLOROETHENE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87		65	5	TOTAL STD	66.993899	
Apr-87		65	5	TOTAL Sx	11.324036	
Jul-87	46	65	5	TOTAL MEAN	109.07222	
Oct-87	141	65	5	TOTAL N	36	
Jan-88	51	65	5	TOTAL df	35	
Apr-88	62	65	5			75.00
Jul-88	87	65	5			85.25
Oct-88	290	65	5			122.50
Jan-89	64	65	5			125.75
Apr-89	12	65	5			113.25
Jul-89	29	65	5			98.75
Oct-89	100	65	5			51.25
Jan-90	57	65	5			49.50
Apr-90	1	65	5			46.75
Jul-90	110	65	5			67.00
Oct-90	124	65	5			73.00
Jan-91	110	65	5			86.25
Apr-91	110	65	5			113.50
Jul-91	67	65	5			102.75
Oct-91	52	65	5			84.75
Jan-92	91	65	5			80.00
Apr-92	130	65	5			85.00
Jul-92	149	65	5			105.50
Oct-92	91	65	5			115.25
Jan-93	71.6	65	5			110.40
Apr-93	159	65	5			117.65
Jul-93	190	65	5			127.90
Oct-93	86	65	5			126.65
Jan-94	94	65	5			132.25
Apr-94	140	65	5			127.50
Jul-94	12	65	5			83.00
Oct-94	120	65	5			91.50
Jan-95	230	65	5			125.50
Apr-95	300	65	5			165.50
Jul-95	120	65	5			192.50
Oct-95	170	65	5			205.00
Apr-96	130	65	5			137.5
Sep-96	130	65	10			130

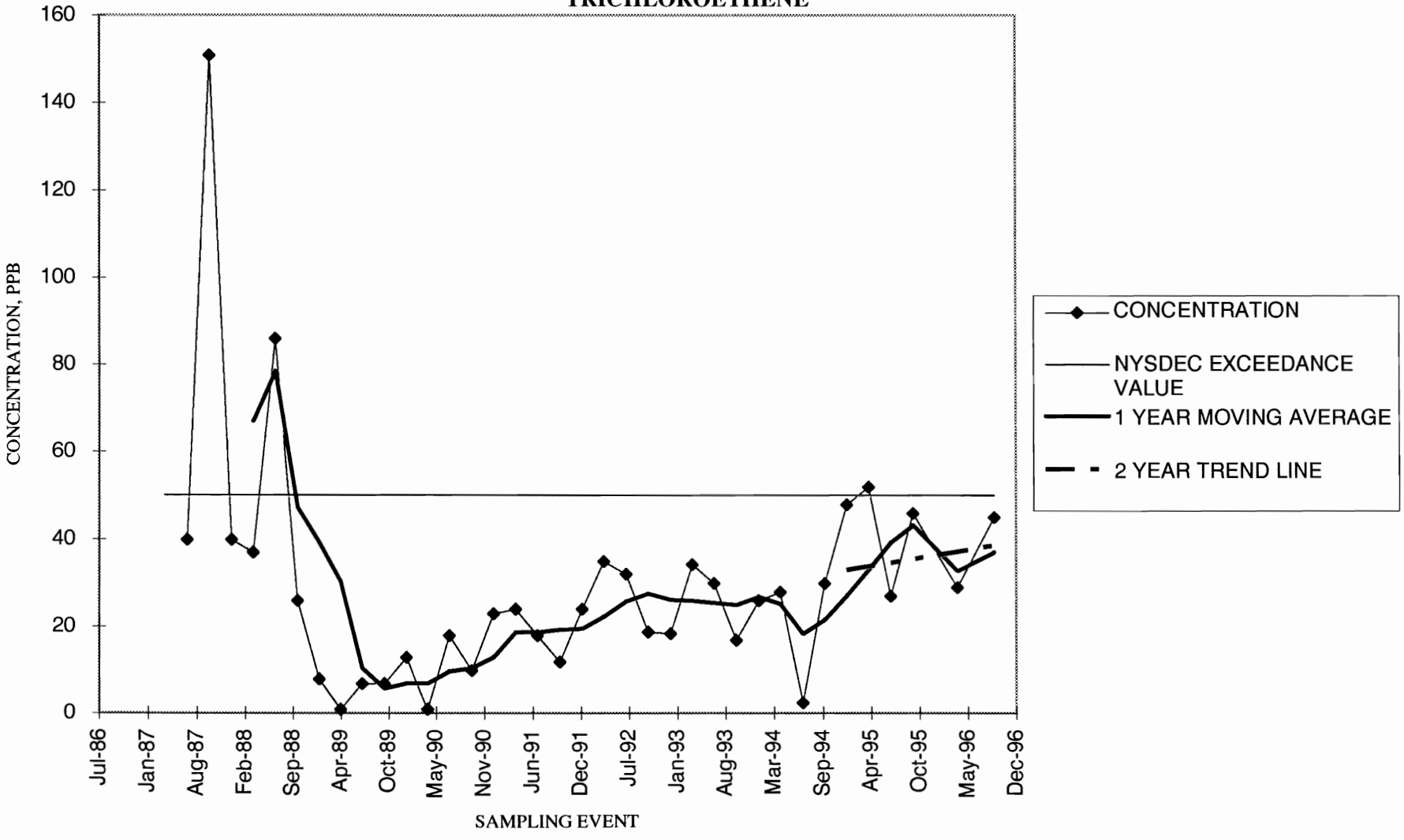


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WELL VDM - 9 : TRICHLOROETHENE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87		50	5	TOTAL STD	26.474178	
Apr-87		50	5	TOTAL Sx	4.4749528	
Jul-87	40	50	5	TOTAL MEAN	29.588889	
Oct-87	151	50	5	TOTAL N	36	
Jan-88	40	50	5	TOTAL df	35	
Apr-88	37	50	5			67.00
Jul-88	86	50	5			78.50
Oct-88	26	50	5			47.25
Jan-89	8	50	5			39.25
Apr-89	1	50	5			30.25
Jul-89	7	50	5			10.50
Oct-89	7	50	5			5.75
Jan-90	13	50	5			7.00
Apr-90	1	50	5			7.00
Jul-90	18	50	5			9.75
Oct-90	10	50	5			10.50
Jan-91	23	50	5			13.00
Apr-91	24	50	5			18.75
Jul-91	18	50	5			18.75
Oct-91	12	50	5			19.25
Jan-92	24	50	5			19.50
Apr-92	35	50	5			22.25
Jul-92	32.1	50	5			25.78
Oct-92	18.8	50	5			27.48
Jan-93	18.5	50	5			26.10
Apr-93	34.3	50	5			25.93
Jul-93	30	50	5			25.40
Oct-93	17	50	5			24.95
Jan-94	26	50	5			26.83
Apr-94	28	50	5			25.25
Jul-94	3	50	5			18.38
Oct-94	30	50	5			21.63
Jan-95	48	50	5			27.13
Apr-95	52	50	5			33.13
Jul-95	27	50	5			39.25
Oct-95	46	50	5			43.25
Apr-96	29	50	5			32.75
Sep-96	45	50	10			37

MOVING AVERAGE TREND TEST
VDM-9
TRICHLOROETHENE

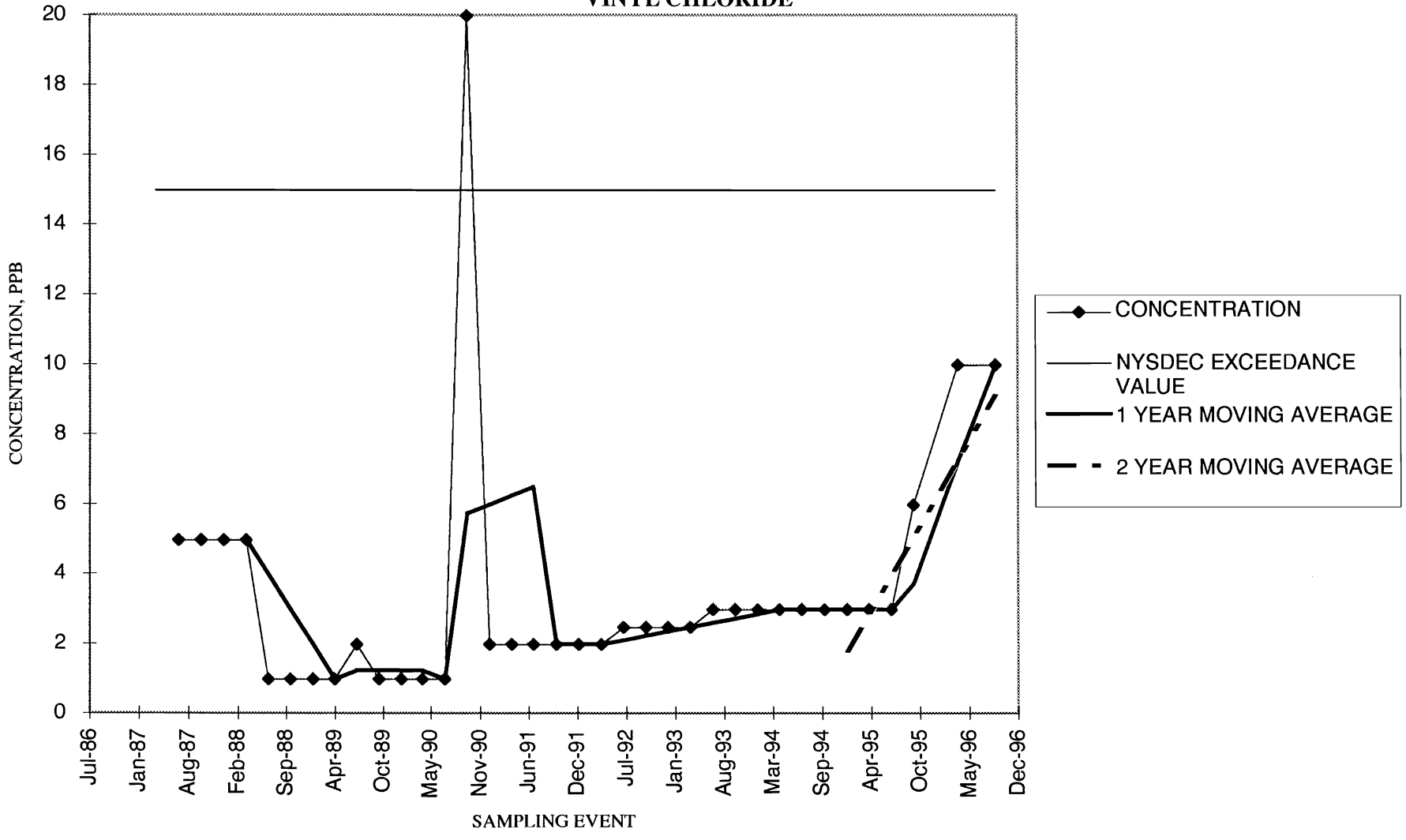


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WELL VDM - 9 : VINYL CHLORIDE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87		15	2	TOTAL STD	3.5117747	
Apr-87		15	2	TOTAL Sx	0.5935983	
Jul-87	5	15	2	TOTAL MEAN	3.4722222	
Oct-87	5	15	2	TOTAL N	36	
Jan-88	5	15	2	TOTAL df	35	
Apr-88	5	15	2			5.00
Jul-88	1	15	2			4.00
Oct-88	1	15	2			3.00
Jan-89	1	15	2			2.00
Apr-89	1	15	2			1.00
Jul-89	2	15	2			1.25
Oct-89	1	15	2			1.25
Jan-90	1	15	2			1.25
Apr-90	1	15	2			1.25
Jul-90	1	15	2			1.00
Oct-90	20	15	2			5.75
Jan-91	2	15	2			6.00
Apr-91	2	15	2			6.25
Jul-91	2	15	2			6.50
Oct-91	2	15	2			2.00
Jan-92	2	15	2			2.00
Apr-92	2	15	2			2.00
Jul-92	2.5	15	2			2.13
Oct-92	2.5	15	2			2.25
Jan-93	2.5	15	2			2.38
Apr-93	2.5	15	2			2.50
Jul-93	3	15	2			2.63
Oct-93	3	15	2			2.75
Jan-94	3	15	2			2.88
Apr-94	3	15	2			3.00
Jul-94	3	15	2			3.00
Oct-94	3	15	2			3.00
Jan-95	3	15	2			3.00
Apr-95	3	15	2			3.00
Jul-95	3	15	2			3.00
Oct-95	6	15	6			3.75
Apr-96	10	15	10			7.25
Sep-96	10	15	10			10

MOVING AVERAGE TREND TEST
VDM-9
VINYL CHLORIDE

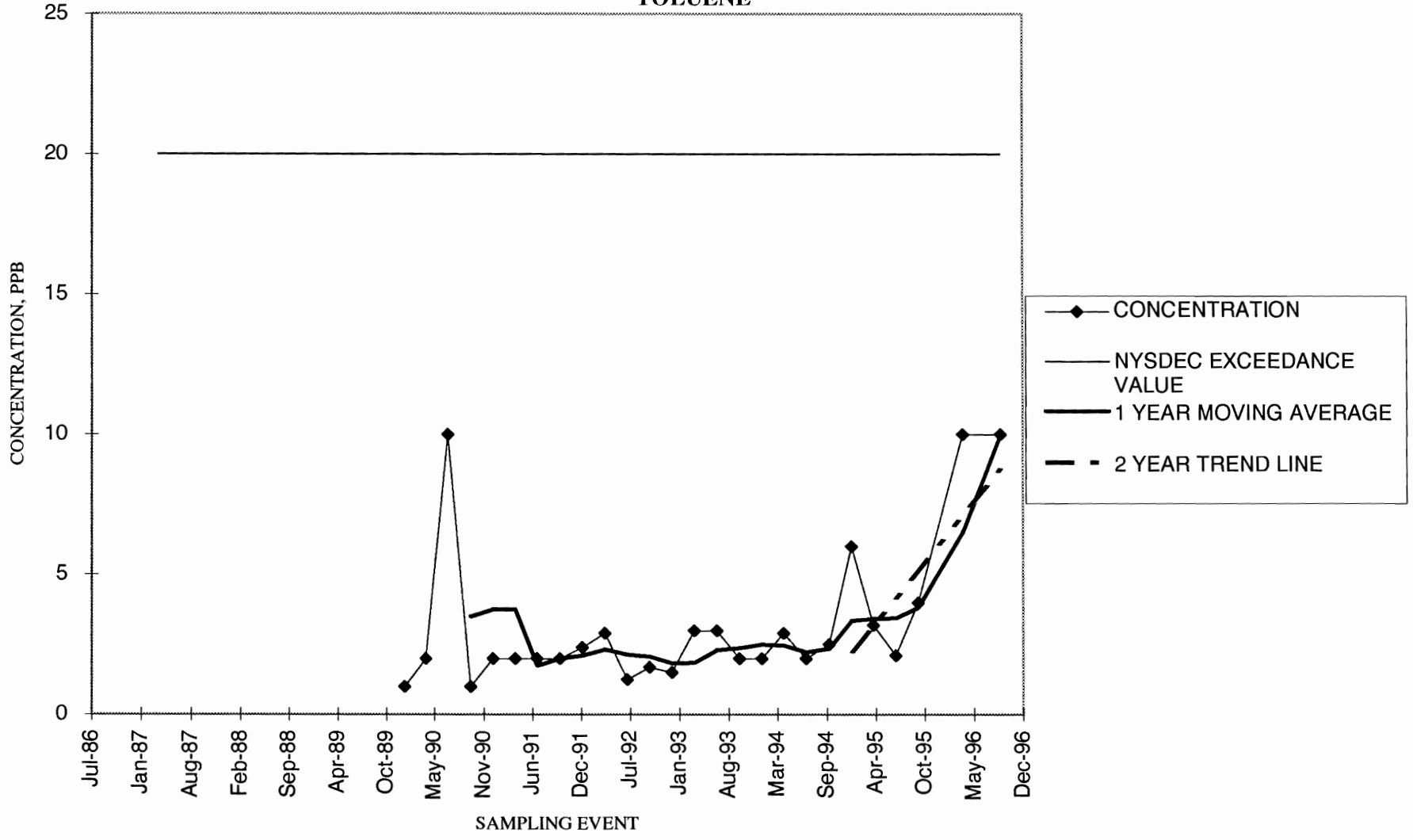


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WELL VDM - 9 : TOLUENE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87		20	5	TOTAL STD	2.6305784	
Apr-87		20	5	TOTAL Sx	0.5261157	
Jul-87		20	5	TOTAL MEAN	3.2473077	
Oct-87		20	5	TOTAL N	26	
Jan-88		20	5	TOTAL df	25	
Apr-88		20	5			
Jul-88		20	5			
Oct-88		20	5			
Jan-89		20	5			
Apr-89		20	5			
Jul-89		20	5			
Oct-89		20	5			
Jan-90	1	20	5			
Apr-90	2	20	5			
Jul-90	10	20	5			
Oct-90	1	20	5			3.50
Jan-91	2	20	5			3.75
Apr-91	2	20	5			3.75
Jul-91	2	20	5			1.75
Oct-91	2	20	5			2.00
Jan-92	2.4	20	5			2.10
Apr-92	2.9	20	5			2.33
Jul-92	1.25	20	5			2.14
Oct-92	1.69	20	5			2.06
Jan-93	1.5	20	5			1.84
Apr-93	2.99	20	5			1.86
Jul-93	3	20	5			2.30
Oct-93	2	20	5			2.37
Jan-94	2	20	5			2.50
Apr-94	3	20	5			2.48
Jul-94	2.0	20	5			2.23
Oct-94	2.5	20	5			2.35
Jan-95	6	20	5			3.35
Apr-95	3.2	20	5			3.43
Jul-95	2.1	20	5			3.45
Oct-95	4	20	4			3.83
Apr-96	10	20	10			6.525
Sep-96	10	20	10			10

MOVING AVERAGE TREND TEST
VDM-9
TOLUENE

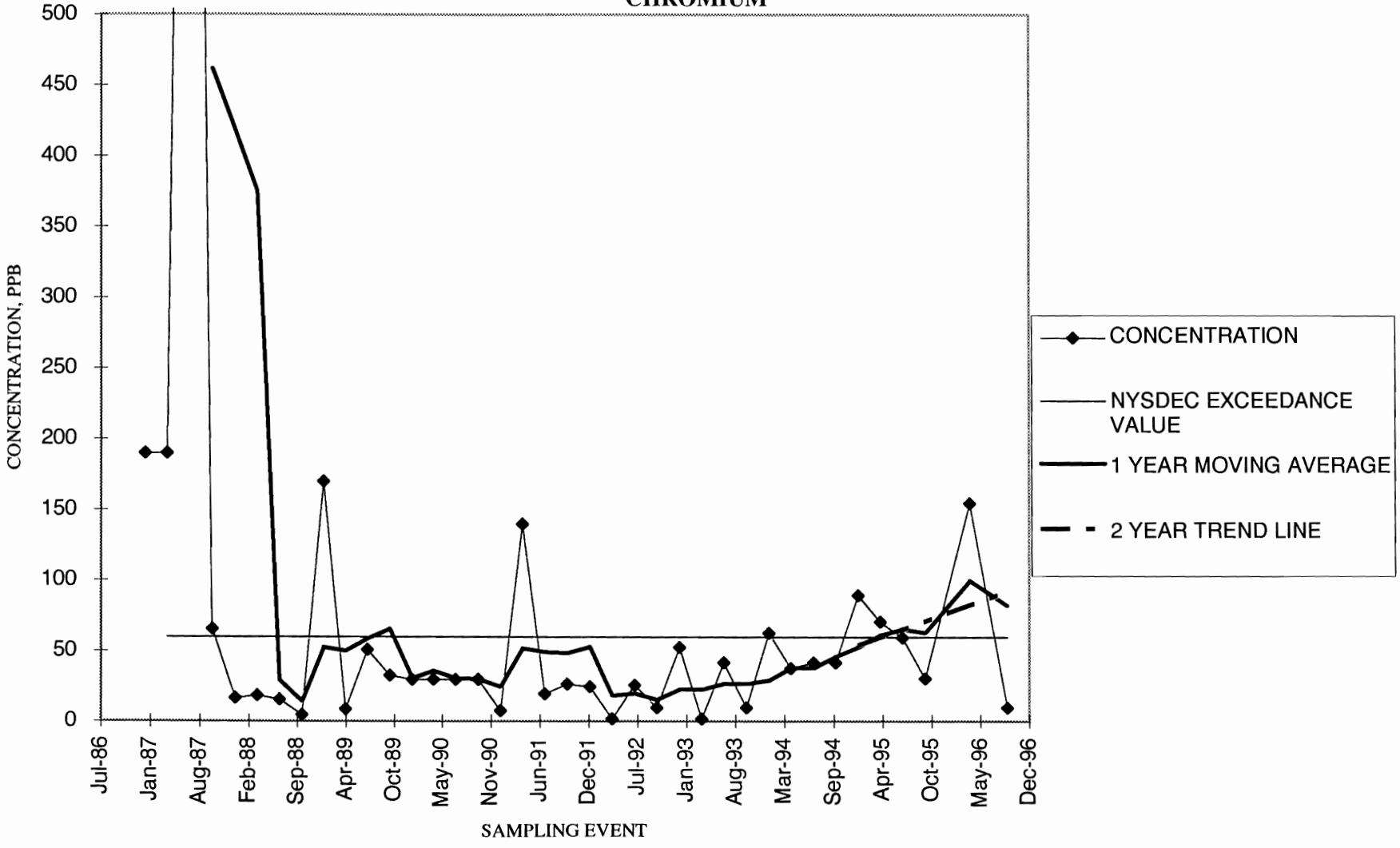


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WELL VDM - 9 : CHROMIUM

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87	190	60	50	TOTAL STD	222.00801	
Apr-87	190	60	50	TOTAL Sx	36.497891	
Jul-87	1400	60	50	TOTAL MEAN	85.605263	
Oct-87	66	60	50	TOTAL N	38	461.5
Jan-88	17	60	50	TOTAL df	37	418.25
Apr-88	19	60	50			375.5
Jul-88	16	60	50			29.5
Oct-88	5	60	50			14.25
Jan-89	170	60	50			52.5
Apr-89	9	60	50			50
Jul-89	51	60	50			58.75
Oct-89	33	60	50			65.75
Jan-90	30	60	50			30.75
Apr-90	30	60	50			36
Jul-90	30	60	50			30.75
Oct-90	30	60	50			30
Jan-91	8	60	50			24.5
Apr-91	140	60	50			52
Jul-91	20	60	50			49.5
Oct-91	27	60	50			48.75
Jan-92	25	60	50			53
Apr-92	2	60	50			18.5
Jul-92	26	60	50			20
Oct-92	10	60	50			15.75
Jan-93	53	60	50			22.75
Apr-93	2	60	50			22.75
Jul-93	42	60	50			26.75
Oct-93	10	60	50			26.75
Jan-94	63	60	50			29.25
Apr-94	38	60	50			38.25
Jul-94	42	60	50			38.25
Oct-94	42	60	50			46.25
Jan-95	90	60	50			53
Apr-95	71	60	50			61.25
Jul-95	60	60	50			65.75
Oct-95	31	60	2			63
Apr-96	155	60	2			100.25
Sep-96	10	60	5			82.5

MOVING AVERAGE TREND TEST
VDM-9
CHROMIUM

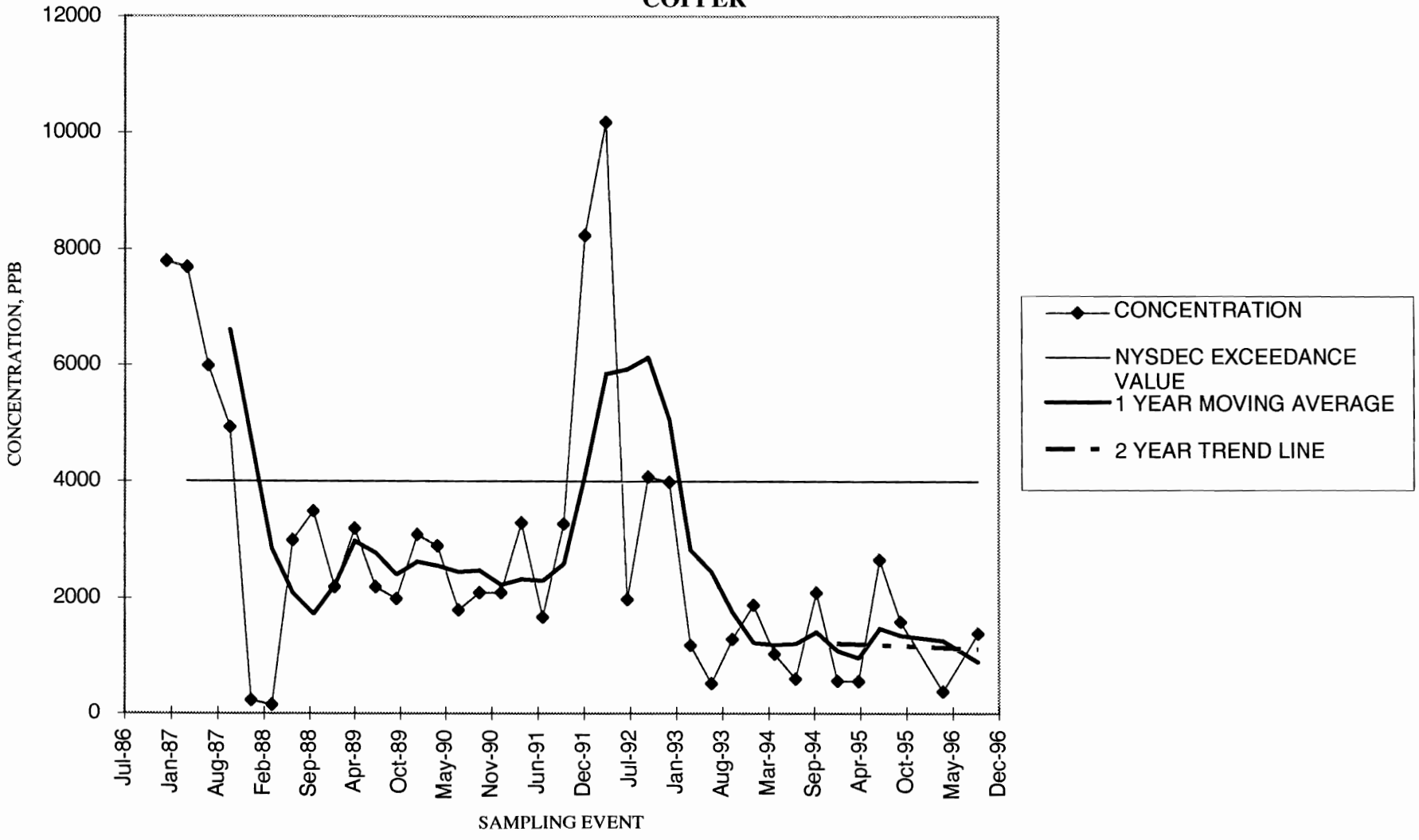


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WELL VDM - 9 : COPPER

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87	7800	4000	200	TOTAL STD	2347.4002	
Apr-87	7700	4000	200	TOTAL Sx	385.91021	
Jul-87	6000	4000	200	TOTAL MEAN	2832.5526	
Oct-87	4940	4000	200	TOTAL N	38	6610
Jan-88	243	4000	200	TOTAL df	37	4720.75
Apr-88	171	4000	200			2838.5
Jul-88	3000	4000	200			2088.5
Oct-88	3500	4000	200			1728.5
Jan-89	2200	4000	200			2217.75
Apr-89	3200	4000	200			2975
Jul-89	2200	4000	200			2775
Oct-89	2000	4000	200			2400
Jan-90	3100	4000	200			2625
Apr-90	2900	4000	200			2550
Jul-90	1800	4000	200			2450
Oct-90	2100	4000	200			2475
Jan-91	2100	4000	200			2225
Apr-91	3300	4000	200			2325
Jul-91	1680	4000	200			2295
Oct-91	3280	4000	200			2590
Jan-92	8240	4000	200			4125
Apr-92	10200	4000	200			5850
Jul-92	1990	4000	200			5927.5
Oct-92	4090	4000	200			6130
Jan-93	4000	4000	200			5070
Apr-93	1200	4000	200			2820
Jul-93	540	4000	200			2457.5
Oct-93	1300	4000	200			1760
Jan-94	1890	4000	200			1232.5
Apr-94	1050	4000	200			1195
Jul-94	620	4000	200			1215
Oct-94	2100	4000	200			1415
Jan-95	577	4000	200			1086.75
Apr-95	570	4000	200			966.75
Jul-95	2662	4000	200			1477.25
Oct-95	1600	4000	10			1352.25
Apr-96	394	4000	10			1262.5
Sep-96	1400	4000	10			897

MOVING AVERAGE TREND TEST
VDM-9
COPPER

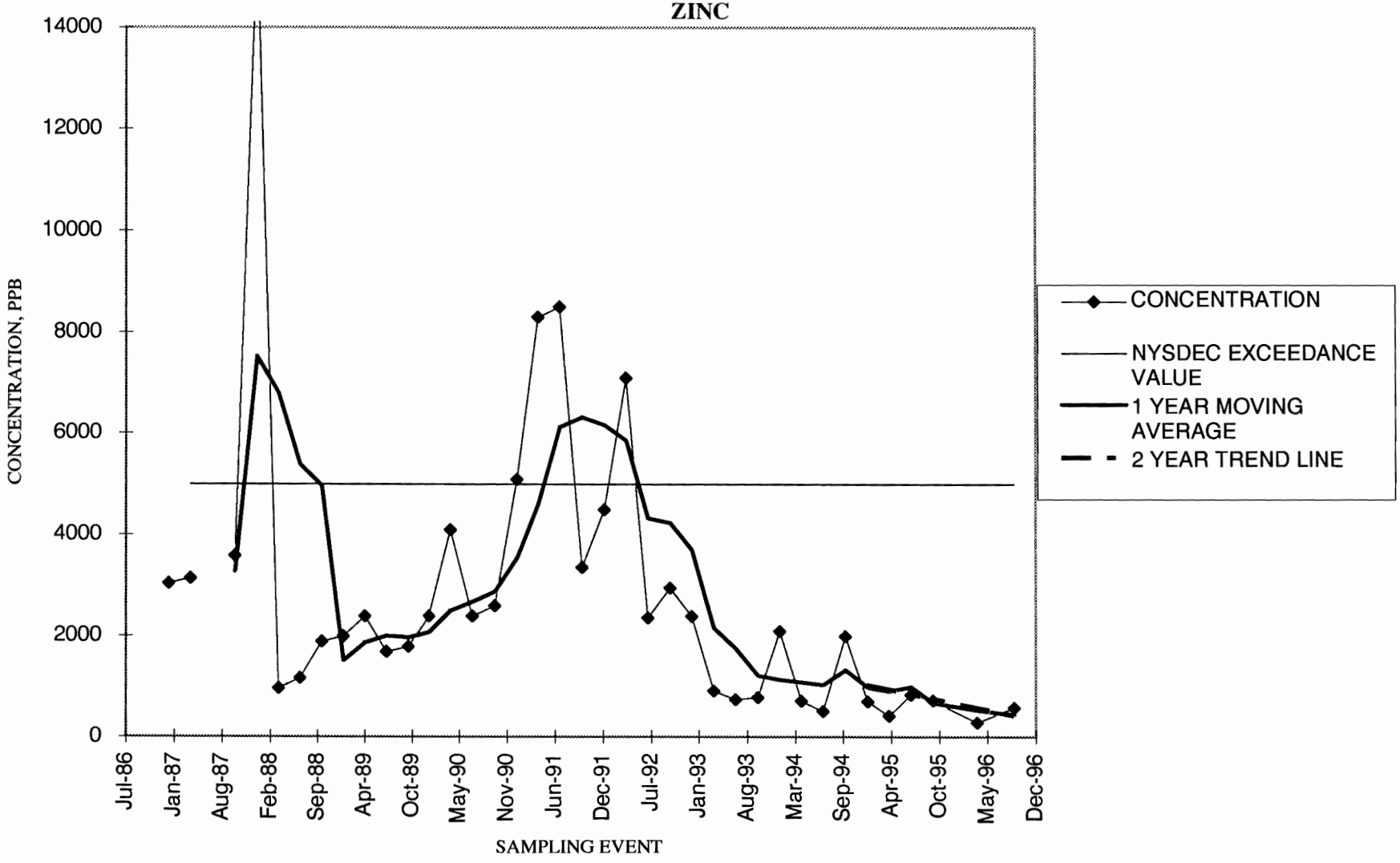


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WELL VDM - 9 : ZINC

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87	3050	5000	300	TOTAL STD	2956.3805	
Apr-87	3150	5000	300	TOTAL Sx	492.73008	
Jul-87		5000	300	TOTAL MEAN	2838.973	
Oct-87	3600	5000	300	TOTAL N	37	3266.66667
Jan-88	15800	5000	300	TOTAL df	36	7516.66667
Apr-88	980	5000	300			6793.33333
Jul-88	1180	5000	300			5390
Oct-88	1900	5000	300			4965
Jan-89	2000	5000	300			1515
Apr-89	2400	5000	300			1870
Jul-89	1700	5000	300			2000
Oct-89	1800	5000	300			1975
Jan-90	2400	5000	300			2075
Apr-90	4100	5000	300			2500
Jul-90	2400	5000	300			2675
Oct-90	2600	5000	300			2875
Jan-91	5100	5000	300			3550
Apr-91	8300	5000	300			4600
Jul-91	8500	5000	300			6125
Oct-91	3360	5000	300			6315
Jan-92	4500	5000	300			6165
Apr-92	7100	5000	300			5865
Jul-92	2370	5000	300			4332.5
Oct-92	2960	5000	300			4232.5
Jan-93	2400	5000	300			3707.5
Apr-93	920	5000	300			2162.5
Jul-93	750	5000	300			1757.5
Oct-93	790	5000	300			1215
Jan-94	2100	5000	300			1140
Apr-94	720	5000	300			1090
Jul-94	520	5000	300			1032.5
Oct-94	2000	5000	300			1335
Jan-95	707	5000	300			986.75
Apr-95	430	5000	300			914.25
Jul-95	842	5000	300			994.75
Oct-95	730	5000	20			677.25
Apr-96	293	5000	20			539.5
Sep-96	590	5000	20			441.5

MOVING AVERAGE TREND TEST
VDM-9
ZINC

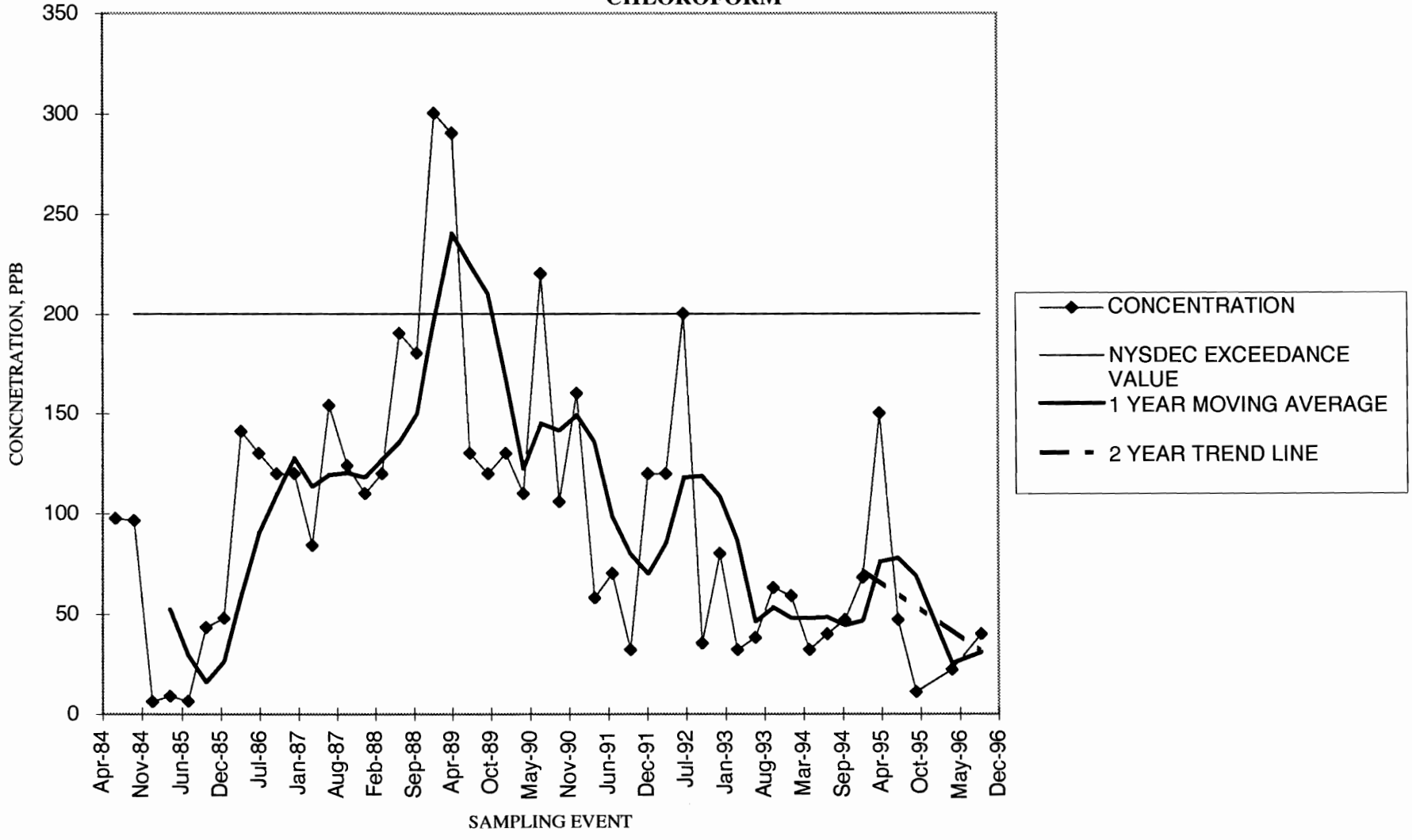


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WELL VDM - 10 : CHLOROFORM

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jul-84	97.6	200	8	TOTAL STD	67.61856	
Oct-84	96.46	200	8	TOTAL Sx	9.863181	
Jan-85	5.97	200	8	TOTAL MEAN	98.11104	
Apr-85	8.8	200	8	TOTAL N	48	52.21
Jul-85	6.3	200	8	TOTAL df	47	29.38
Oct-85	43.2	200	8			16.07
Jan-86	47.8	200	8			26.53
Apr-86	141	200	8			59.58
Jul-86	130	200	8			90.50
Oct-86	120	200	8			109.70
Jan-87	120	200	8			127.75
Apr-87	84	200	8			113.50
Jul-87	154	200	8			119.50
Oct-87	124	200	8			120.50
Jan-88	110	200	8			118.00
Apr-88	120	200	8			127.00
Jul-88	190	200	8			136.00
Oct-88	180	200	8			150.00
Jan-89	300	200	8			197.50
Apr-89	290	200	8			240.00
Jul-89	130	200	8			225.00
Oct-89	120	200	8			210.00
Jan-90	130	200	8			167.50
Apr-90	110	200	8			122.50
Jul-90	220	200	8			145.00
Oct-90	106	200	8			141.50
Jan-91	160	200	8			149.00
Apr-91	58	200	8			136.00
Jul-91	70	200	8			98.50
Oct-91	32	200	8			80.00
Jan-92	120	200	8			70.00
Apr-92	120	200	8			85.50
Jul-92	200	200	8			118.00
Oct-92	35.3	200	8			118.83
Jan-93	79.9	200	8			108.80
Apr-93	32	200	8			86.80
Jul-93	38	200	8			46.30
Oct-93	63	200	8			53.23
Jan-94	59	200	8			48.00
Apr-94	32	200	8			48.00
Jul-94	40	200	8			48.50
Oct-94	47	200	8			44.50
Jan-95	68	200	8			46.75
Apr-95	150	200	8			76.25
Jul-95	47	200	8			78.00
Oct-95	11	200	4			69.00
Apr-96	22	200	4			25.5
Sep-96	40	200	10			31

MOVING AVERAGE TREND TEST
VDM-10
CHLOROFORM

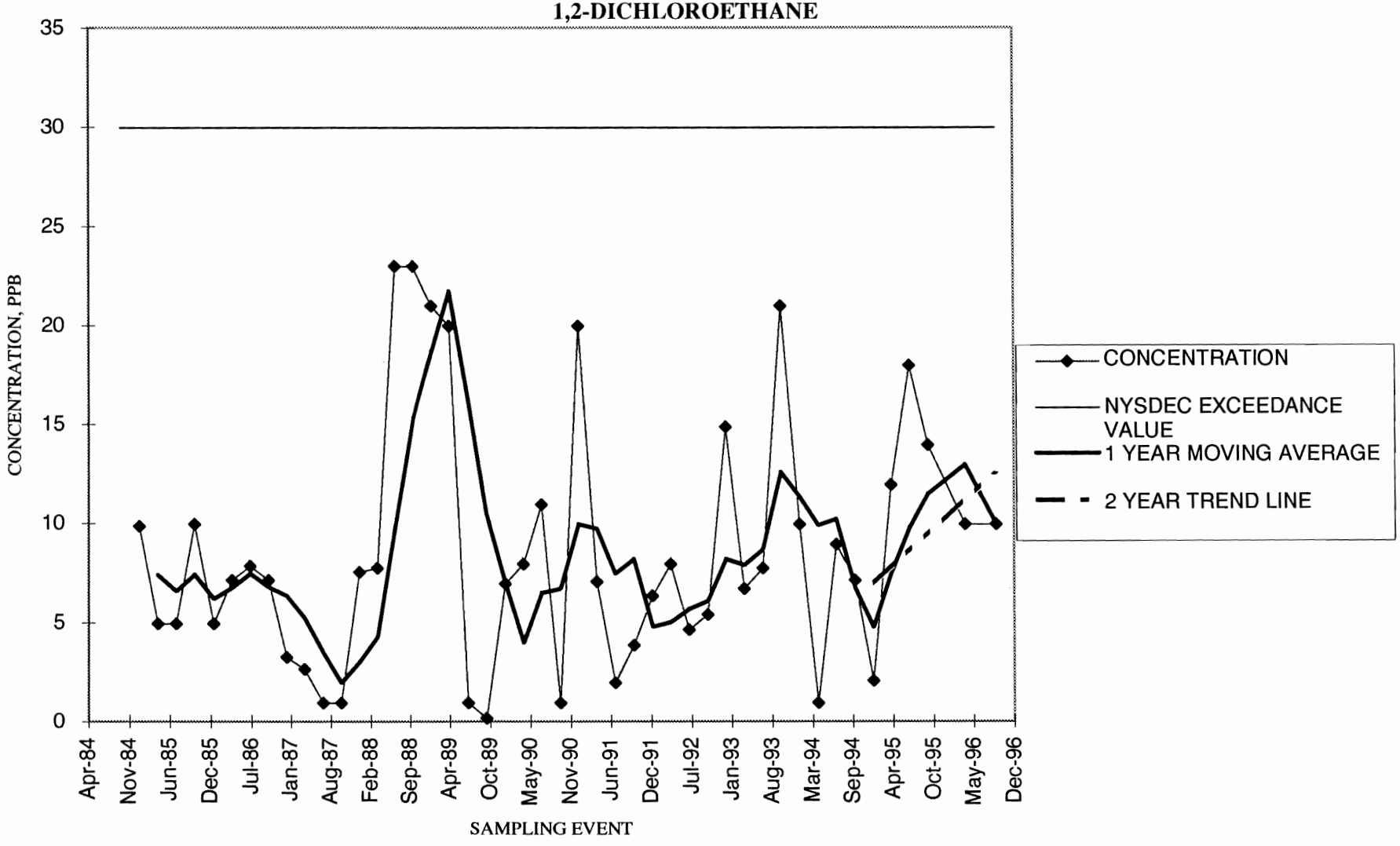


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WELL VDM - 10 : 1,2-DICHLOROETHANE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jul-84		30	5	TOTAL STD	6.225729	
Oct-84		30	5	TOTAL Sx	0.928077	
Jan-85	9.9	30	5	TOTAL MEAN	8.632609	
Apr-85	5	30	5	TOTAL N	46	7.45
Jul-85	5	30	5	TOTAL df	45	6.63
Oct-85	10	30	5			7.48
Jan-86	5	30	5			6.25
Apr-86	7.2	30	5			6.80
Jul-86	7.9	30	5			7.53
Oct-86	7.2	30	5			6.83
Jan-87	3.3	30	5			6.40
Apr-87	2.7	30	5			5.28
Jul-87	1	30	5			3.55
Oct-87	1	30	5			2.00
Jan-88	7.6	30	5			3.08
Apr-88	7.8	30	5			4.35
Jul-88	23	30	5			9.85
Oct-88	23	30	5			15.35
Jan-89	21	30	5			18.70
Apr-89	20	30	5			21.75
Jul-89	1	30	5			16.25
Oct-89	0.2	30	5			10.55
Jan-90	7	30	5			7.05
Apr-90	8	30	5			4.05
Jul-90	11	30	5			6.55
Oct-90	1	30	5			6.75
Jan-91	20	30	5			10.00
Apr-91	7.1	30	5			9.78
Jul-91	2	30	5			7.53
Oct-91	3.9	30	5			8.25
Jan-92	6.4	30	5			4.85
Apr-92	8	30	5			5.08
Jul-92	4.7	30	5			5.75
Oct-92	5.45	30	5			6.14
Jan-93	14.9	30	5			8.26
Apr-93	6.75	30	5			7.95
Jul-93	7.8	30	5			8.73
Oct-93	21	30	5			12.61
Jan-94	10	30	5			11.39
Apr-94	1	30	5			9.95
Jul-94	9	30	5			10.25
Oct-94	7.2	30	5			6.80
Jan-95	2.1	30	5			4.83
Apr-95	12	30	5			7.58
Jul-95	18	30	5			9.83
Oct-95	14	30	1			11.53
Apr-96	10	30	10			13.00
Sep-96	10	30	10			10

MOVING AVERAGE TREND TEST
VDM-10
1,2-DICHLOROETHANE

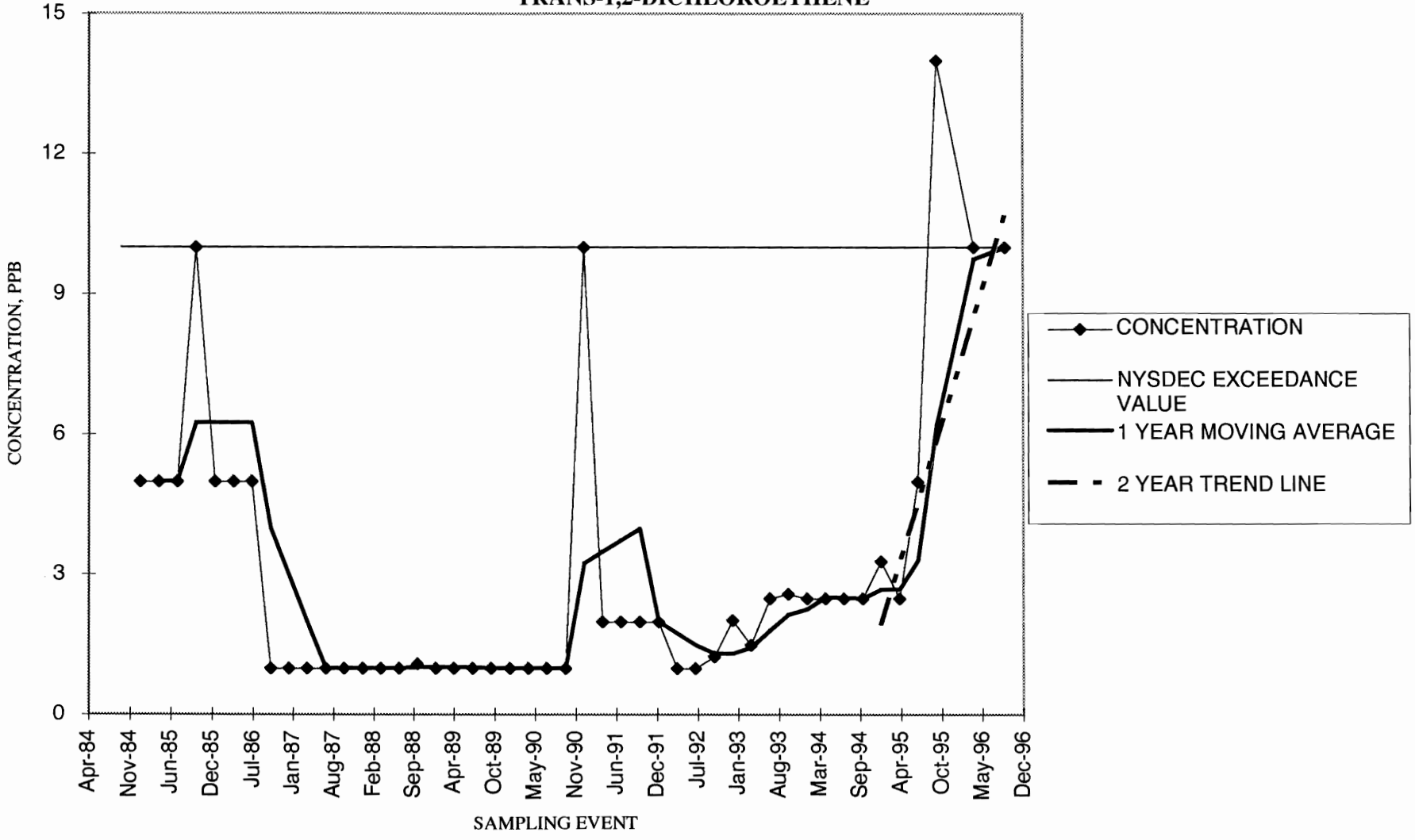


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WELL VDM - 10 : TRANS-1,2-DICHLOROETHENE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jul-84		10	5	TOTAL STD	3.065523	
Oct-84		10	5	TOTAL Sx	0.456981	
Jan-85	5	10	5	TOTAL MEAN	3.082391	
Apr-85	5	10	5	TOTAL N	46	5.00
Jul-85	5	10	5	TOTAL df	45	5.00
Oct-85	10	10	5			6.25
Jan-86	5	10	5			6.25
Apr-86	5	10	5			6.25
Jul-86	5	10	5			6.25
Oct-86	1	10	5			4.00
Jan-87	1	10	5			3.00
Apr-87	1	10	5			2.00
Jul-87	1	10	5			1.00
Oct-87	1	10	5			1.00
Jan-88	1	10	5			1.00
Apr-88	1	10	5			1.00
Jul-88	1	10	5			1.00
Oct-88	1.1	10	5			1.03
Jan-89	1	10	5			1.03
Apr-89	1	10	5			1.03
Jul-89	1	10	5			1.03
Oct-89	1	10	5			1.00
Jan-90	1	10	5			1.00
Apr-90	1	10	5			1.00
Jul-90	1	10	5			1.00
Oct-90	1	10	5			1.00
Jan-91	10	10	5			3.25
Apr-91	2	10	5			3.50
Jul-91	2	10	5			3.75
Oct-91	2	10	5			4.00
Jan-92	2	10	5			2.00
Apr-92	1	10	5			1.75
Jul-92	1	10	5			1.50
Oct-92	1.25	10	5			1.31
Jan-93	2.04	10	5			1.32
Apr-93	1.5	10	5			1.45
Jul-93	2.5	10	5			1.82
Oct-93	2.6	10	5			2.16
Jan-94	2.5	10	5			2.28
Apr-94	2.5	10	5			2.53
Jul-94	2.5	10	5			2.53
Oct-94	2.5	10	5			2.50
Jan-95	3.3	10	5			2.70
Apr-95	2.5	10	5			2.70
Jul-95	5	10	5			3.33
Oct-95	14	10	1			6.20
Apr-96	10	10	10			9.75
Sep-96	10	10	10			10

MOVING AVERAGE TREND TEST
VDM-10
TRANS-1,2-DICHLOROETHENE

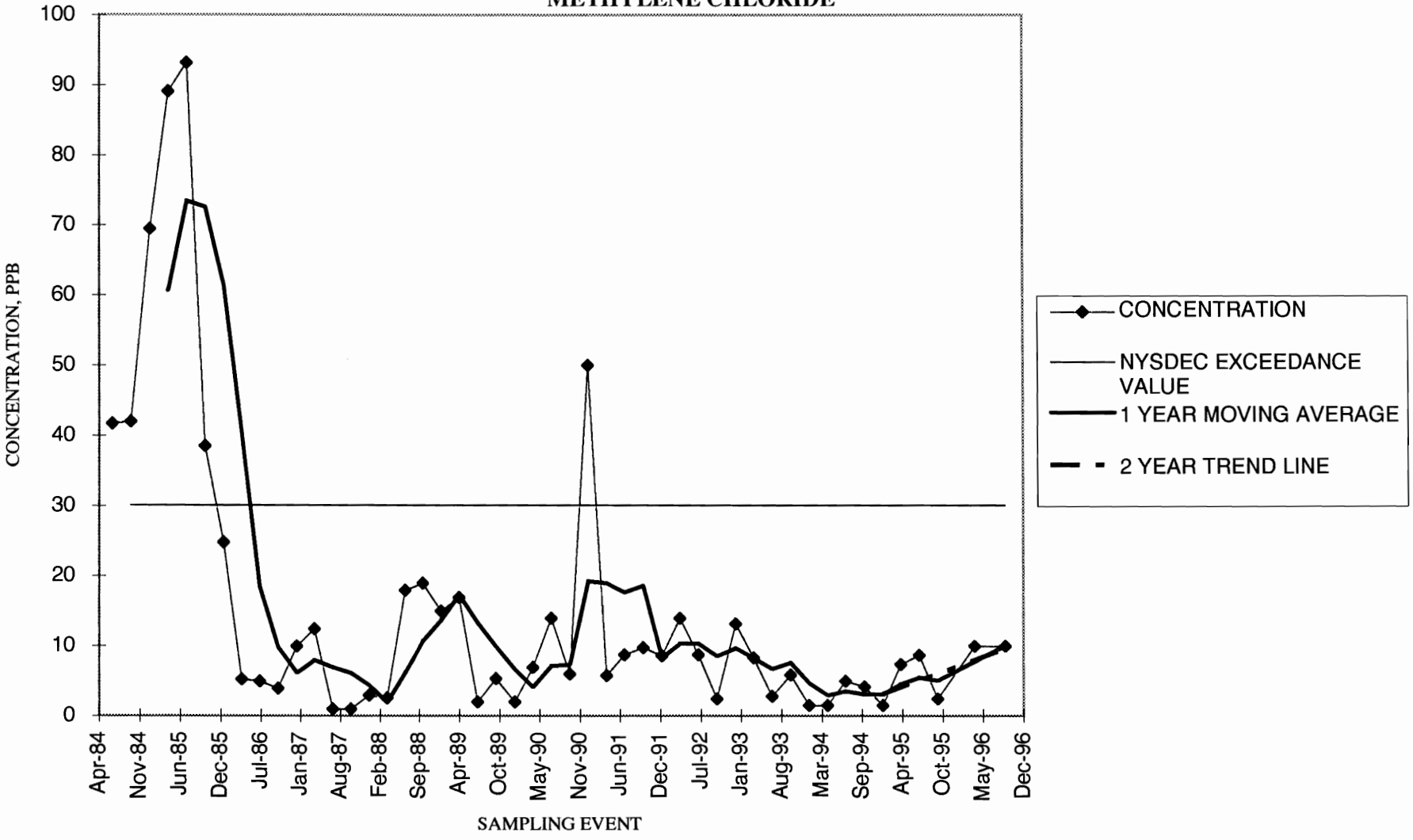


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WELL VDM - 10 : METHYLENE CHLORIDE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jul-84	41.7	30	5	TOTAL STD	21.04479	
Oct-84	42	30	5	TOTAL Sx	3.069698	
Jan-85	69.5	30	5	TOTAL MEAN	15.40438	
Apr-85	89.1	30	5	TOTAL N	48	60.58
Jul-85	93.2	30	5	TOTAL df	47	73.45
Oct-85	38.5	30	5			72.58
Jan-86	24.8	30	5			61.40
Apr-86	5.3	30	5			40.45
Jul-86	5	30	5			18.40
Oct-86	4	30	5			9.78
Jan-87	10	30	5			6.08
Apr-87	12.5	30	5			7.88
Jul-87	1	30	5			6.88
Oct-87	1	30	5			6.13
Jan-88	3	30	5			4.38
Apr-88	2.6	30	5			1.90
Jul-88	18	30	5			6.15
Oct-88	19	30	5			10.65
Jan-89	15	30	5			13.65
Apr-89	17	30	5			17.25
Jul-89	2	30	5			13.25
Oct-89	5.4	30	5			9.85
Jan-90	2	30	5			6.60
Apr-90	7	30	5			4.10
Jul-90	14	30	5			7.10
Oct-90	6	30	5			7.25
Jan-91	50	30	5			19.25
Apr-91	5.8	30	5			18.95
Jul-91	8.8	30	5			17.65
Oct-91	9.8	30	5			18.60
Jan-92	8.6	30	5			8.25
Apr-92	14	30	5			10.30
Jul-92	8.8	30	5			10.30
Oct-92	2.5	30	5			8.48
Jan-93	13.2	30	5			9.63
Apr-93	8.31	30	5			8.20
Jul-93	2.8	30	5			6.70
Oct-93	5.9	30	5			7.55
Jan-94	1.5	30	5			4.63
Apr-94	1.5	30	5			2.93
Jul-94	5	30	5			3.48
Oct-94	4.2	30	5			3.05
Jan-95	1.5	30	5			3.05
Apr-95	7.4	30	5			4.53
Jul-95	8.7	30	5			5.45
Oct-95	2.5	30	2.5			5.03
Apr-96	10	30	10			7.80
Sep-96	10	30	10			10

MOVING AVERAGE TREND TEST
VDM-10
METHYLENE CHLORIDE

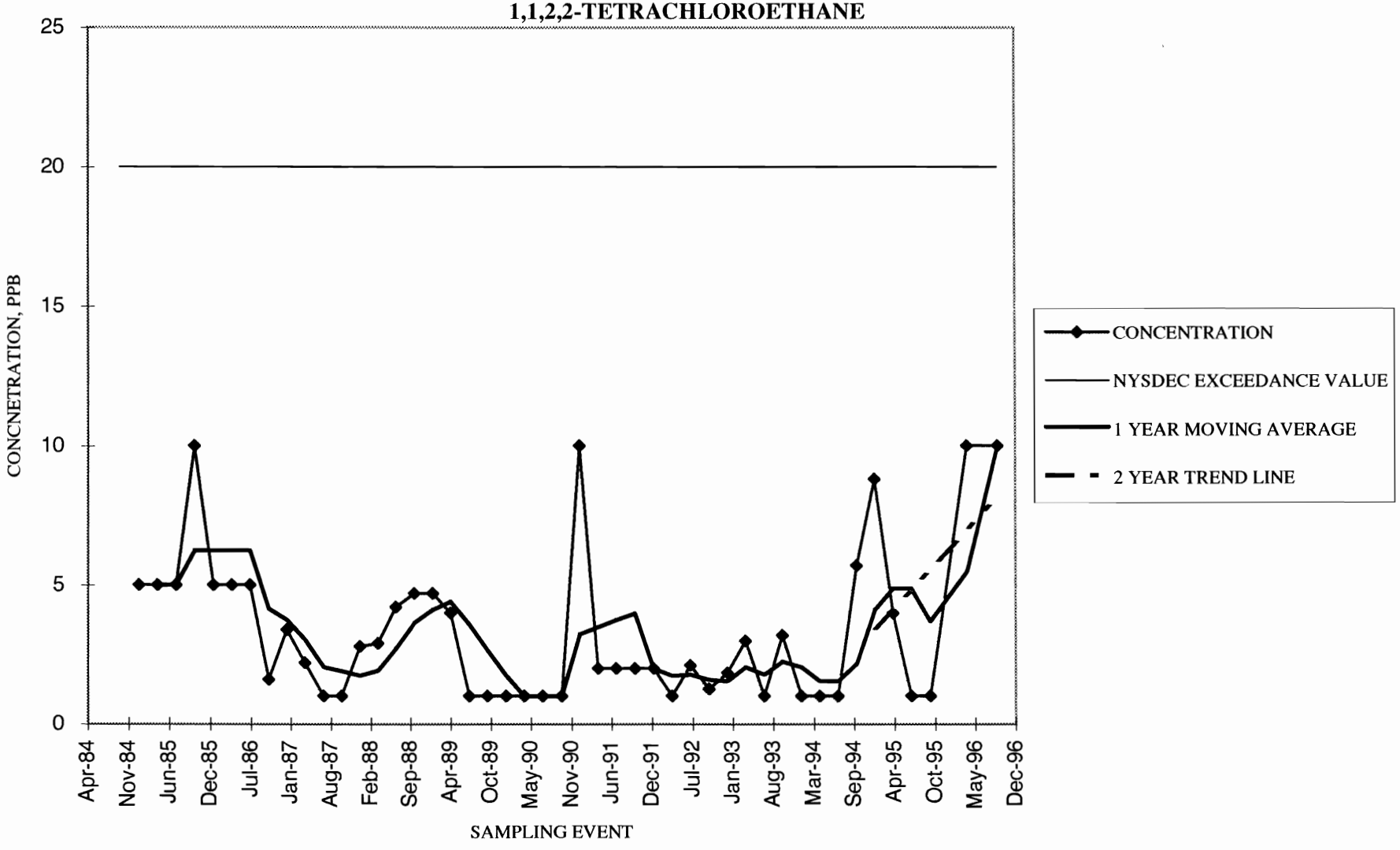


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WELL VDM - 10 : 1,1,2,2-TETRACHLOROETHANE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jul-84		20	5	TOTAL STD	2.707073	
Oct-84		20	5	TOTAL Sx	0.403547	
Jan-85	5	20	5	TOTAL MEAN	3.334348	
Apr-85	5	20	5	TOTAL N	46	5.00
Jul-85	5	20	5	TOTAL df	45	5.00
Oct-85	10	20	5			6.25
Jan-86	5	20	5			6.25
Apr-86	5	20	5			6.25
Jul-86	5	20	5			6.25
Oct-86	1.6	20	5			4.15
Jan-87	3.4	20	5			3.75
Apr-87	2.2	20	5			3.05
Jul-87	1	20	5			2.05
Oct-87	1	20	5			1.90
Jan-88	2.8	20	5			1.75
Apr-88	2.9	20	5			1.93
Jul-88	4.2	20	5			2.73
Oct-88	4.7	20	5			3.65
Jan-89	4.7	20	5			4.13
Apr-89	4	20	5			4.40
Jul-89	1	20	5			3.60
Oct-89	1	20	5			2.68
Jan-90	1	20	5			1.75
Apr-90	1	20	5			1.00
Jul-90	1	20	5			1.00
Oct-90	1	20	5			1.00
Jan-91	10	20	5			3.25
Apr-91	2	20	5			3.50
Jul-91	2	20	5			3.75
Oct-91	2	20	5			4.00
Jan-92	2	20	5			2.00
Apr-92	1	20	5			1.75
Jul-92	2.1	20	5			1.78
Oct-92	1.25	20	5			1.59
Jan-93	1.83	20	5			1.55
Apr-93	3	20	5			2.05
Jul-93	1	20	5			1.77
Oct-93	3.2	20	5			2.26
Jan-94	1	20	5			2.05
Apr-94	1	20	5			1.55
Jul-94	1	20	5			1.55
Oct-94	5.7	20	5			2.18
Jan-95	8.8	20	5			4.13
Apr-95	4	20	5			4.88
Jul-95	1	20	5			4.88
Oct-95	1	20	1			3.70
Apr-96	10	20	10			5.50
Sep-96	10	20	10			10

MOVING AVERAGE TREND TEST
VDM-10
1,1,2,2-TETRACHLOROETHANE

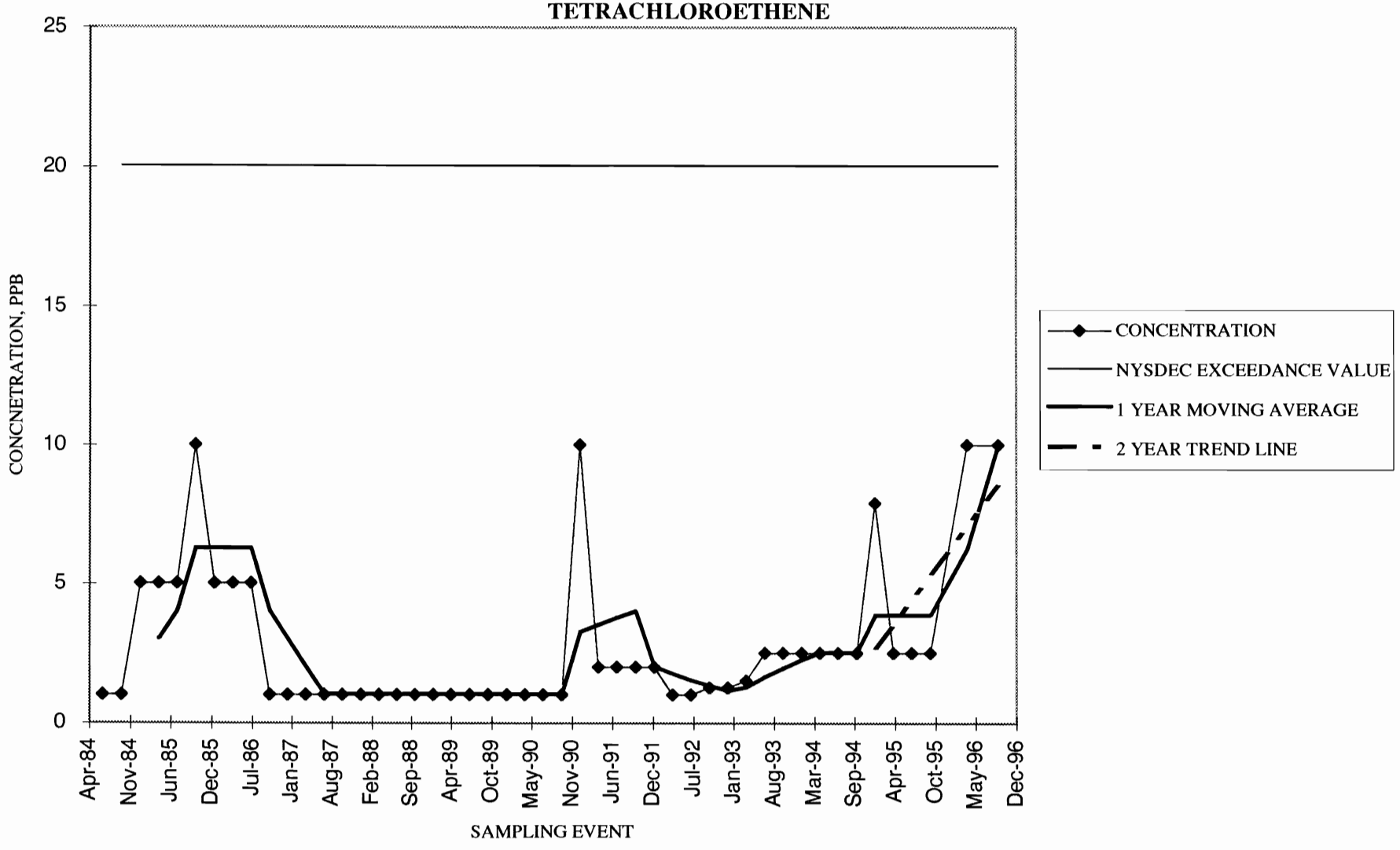


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WELL VDM - 10 : TETRACHLOROETHENE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jul-84	1	20	5	TOTAL STD	2.662604	
Oct-84	1	20	5	TOTAL Sx	0.388381	
Jan-85	5	20	5	TOTAL MEAN	2.779167	
Apr-85	5	20	5	TOTAL N	48	3.00
Jul-85	5	20	5	TOTAL df	47	4.00
Oct-85	10	20	5			6.25
Jan-86	5	20	5			6.25
Apr-86	5	20	5			6.25
Jul-86	5	20	5			6.25
Oct-86	1	20	5			4.00
Jan-87	1	20	5			3.00
Apr-87	1	20	5			2.00
Jul-87	1	20	5			1.00
Oct-87	1	20	5			1.00
Jan-88	1	20	5			1.00
Apr-88	1	20	5			1.00
Jul-88	1	20	5			1.00
Oct-88	1	20	5			1.00
Jan-89	1	20	5			1.00
Apr-89	1	20	5			1.00
Jul-89	1	20	5			1.00
Oct-89	1	20	5			1.00
Jan-90	1	20	5			1.00
Apr-90	1	20	5			1.00
Jul-90	1	20	5			1.00
Oct-90	1	20	5			1.00
Jan-91	10	20	5			3.25
Apr-91	2	20	5			3.50
Jul-91	2	20	5			3.75
Oct-91	2	20	5			4.00
Jan-92	2	20	5			2.00
Apr-92	1	20	5			1.75
Jul-92	1	20	5			1.50
Oct-92	1.25	20	5			1.31
Jan-93	1.25	20	5			1.13
Apr-93	1.5	20	5			1.25
Jul-93	2.5	20	5			1.63
Oct-93	2.5	20	5			1.94
Jan-94	2.5	20	5			2.25
Apr-94	2.5	20	5			2.50
Jul-94	2.5	20	5			2.50
Oct-94	2.5	20	5			2.50
Jan-95	7.9	20	5			3.85
Apr-95	2.5	20	5			3.85
Jul-95	2.5	20	5			3.85
Oct-95	2.5	20	2.5			3.85
Apr-96	10	20	10			6.25
Sep-96	10	20	10			10

MOVING AVERAGE TREND TEST
VDM-10
TETRACHLOROETHENE

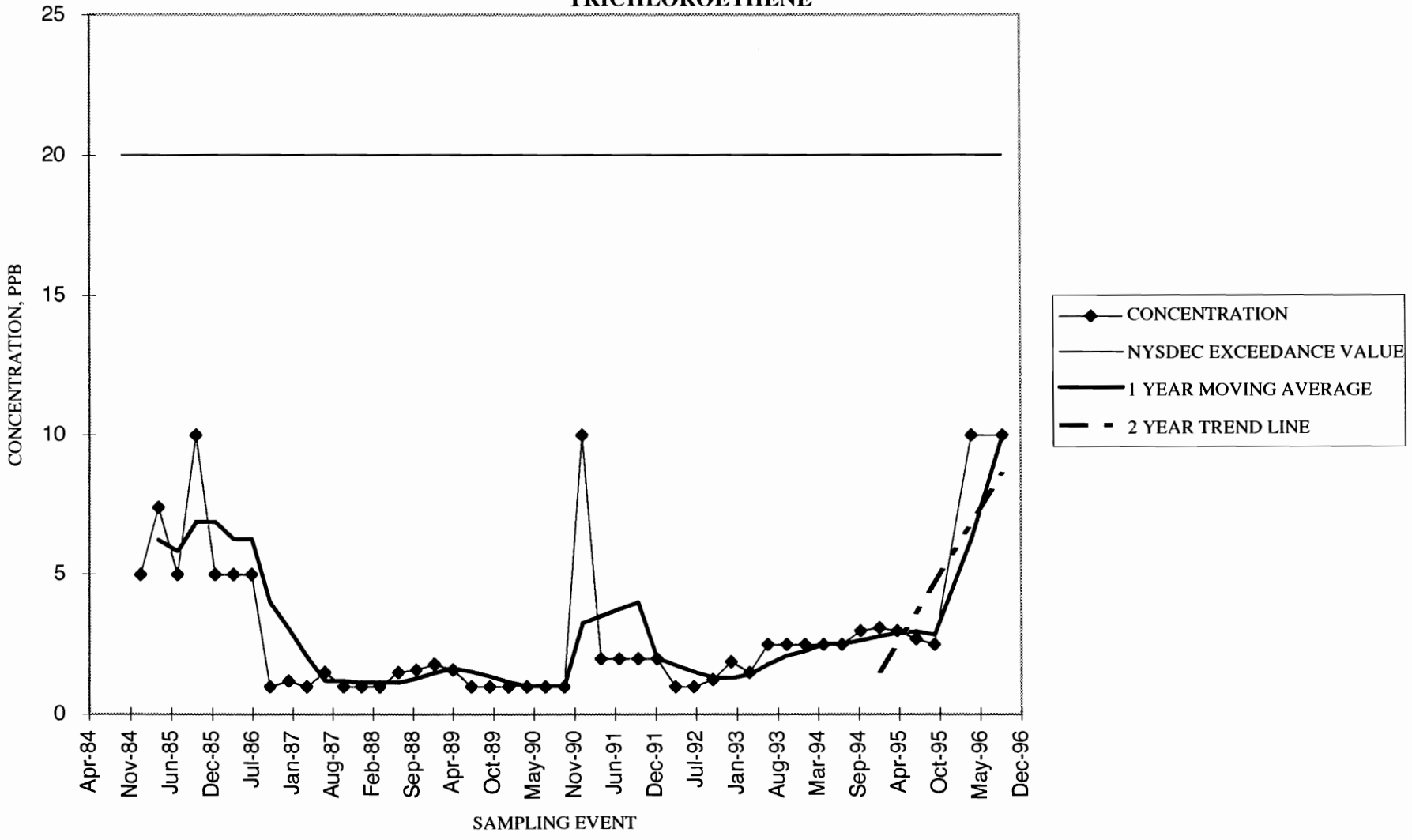


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WELL VDM - 10 : TRICHLOROETHENE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jul-84		20	5	TOTAL STD	2.60553	
Oct-84		20	5	TOTAL Sx	0.38841	
Jan-85	5	20	5	TOTAL MEAN	2.913696	
Apr-85	7.4	20	5	TOTAL N	46	6.20
Jul-85	5	20	5	TOTAL df	45	5.80
Oct-85	10	20	5			6.85
Jan-86	5	20	5			6.85
Apr-86	5	20	5			6.25
Jul-86	5	20	5			6.25
Oct-86	1	20	5			4.00
Jan-87	1.2	20	5			3.05
Apr-87	1	20	5			2.05
Jul-87	1.5	20	5			1.18
Oct-87	1	20	5			1.18
Jan-88	1	20	5			1.13
Apr-88	1	20	5			1.13
Jul-88	1.5	20	5			1.13
Oct-88	1.6	20	5			1.28
Jan-89	1.8	20	5			1.48
Apr-89	1.6	20	5			1.63
Jul-89	1	20	5			1.50
Oct-89	1	20	5			1.35
Jan-90	1	20	5			1.15
Apr-90	1	20	5			1.00
Jul-90	1	20	5			1.00
Oct-90	1	20	5			1.00
Jan-91	10	20	5			3.25
Apr-91	2	20	5			3.50
Jul-91	2	20	5			3.75
Oct-91	2	20	5			4.00
Jan-92	2	20	5			2.00
Apr-92	1	20	5			1.75
Jul-92	1	20	5			1.50
Oct-92	1.25	20	5			1.31
Jan-93	1.88	20	5			1.28
Apr-93	1.5	20	5			1.41
Jul-93	2.5	20	5			1.78
Oct-93	2.5	20	5			2.10
Jan-94	2.5	20	5			2.25
Apr-94	2.5	20	5			2.50
Jul-94	2.5	20	5			2.50
Oct-94	3	20	5			2.63
Jan-95	3.1	20	5			2.78
Apr-95	3	20	5			2.90
Jul-95	2.7	20	5			2.95
Oct-95	2.5	20	2.5			2.83
Apr-96	10	20	10			6.30
Sep-96	10	20	10			10

MOVING AVERAGE TREND TEST
VDM-10
TRICHLOROETHENE

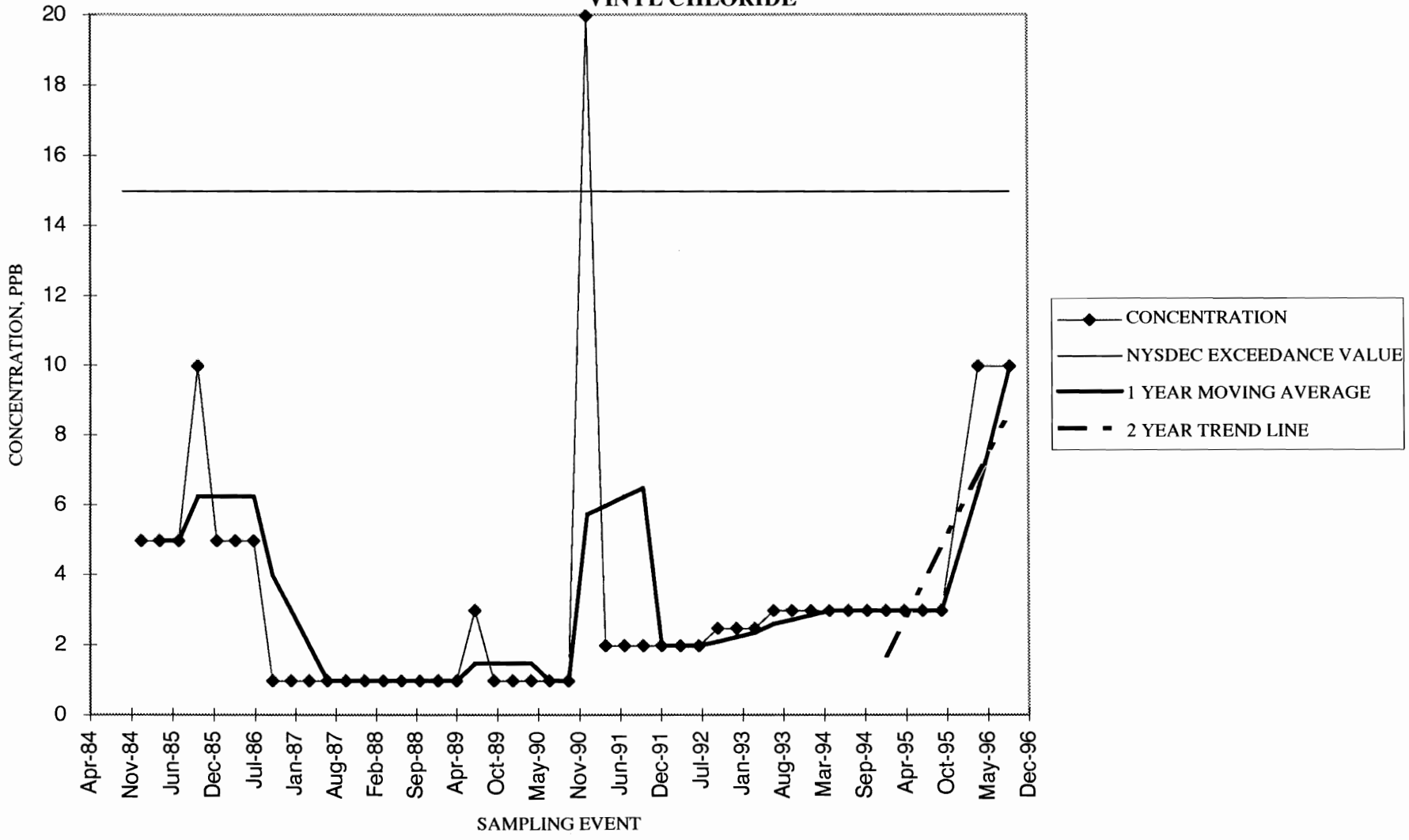


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WELL VDM - 10 : VINYL CHLORIDE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jul-84		15	2	TOTAL STD	3.389091	
Oct-84		15	2	TOTAL Sx	0.505216	
Jan-85	5	15	2	TOTAL MEAN	3.228261	
Apr-85	5	15	2	TOTAL N	46	5.00
Jul-85	5	15	2	TOTAL df	45	5.00
Oct-85	10	15	2			6.25
Jan-86	5	15	2			6.25
Apr-86	5	15	2			6.25
Jul-86	5	15	2			6.25
Oct-86	1	15	2			4.00
Jan-87	1	15	2			3.00
Apr-87	1	15	2			2.00
Jul-87	1	15	2			1.00
Oct-87	1	15	2			1.00
Jan-88	1	15	2			1.00
Apr-88	1	15	2			1.00
Jul-88	1	15	2			1.00
Oct-88	1	15	2			1.00
Jan-89	1	15	2			1.00
Apr-89	1	15	2			1.00
Jul-89	3	15	2			1.50
Oct-89	1	15	2			1.50
Jan-90	1	15	2			1.50
Apr-90	1	15	2			1.50
Jul-90	1	15	2			1.00
Oct-90	1	15	2			1.00
Jan-91	20	15	2			5.75
Apr-91	2	15	2			6.00
Jul-91	2	15	2			6.25
Oct-91	2	15	2			6.50
Jan-92	2	15	2			2.00
Apr-92	2	15	2			2.00
Jul-92	2	15	2			2.00
Oct-92	2.5	15	2			2.13
Jan-93	2.5	15	2			2.25
Apr-93	2.5	15	2			2.38
Jul-93	3	15	2			2.63
Oct-93	3	15	2			2.75
Jan-94	3	15	2			2.88
Apr-94	3	15	2			3.00
Jul-94	3	15	2			3.00
Oct-94	3	15	2			3.00
Jan-95	3	15	2			3.00
Apr-95	3	15	2			3.00
Jul-95	3	15	2			3.00
Oct-95	3	15	3			3.00
Apr-96	10	15	10			6.50
Sep-96	10	15	10			10

MOVING AVERAGE TREND TEST
VDM-10
VINYL CHLORIDE

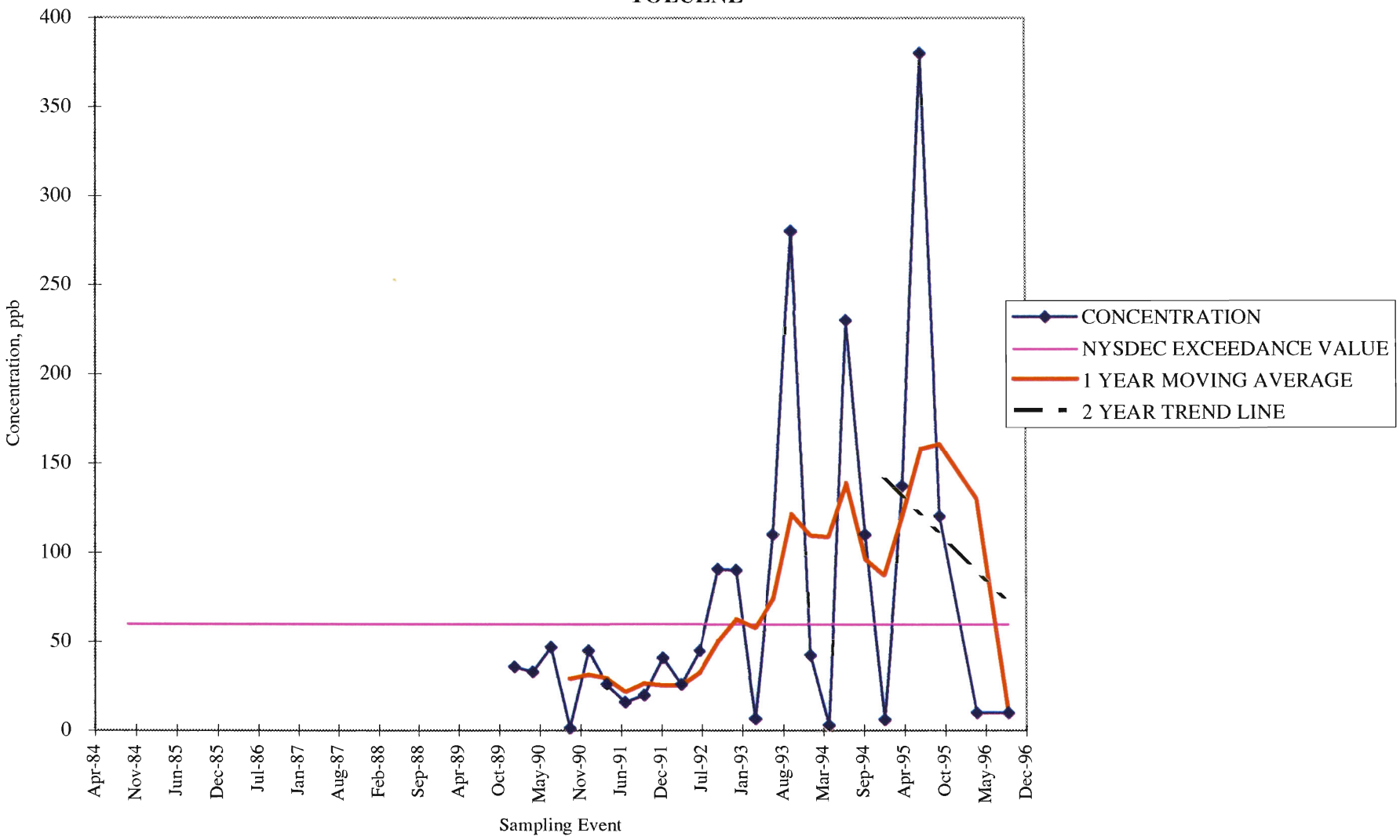


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WELL VDM - 10 : TOLUENE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jul-84		60	5	TOTAL STD	91.12043	
Oct-84		60	5	TOTAL Sx	18.22409	
Jan-85		60	5	TOTAL MEAN	75.40385	
Apr-85		60	5	TOTAL N	26	
Jul-85		60	5	TOTAL df	25	
Oct-85		60	5			
Jan-86		60	5			
Apr-86		60	5			
Jul-86		60	5			
Oct-86		60	5			
Jan-87		60	5			
Apr-87		60	5			
Jul-87		60	5			
Oct-87		60	5			
Jan-88		60	5			
Apr-88		60	5			
Jul-88		60	5			
Oct-88		60	5			
Jan-89		60	5			
Apr-89		60	5			
Jul-89		60	5			
Oct-89		60	5			
Jan-90	36	60	5			
Apr-90	33	60	5			
Jul-90	47	60	5			
Oct-90	1	60	5			29.25
Jan-91	45	60	5			31.50
Apr-91	26	60	5			29.75
Jul-91	16	60	5			22.00
Oct-91	20	60	5			26.75
Jan-92	41	60	5			25.75
Apr-92	26	60	5			25.75
Jul-92	45	60	5			33.00
Oct-92	90.4	60	5			50.60
Jan-93	89.9	60	5			62.83
Apr-93	6.5	60	5			57.95
Jul-93	110	60	5			74.20
Oct-93	280	60	5			121.60
Jan-94	42	60	5			109.63
Apr-94	2.9	60	5			108.73
Jul-94	230	60	5			138.73
Oct-94	110	60	5			96.23
Jan-95	5.8	60	5			87.18
Apr-95	137	60	5			120.70
Jul-95	380	60	5			158.20
Oct-95	120	60	2			160.70
Apr-96	10	60	10			130.00
Sep-96	10	60	10			10

MOVING AVERAGE TREND TEST
VDM-10
TOLUENE

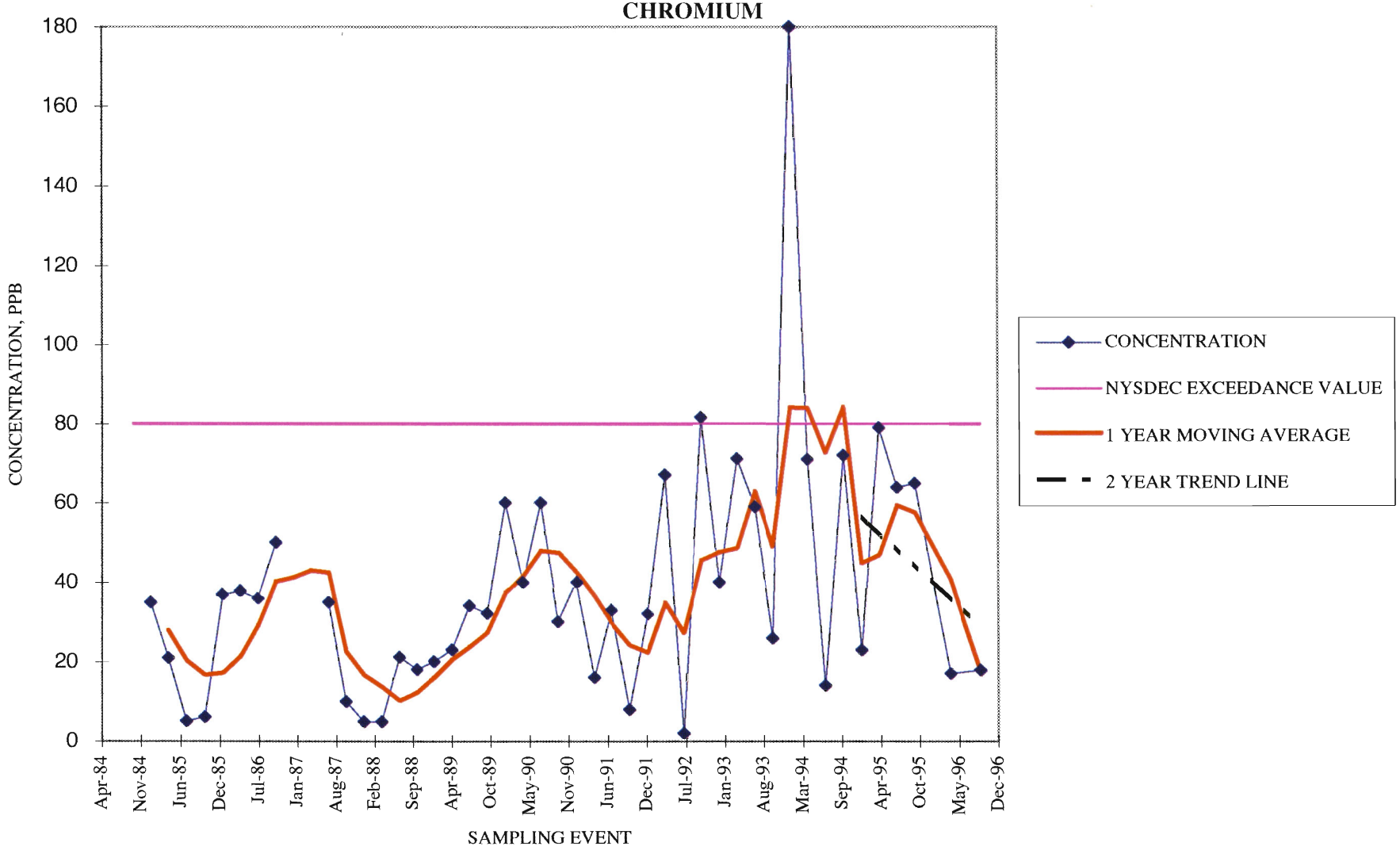


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WELL VDM - 10 : CHROMIUM

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jul-84		80	50	TOTAL STD	30.9495	
Oct-84		80	50	TOTAL Sx	4.719754	
Jan-85	35	80	50	TOTAL MEAN	38.63182	
Apr-85	21	80	50	TOTAL N	44	28.00
Jul-85	5	80	50	TOTAL df	43	20.33
Oct-85	6	80	50			16.75
Jan-86	37	80	50			17.25
Apr-86	38	80	50			21.50
Jul-86	36	80	50			29.25
Oct-86	50	80	50			40.25
Jan-87		80	50			41.33
Apr-87		80	50			43.00
Jul-87	35	80	50			42.50
Oct-87	10	80	50			22.50
Jan-88	5	80	50			16.67
Apr-88	5	80	50			13.75
Jul-88	21	80	50			10.25
Oct-88	18	80	50			12.25
Jan-89	20	80	50			16.00
Apr-89	23	80	50			20.50
Jul-89	34	80	50			23.75
Oct-89	32	80	50			27.25
Jan-90	60	80	50			37.25
Apr-90	40	80	50			41.50
Jul-90	60	80	50			48.00
Oct-90	30	80	50			47.50
Jan-91	40	80	50			42.50
Apr-91	16	80	50			36.50
Jul-91	33	80	50			29.75
Oct-91	8	80	50			24.25
Jan-92	32	80	50			22.25
Apr-92	67	80	50			35.00
Jul-92	2	80	50			27.25
Oct-92	81.5	80	50			45.63
Jan-93	40.1	80	50			47.65
Apr-93	71.2	80	50			48.70
Jul-93	59	80	50			62.95
Oct-93	26	80	50			49.08
Jan-94	180	80	50			84.05
Apr-94	71	80	50			84.00
Jul-94	14	80	50			72.75
Oct-94	72	80	50			84.25
Jan-95	23	80	50			45.00
Apr-95	79	80	50			47.00
Jul-95	64	80	50			59.50
Oct-95	65	80	2			57.75
Apr-96	17	80	2			40.75
Sep-96	18	80	5			17.5

MOVING AVERAGE TREND TEST
VDM-10
CHROMIUM

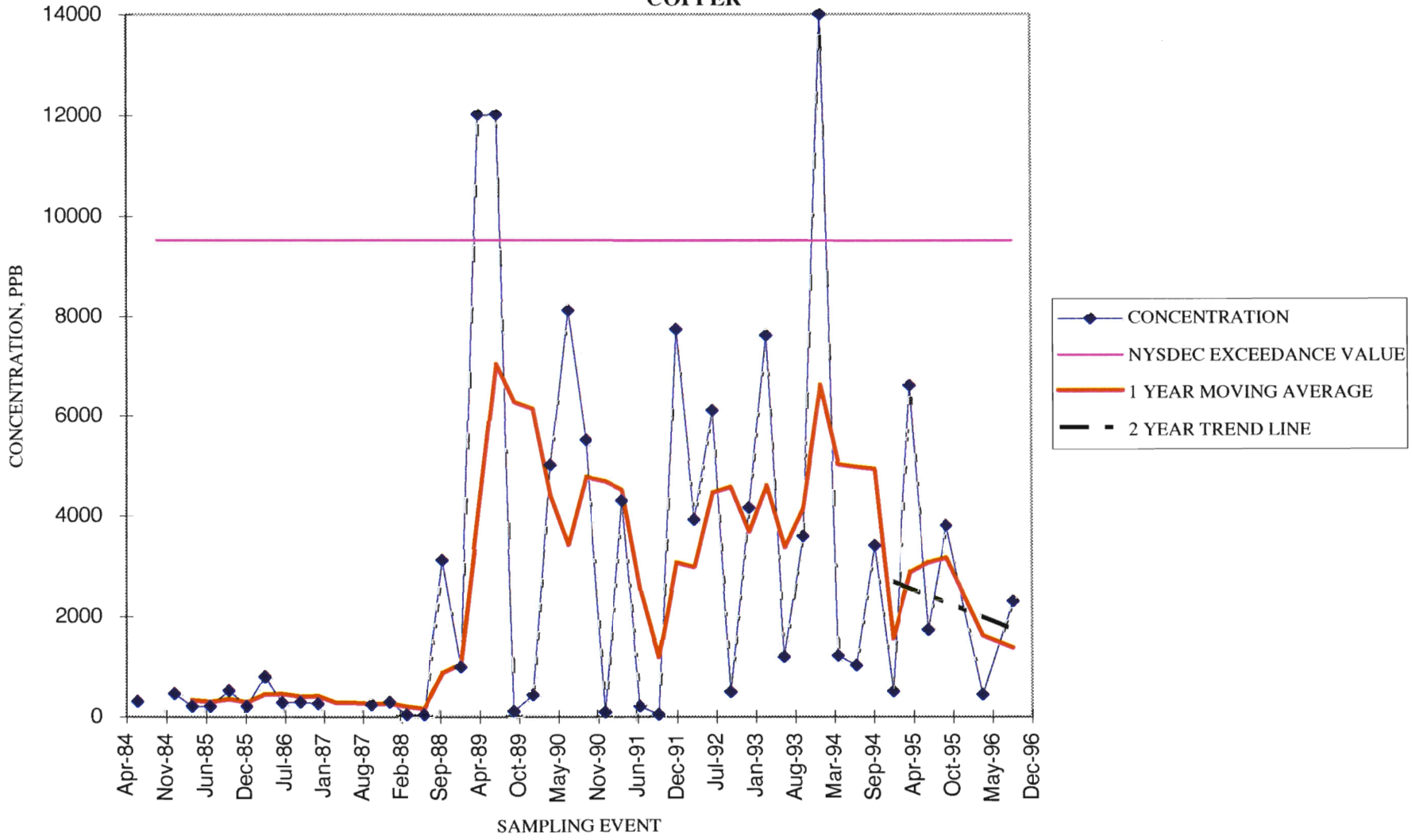


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WELL VDM - 10 : COPPER

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jul-84	290	9500	200	TOTAL STD	3550.412	
Oct-84		9500	200	TOTAL Sx	535.2448	
Jan-85	450	9500	200	TOTAL MEAN	2794.311	
Apr-85	200	9500	200	TOTAL N	45	313.33
Jul-85	200	9500	200	TOTAL df	44	283.33
Oct-85	510	9500	200			340.00
Jan-86	200	9500	200			277.50
Apr-86	780	9500	200			422.50
Jul-86	270	9500	200			440.00
Oct-86	280	9500	200			382.50
Jan-87	250	9500	200			395.00
Apr-87		9500	200			266.67
Jul-87		9500	200			265.00
Oct-87	230	9500	200			240.00
Jan-88	280	9500	200			255.00
Apr-88	35	9500	200			181.67
Jul-88	30	9500	200			143.75
Oct-88	3100	9500	200			861.25
Jan-89	990	9500	200			1038.75
Apr-89	12000	9500	200			4030.00
Jul-89	12000	9500	200			7022.50
Oct-89	100	9500	200			6272.50
Jan-90	430	9500	200			6132.50
Apr-90	5000	9500	200			4382.50
Jul-90	8100	9500	200			3407.50
Oct-90	5500	9500	200			4757.50
Jan-91	100	9500	200			4675.00
Apr-91	4300	9500	200			4500.00
Jul-91	215	9500	200			2528.75
Oct-91	50	9500	200			1166.25
Jan-92	7720	9500	200			3071.25
Apr-92	3920	9500	200			2976.25
Jul-92	6100	9500	200			4447.50
Oct-92	498	9500	200			4559.50
Jan-93	4160	9500	200			3669.50
Apr-93	7600	9500	200			4589.50
Jul-93	1200	9500	200			3364.50
Oct-93	3600	9500	200			4140.00
Jan-94	14000	9500	200			6600.00
Apr-94	1220	9500	200			5005.00
Jul-94	1030	9500	200			4962.50
Oct-94	3400	9500	200			4912.50
Jan-95	508	9500	200			1539.50
Apr-95	6600	9500	200			2884.50
Jul-95	1745	9500	200			3063.25
Oct-95	3800	9500	10			3163.25
Apr-96	453	9500	10			1612.75
Sep-96	2300	9500	10			1376.5

MOVING AVERAGE TREND TEST
VDM-10
COPPER

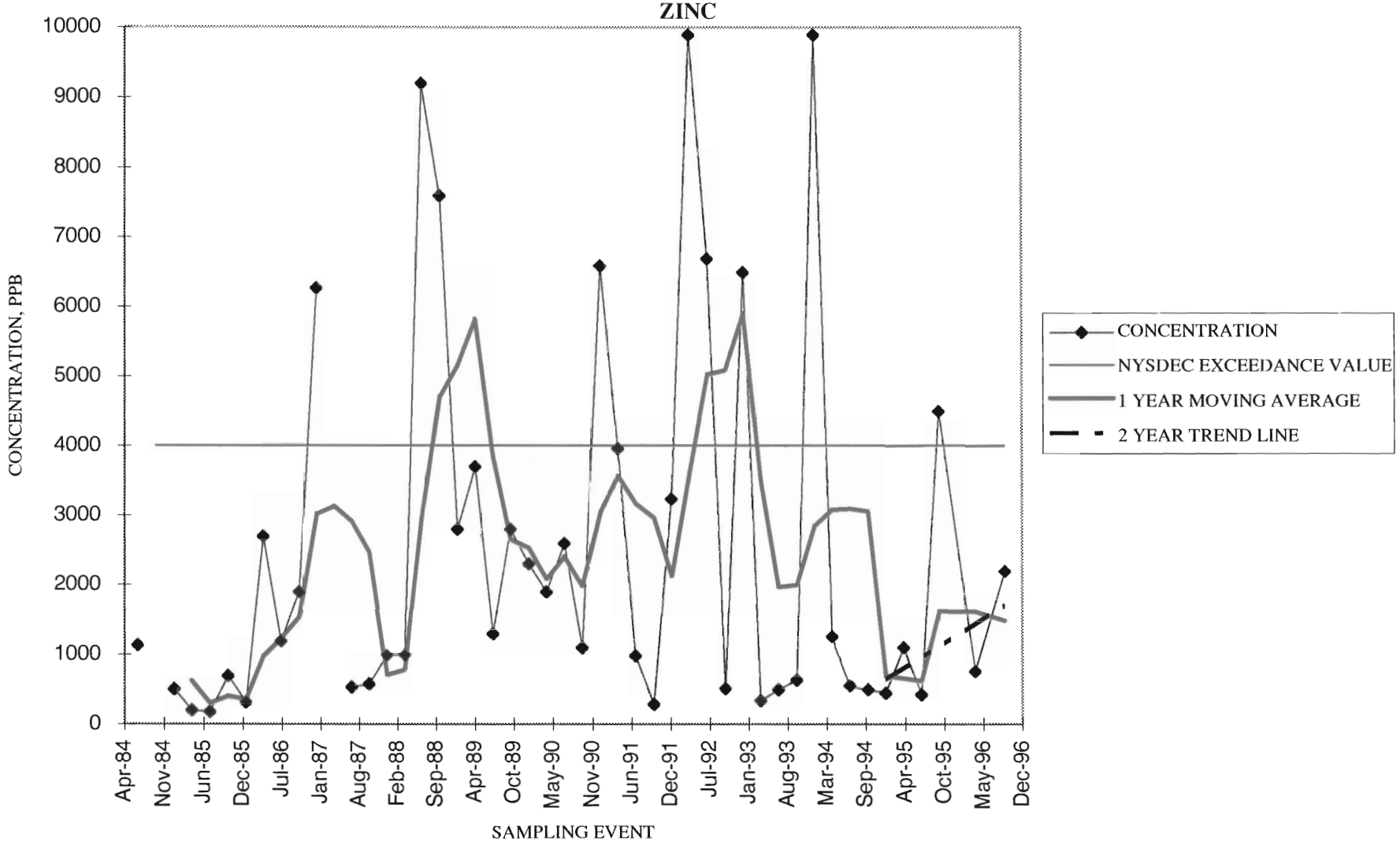


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WELL VDM - 10 : ZINC

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jul-84	1140	4000	300	TOTAL STD	2726.482	
Oct-84		4000	300	TOTAL Sx	406.4399	
Jan-85	510	4000	300	TOTAL MEAN	2508.391	
Apr-85	200	4000	300	TOTAL N	46	616.7
Jul-85	180	4000	300	TOTAL df	45	296.7
Oct-85	700	4000	300			397.5
Jan-86	320	4000	300			350.0
Apr-86	2700	4000	300			975.0
Jul-86	1200	4000	300			1230.0
Oct-86	1900	4000	300			1530.0
Jan-87	6280	4000	300			3020.0
Apr-87		4000	300			3126.7
Jul-87	540	4000	300			2906.7
Oct-87	580	4000	300			2466.7
Jan-88	1000	4000	300			706.7
Apr-88	1000	4000	300			780.0
Jul-88	9200	4000	300			2945.0
Oct-88	7600	4000	300			4700.0
Jan-89	2800	4000	300			5150.0
Apr-89	3700	4000	300			5825.0
Jul-89	1300	4000	300			3850.0
Oct-89	2800	4000	300			2650.0
Jan-90	2300	4000	300			2525.0
Apr-90	1900	4000	300			2075.0
Jul-90	2600	4000	300			2400.0
Oct-90	1100	4000	300			1975.0
Jan-91	6600	4000	300			3050.0
Apr-91	3960	4000	300			3565.0
Jul-91	990	4000	300			3162.5
Oct-91	290	4000	300			2960.0
Jan-92	3240	4000	300			2120.0
Apr-92	9900	4000	300			3605.0
Jul-92	6700	4000	300			5032.5
Oct-92	517	4000	300			5089.3
Jan-93	6500	4000	300			5904.3
Apr-93	340	4000	300			3514.3
Jul-93	500	4000	300			1964.3
Oct-93	640	4000	300			1995.0
Jan-94	9900	4000	300			2845.0
Apr-94	1260	4000	300			3075.0
Jul-94	560	4000	300			3090.0
Oct-94	500	4000	300			3055.0
Jan-95	451	4000	300			692.8
Apr-95	1100	4000	300			652.8
Jul-95	426	4000	300			619.3
Oct-95	4500	4000	20			1619.3
Apr-96	762	4000	20			1612.50
Sep-96	2200	4000	20			1481

MOVING AVERAGE TREND TEST
VDM-10
ZINC

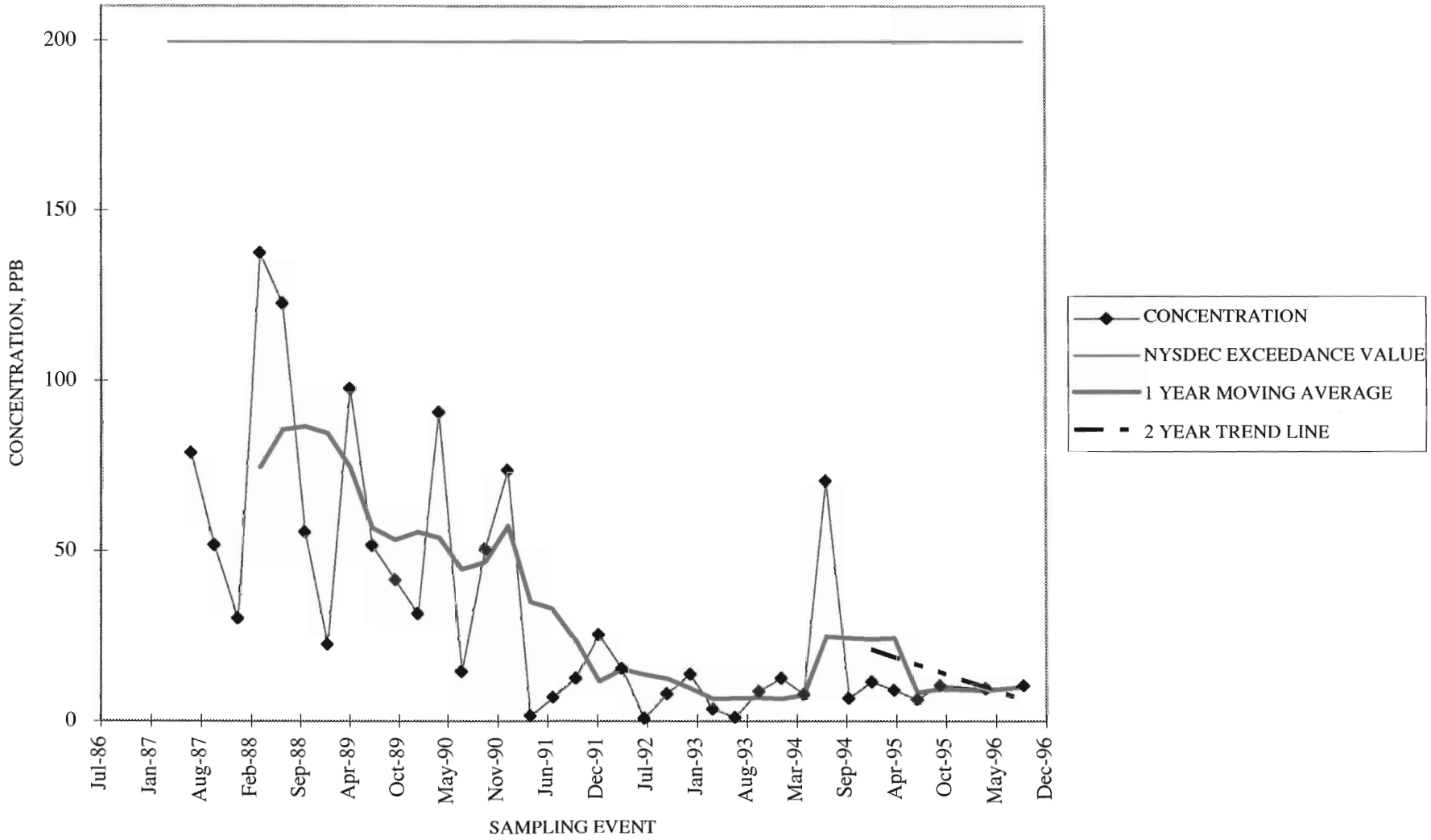


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WELL VDM - 11 : CHLOROFORM

SAMPLING EVENT NO.	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87		200	8	TOTAL STD	35.5867	
Apr-87		200	8	TOTAL Sx	6.0153	
Jul-87	79.2	200	8	TOTAL MEAN	33.8967	
Oct-87	52.2	200	8	TOTAL N	36.0000	
Jan-88	30.7	200	8	TOTAL df	35.0000	
Apr-88	138	200	8			75.03
Jul-88	123	200	8			85.98
Oct-88	56	200	8			86.93
Jan-89	23	200	8			85.00
Apr-89	98	200	8			75.00
Jul-89	52	200	8			57.25
Oct-89	42	200	8			53.75
Jan-90	32	200	8			56.00
Apr-90	91	200	8			54.25
Jul-90	15	200	8			45.00
Oct-90	51	200	8			47.25
Jan-91	74	200	8			57.75
Apr-91	2	200	8			35.50
Jul-91	7.4	200	8			33.60
Oct-91	13	200	8			24.10
Jan-92	26	200	8			12.10
Apr-92	16	200	8			15.60
Jul-92	1.25	200	8			14.06
Oct-92	8.55	200	8			12.95
Jan-93	14.3	200	8			10.03
Apr-93	4	200	8			7.03
Jul-93	1.58	200	8			7.11
Oct-93	9.2	200	8			7.27
Jan-94	13	200	8			6.95
Apr-94	8.4	200	8			8.05
Jul-94	71	200	8			25.40
Oct-94	7.1	200	8			24.88
Jan-95	12	200	8			24.63
Apr-95	9.6	200	8			24.93
Jul-95	6.8	200	8			8.88
Oct-95	11	200	4			9.85
Apr-96	10	200	10			9.45
Sep-96	11	200	10			10.5

MOVING AVERAGE TREND TEST
VDM-11
CHLOROFORM

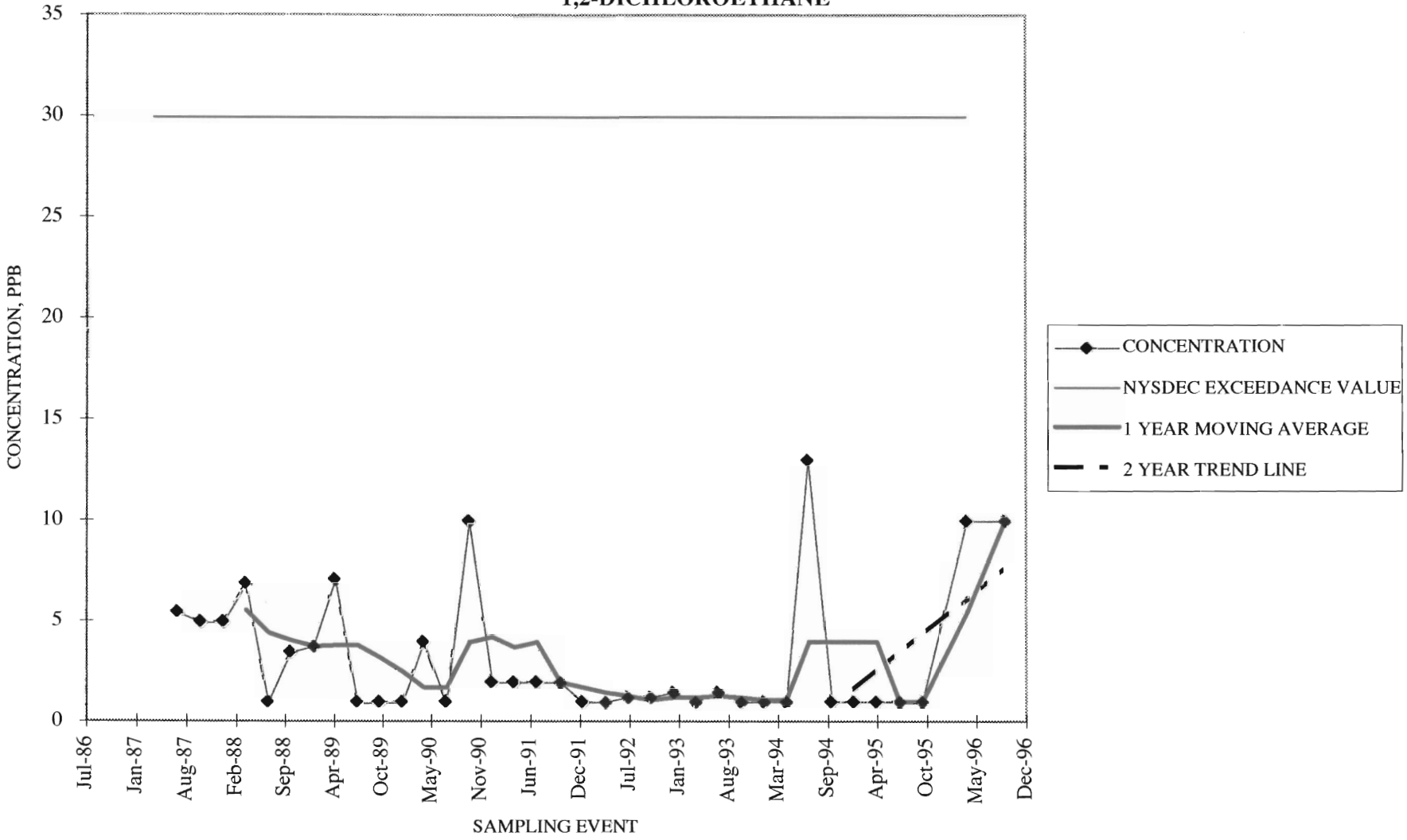


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WELL VDM - 11 : 1,2-DICHLOROETHANE

SAMPLING EVENT NO.	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87		30	5	TOTAL STD	3.2189	
Apr-87		30	5	TOTAL Sx	0.5441	
Jul-87	5.5	30	5	TOTAL MEAN	3.1472	
Oct-87	5	30	5	TOTAL N	36.0000	
Jan-88	5	30	5	TOTAL df	35.0000	
Apr-88	6.9	30	5			5.60
Jul-88	1	30	5			4.48
Oct-88	3.5	30	5			4.10
Jan-89	3.8	30	5			3.80
Apr-89	7.1	30	5			3.85
Jul-89	1	30	5			3.85
Oct-89	1	30	5			3.23
Jan-90	1	30	5			2.53
Apr-90	4	30	5			1.75
Jul-90	1	30	5			1.75
Oct-90	10	30	5			4.00
Jan-91	2	30	5			4.25
Apr-91	2	30	5			3.75
Jul-91	2	30	5			4.00
Oct-91	2	30	5			2.00
Jan-92	1	30	5			1.75
Apr-92	1	30	5			1.50
Jul-92	1.25	30	5			1.31
Oct-92	1.25	30	5			1.13
Jan-93	1.5	30	5			1.25
Apr-93	1	30	5			1.25
Jul-93	1.5	30	5			1.31
Oct-93	1	30	5			1.25
Jan-94	1	30	5			1.13
Apr-94	1	30	5			1.13
Jul-94	13	30	5			4.00
Oct-94	1	30	5			4.00
Jan-95	1	30	5			4.00
Apr-95	1	30	5			4.00
Jul-95	1	30	5			1.00
Oct-95	1	30	1			1.00
Apr-96	10	30	10			5.5
Sep-96	10	30	10			10

MOVING AVERAGE TREND TEST
VDM-11
1,2-DICHLOROETHANE

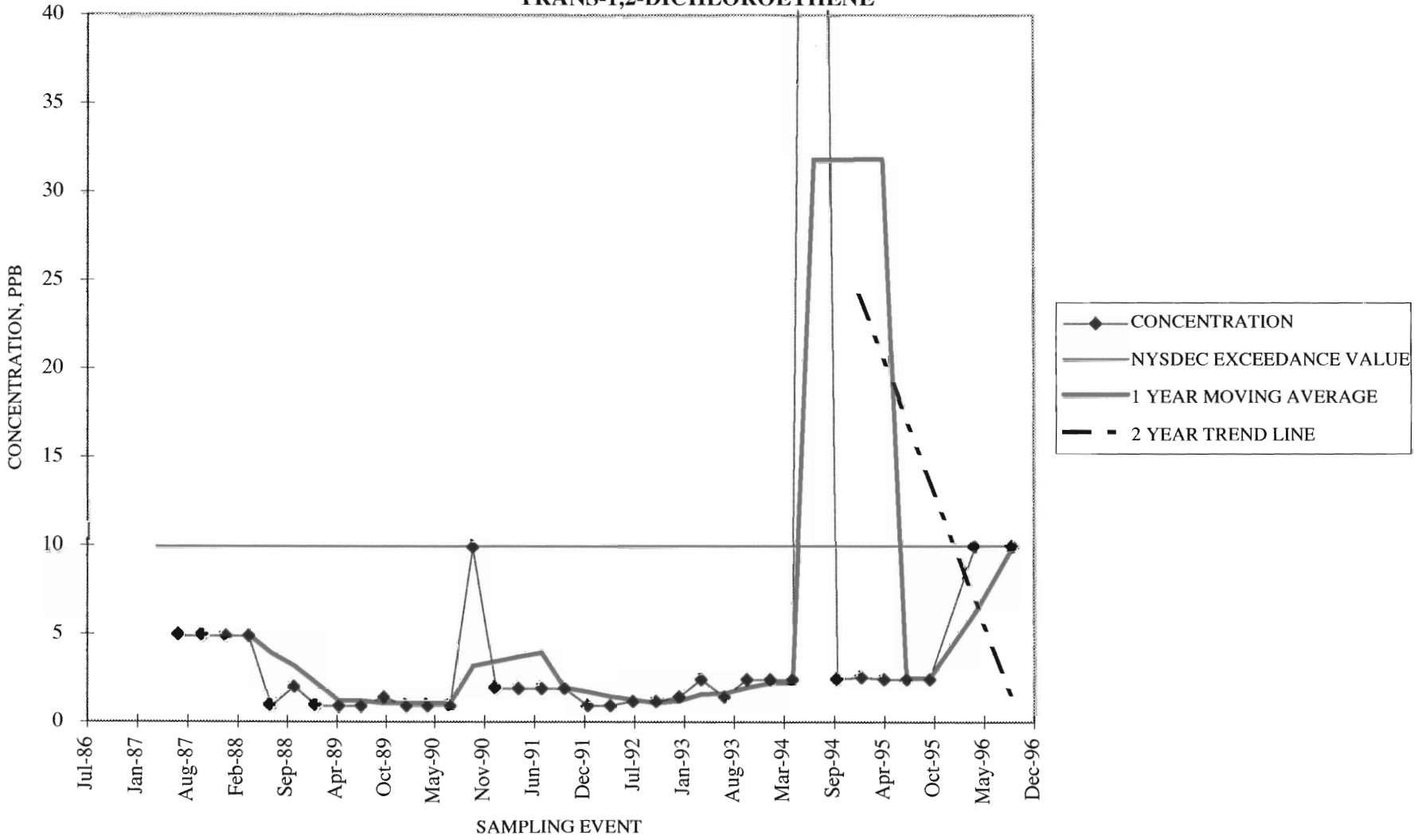


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WELL VDM - 11 : TRANS-1,2-DICHLOROETHENE

SAMPLING EVENT NO.	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87		10	5	TOTAL STD	19.4132	
Apr-87		10	5	TOTAL Sx	3.2814	
Jul-87	5	10	5	TOTAL MEAN	6.0750	
Oct-87	5	10	5	TOTAL N	36.0000	
Jan-88	5	10	5	TOTAL df	35.0000	
Apr-88	5	10	5			5.00
Jul-88	1	10	5			4.00
Oct-88	2.1	10	5			3.28
Jan-89	1	10	5			2.28
Apr-89	1	10	5			1.28
Jul-89	1	10	5			1.28
Oct-89	1.5	10	5			1.13
Jan-90	1	10	5			1.13
Apr-90	1	10	5			1.13
Jul-90	1	10	5			1.13
Oct-90	10	10	5			3.25
Jan-91	2	10	5			3.50
Apr-91	2	10	5			3.75
Jul-91	2	10	5			4.00
Oct-91	2	10	5			2.00
Jan-92	1	10	5			1.75
Apr-92	1	10	5			1.50
Jul-92	1.25	10	5			1.31
Oct-92	1.25	10	5			1.13
Jan-93	1.5	10	5			1.25
Apr-93	2.5	10	5			1.63
Jul-93	1.5	10	5			1.69
Oct-93	2.5	10	5			2.00
Jan-94	2.5	10	5			2.25
Apr-94	2.5	10	5			2.25
Jul-94	120	10	5			31.88
Oct-94	2.5	10	5			31.88
Jan-95	2.6	10	5			31.90
Apr-95	2.5	10	5			31.90
Jul-95	2.5	10	5			2.53
Oct-95	2.5	10	2.5			2.53
Apr-96	10	10	10			6.25
Sep-96	10	10	10			10

MOVING AVERAGE TREND TEST
VDM-11
TRANS-1,2-DICHLOROETHENE

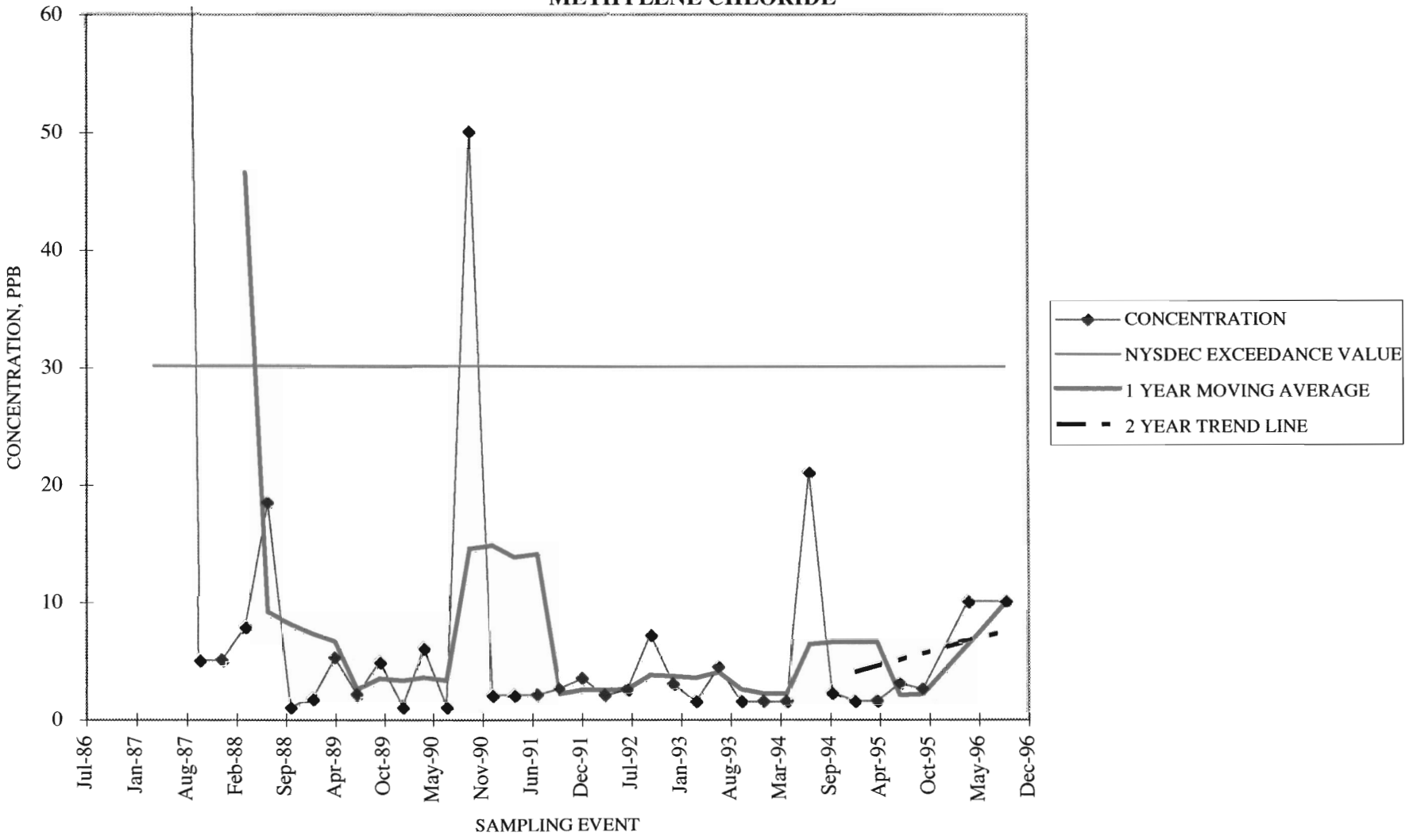


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WELL VDM - 11 : METHYLENE CHLORIDE

SAMPLING EVENT NO.	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87		30	5	TOTAL STD	28.0627	
Apr-87		30	5	TOTAL Sx	4.7435	
Jul-87	168	30	5	TOTAL MEAN	10.1497	
Oct-87	5	30	5	TOTAL N	36.0000	
Jan-88	5	30	5	TOTAL df	35.0000	
Apr-88	7.8	30	5			46.45
Jul-88	18.3	30	5			9.03
Oct-88	1	30	5			8.03
Jan-89	1.7	30	5			7.20
Apr-89	5.1	30	5			6.53
Jul-89	2	30	5			2.45
Oct-89	4.8	30	5			3.40
Jan-90	1	30	5			3.23
Apr-90	6	30	5			3.45
Jul-90	1	30	5			3.20
Oct-90	50	30	5			14.50
Jan-91	2	30	5			14.75
Apr-91	2	30	5			13.75
Jul-91	2	30	5			14.00
Oct-91	2.5	30	5			2.13
Jan-92	3.4	30	5			2.48
Apr-92	2	30	5			2.48
Jul-92	2.5	30	5			2.60
Oct-92	7.16	30	5			3.77
Jan-93	3	30	5			3.67
Apr-93	1.5	30	5			3.54
Jul-93	4.43	30	5			4.02
Oct-93	1.5	30	5			2.61
Jan-94	1.5	30	5			2.23
Apr-94	1.5	30	5			2.23
Jul-94	21	30	5			6.38
Oct-94	2.2	30	5			6.55
Jan-95	1.5	30	5			6.55
Apr-95	1.5	30	5			6.55
Jul-95	3	30	5			2.05
Oct-95	2.5	30	2.5			2.13
Apr-96	10	30	10			6.375
Sep-96	10	30	10			10

MOVING AVERAGE TREND TEST
VDM-11
METHYLENE CHLORIDE

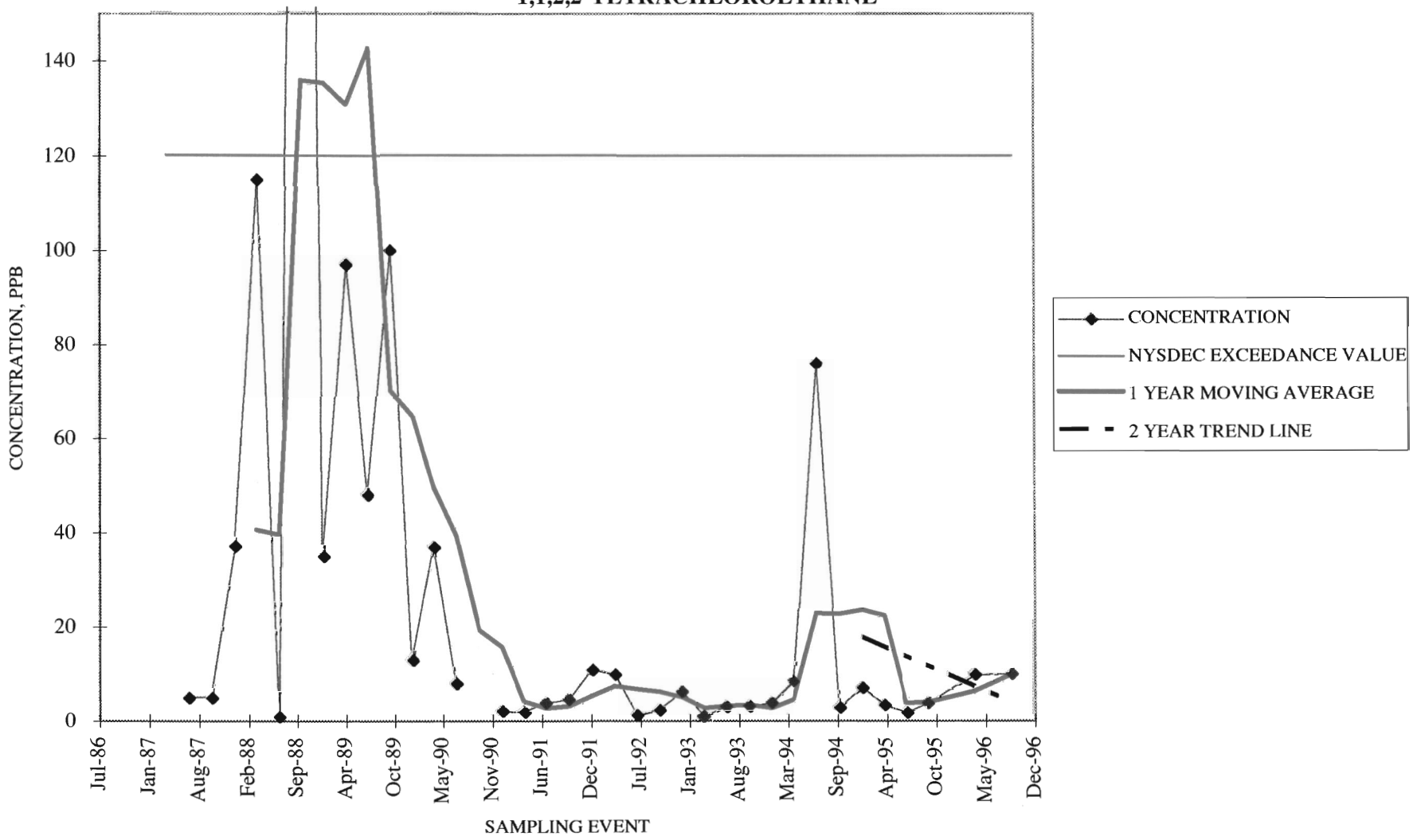


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WELL VDM - 11 : 1,1,2,2-TETRACHLOROETHANE

SAMPLING EVENT NO.	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87		120	5	TOTAL STD	68.6839	
Apr-87		120	5	TOTAL Sx	11.7792	
Jul-87	5	120	5	TOTAL MEAN	30.5534	
Oct-87	5	120	5	TOTAL N	35.0000	
Jan-88	37.2	120	5	TOTAL df	34.0000	
Apr-88	115	120	5			40.55
Jul-88	1	120	5			39.55
Oct-88	390	120	5			135.80
Jan-89	35	120	5			135.25
Apr-89	97	120	5			130.75
Jul-89	48	120	5			142.50
Oct-89	100	120	5			70.00
Jan-90	13	120	5			64.50
Apr-90	37	120	5			49.50
Jul-90	8	120	5			39.50
Oct-90		120	5			19.33
Jan-91	2.2	120	5			15.73
Apr-91	2	120	5			4.07
Jul-91	3.8	120	5			2.67
Oct-91	4.6	120	5			3.15
Jan-92	11	120	5			5.35
Apr-92	10	120	5			7.35
Jul-92	1.25	120	5			6.71
Oct-92	2.4	120	5			6.16
Jan-93	6.22	120	5			4.97
Apr-93	1	120	5			2.72
Jul-93	3	120	5			3.16
Oct-93	3.1	120	5			3.33
Jan-94	3.8	120	5			2.73
Apr-94	8.5	120	5			4.60
Jul-94	76	120	5			22.85
Oct-94	2.9	120	5			22.80
Jan-95	7.2	120	5			23.65
Apr-95	3.5	120	5			22.40
Jul-95	1.8	120	5			3.85
Oct-95	3.9	120	1			4.10
Apr-96	10	120	10			6.425
Sep-96	10	120	10			10

MOVING AVERAGE TREND TEST
VDM-11
1,1,2,2-TETRACHLOROETHANE

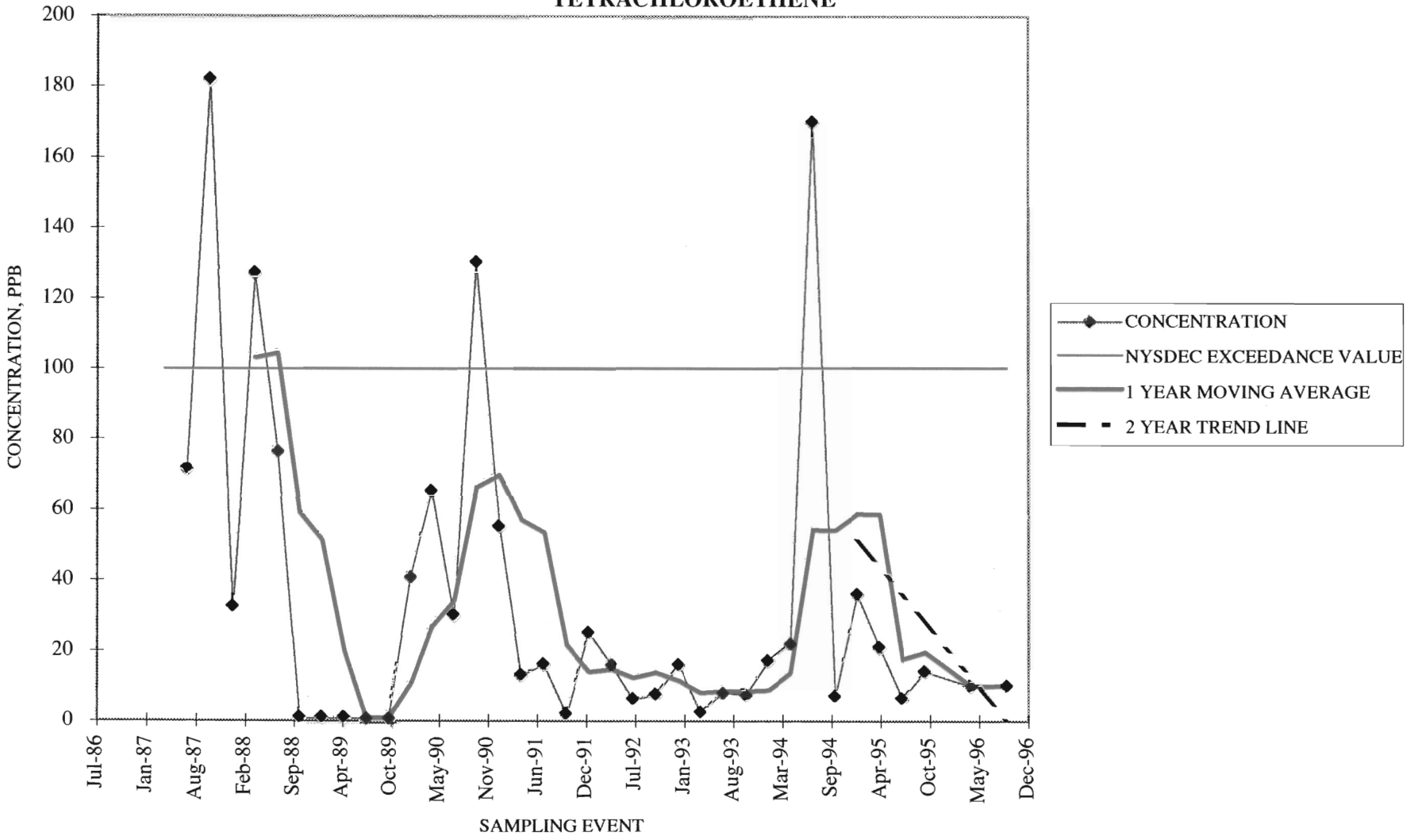


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WELL VDM - 11 : TETRACHLOROETHENE

SAMPLING EVENT NO.	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87		100	5	TOTAL STD	46.6736	
Apr-87		100	5	TOTAL Sx	7.8893	
Jul-87	71.6	100	5	TOTAL MEAN	34.6869	
Oct-87	182	100	5	TOTAL N	36.0000	
Jan-88	32.3	100	5	TOTAL df	35.0000	
Apr-88	127	100	5			103.23
Jul-88	76.8	100	5			104.53
Oct-88	1	100	5			59.28
Jan-89	1	100	5			51.45
Apr-89	1	100	5			19.95
Jul-89	1	100	5			1.00
Oct-89	1	100	5			1.00
Jan-90	41	100	5			11.00
Apr-90	65	100	5			27.00
Jul-90	30	100	5			34.25
Oct-90	130	100	5			66.50
Jan-91	55	100	5			70.00
Apr-91	13	100	5			57.00
Jul-91	16	100	5			53.50
Oct-91	2	100	5			21.50
Jan-92	25	100	5			14.00
Apr-92	16	100	5			14.75
Jul-92	6.25	100	5			12.31
Oct-92	7.58	100	5			13.71
Jan-93	15.9	100	5			11.43
Apr-93	2.5	100	5			8.06
Jul-93	8.1	100	5			8.52
Oct-93	7.5	100	5			8.50
Jan-94	17	100	5			8.78
Apr-94	22	100	5			13.65
Jul-94	170	100	5			54.13
Oct-94	6.9	100	5			53.98
Jan-95	36	100	5			58.73
Apr-95	21	100	5			58.48
Jul-95	6.3	100	5			17.55
Oct-95	14	100	2.5			19.33
Apr-96	10	100	10			10.075
Sep-96	10	100	10			10

MOVING AVERAGE TREND TEST
VDM-11
TETRACHLOROETHENE

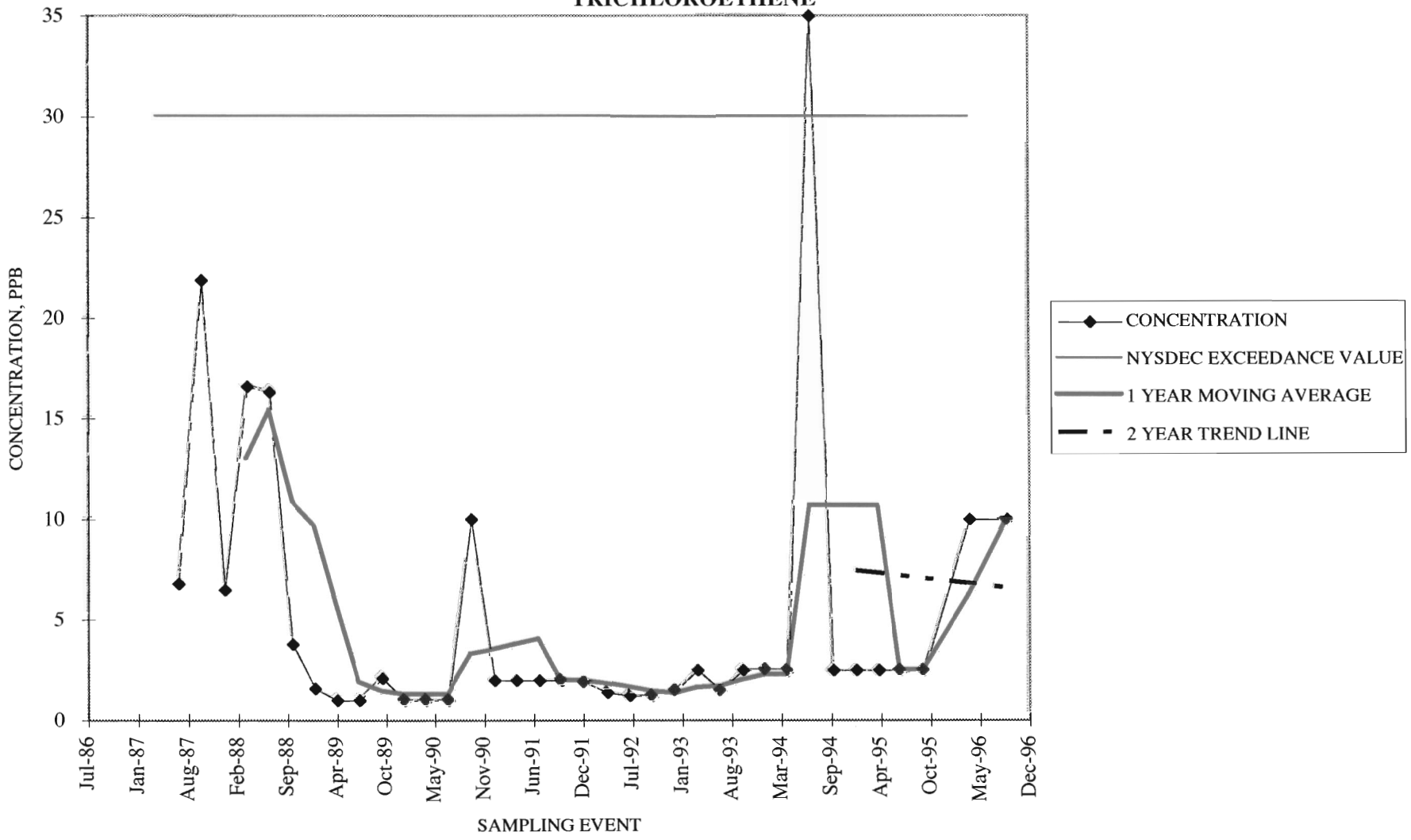


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WELL VDM - 11 : TRICHLOROETHENE

SAMPLING EVENT NO.	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87		30	5	TOTAL STD	7.0643	
Apr-87		30	5	TOTAL Sx	1.1941	
Jul-87	6.8	30	5	TOTAL MEAN	5.1361	
Oct-87	21.9	30	5	TOTAL N	36.0000	
Jan-88	6.5	30	5	TOTAL df	35.0000	
Apr-88	16.6	30	5			12.95
Jul-88	16.3	30	5			15.33
Oct-88	3.8	30	5			10.80
Jan-89	1.6	30	5			9.58
Apr-89	1	30	5			5.68
Jul-89	1	30	5			1.85
Oct-89	2.1	30	5			1.43
Jan-90	1	30	5			1.28
Apr-90	1	30	5			1.28
Jul-90	1	30	5			1.28
Oct-90	10	30	5			3.25
Jan-91	2	30	5			3.50
Apr-91	2	30	5			3.75
Jul-91	2	30	5			4.00
Oct-91	2	30	5			2.00
Jan-92	1.9	30	5			1.98
Apr-92	1.4	30	5			1.83
Jul-92	1.25	30	5			1.64
Oct-92	1.25	30	5			1.45
Jan-93	1.5	30	5			1.35
Apr-93	2.5	30	5			1.63
Jul-93	1.5	30	5			1.69
Oct-93	2.5	30	5			2.00
Jan-94	2.5	30	5			2.25
Apr-94	2.5	30	5			2.25
Jul-94	35	30	5			10.63
Oct-94	2.5	30	5			10.63
Jan-95	2.5	30	5			10.63
Apr-95	2.5	30	5			10.63
Jul-95	2.5	30	5			2.50
Oct-95	2.5	30	2.5			2.50
Apr-96	10	30	10			6.25
Sep-96	10	30	10			10

MOVING AVERAGE TREND TEST
VDM-11
TRICHLOROETHENE

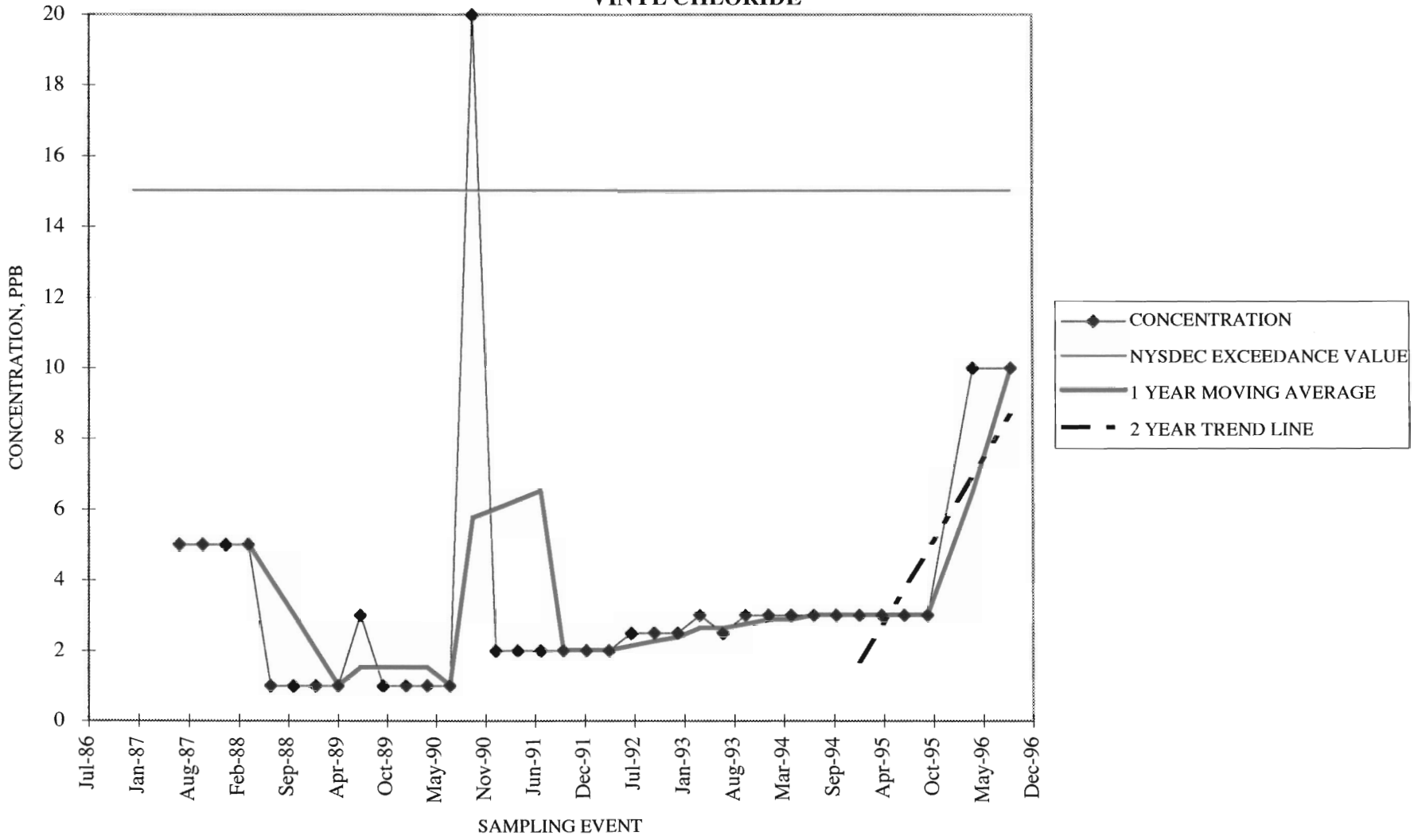


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WELL VDM - 11 : VINYL CHLORIDE

SAMPLING EVENT NO.	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87		15	2	TOTAL STD	3.4791	
Apr-87		15	2	TOTAL Sx	0.5881	
Jul-87	5	15	2	TOTAL MEAN	3.4167	
Oct-87	5	15	2	TOTAL N	36.0000	
Jan-88	5	15	2	TOTAL df	35.0000	
Apr-88	5	15	2			5.00
Jul-88	1	15	2			4.00
Oct-88	1	15	2			3.00
Jan-89	1	15	2			2.00
Apr-89	1	15	2			1.00
Jul-89	3	15	2			1.50
Oct-89	1	15	2			1.50
Jan-90	1	15	2			1.50
Apr-90	1	15	2			1.50
Jul-90	1	15	2			1.00
Oct-90	20	15	2			5.75
Jan-91	2	15	2			6.00
Apr-91	2	15	2			6.25
Jul-91	2	15	2			6.50
Oct-91	2	15	2			2.00
Jan-92	2	15	2			2.00
Apr-92	2	15	2			2.00
Jul-92	2.5	15	2			2.13
Oct-92	2.5	15	2			2.25
Jan-93	2.5	15	2			2.38
Apr-93	3	15	2			2.63
Jul-93	2.5	15	2			2.63
Oct-93	3	15	2			2.75
Jan-94	3	15	2			2.88
Apr-94	3	15	2			2.88
Jul-94	3	15	2			3.00
Oct-94	3	15	2			3.00
Jan-95	3	15	2			3.00
Apr-95	3	15	2			3.00
Jul-95	3	15	2			3.00
Oct-95	3	15	3			3.00
Apr-96	10	15	10			6.5
Sep-96	10	15	10			10

MOVING AVERAGE TREND TEST
VDM-11
VINYL CHLORIDE

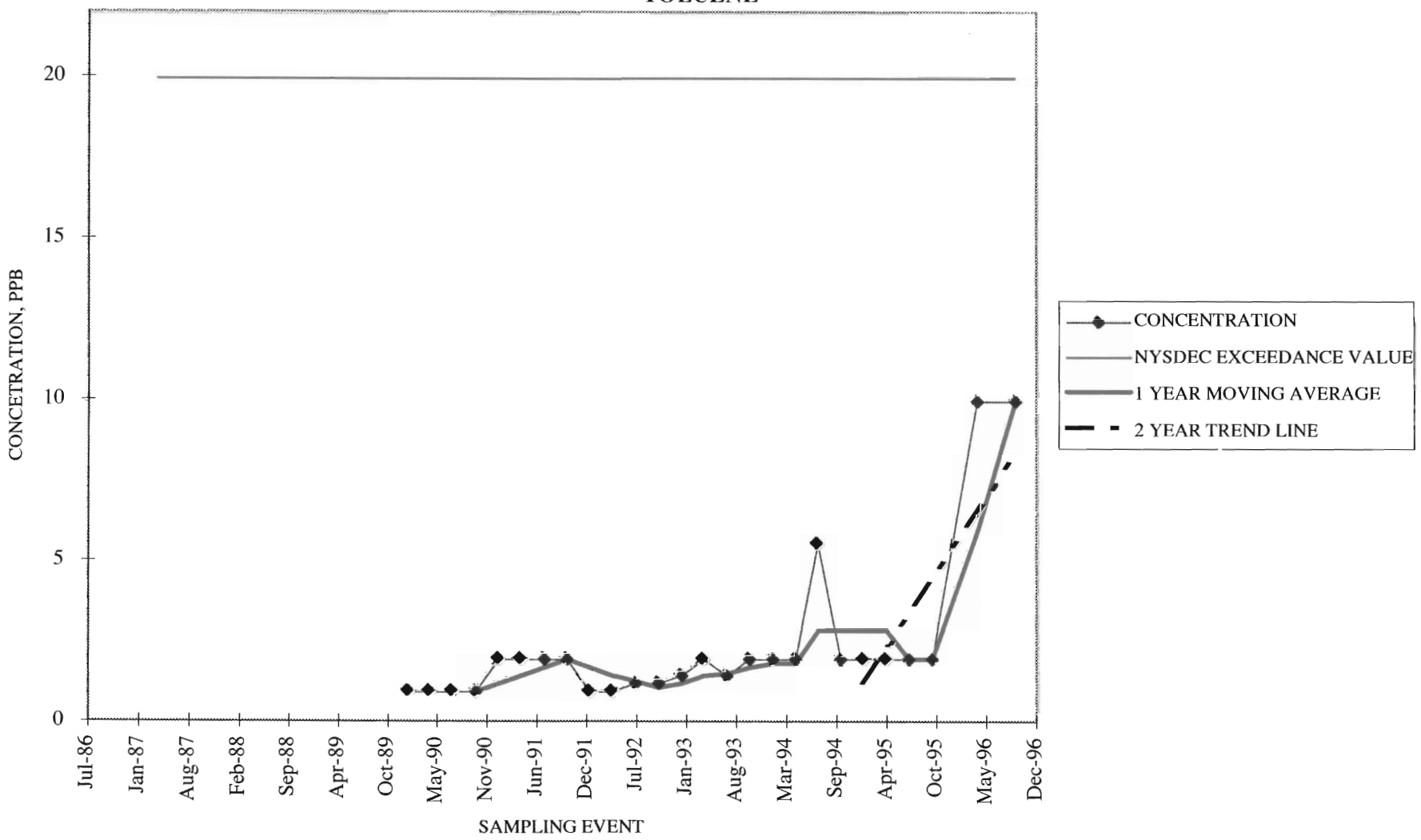


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WELL VDM - 11 : TOLUENE

SAMPLING EVENT NO.	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87		20	5	TOTAL STD	2.3521	
Apr-87		20	5	TOTAL Sx	0.4704	
Jul-87		20	5	TOTAL MEAN	2.4269	
Oct-87		20	5	TOTAL N	26.0000	
Jan-88		20	5	TOTAL df	25.0000	
Apr-88		20	5			
Jul-88		20	5			
Oct-88		20	5			
Jan-89		20	5			
Apr-89		20	5			
Jul-89		20	5			
Oct-89		20	5			
Jan-90	1	20	5			
Apr-90	1	20	5			
Jul-90	1	20	5			
Oct-90	1	20	5			1.00
Jan-91	2	20	5			1.25
Apr-91	2	20	5			1.50
Jul-91	2	20	5			1.75
Oct-91	2	20	5			2.00
Jan-92	1	20	5			1.75
Apr-92	1	20	5			1.50
Jul-92	1.25	20	5			1.31
Oct-92	1.25	20	5			1.13
Jan-93	1.5	20	5			1.25
Apr-93	2	20	5			1.50
Jul-93	1.5	20	5			1.56
Oct-93	2	20	5			1.75
Jan-94	2	20	5			1.88
Apr-94	2	20	5			1.88
Jul-94	5.6	20	5			2.90
Oct-94	2	20	5			2.90
Jan-95	2	20	5			2.90
Apr-95	2	20	5			2.90
Jul-95	2	20	5			2.00
Oct-95	2	20	2			2.00
Apr-96	10	20	10			6
Sep-96	10	20	10			10

MOVING AVERAGE TREND TEST
VDM-11
TOLUENE

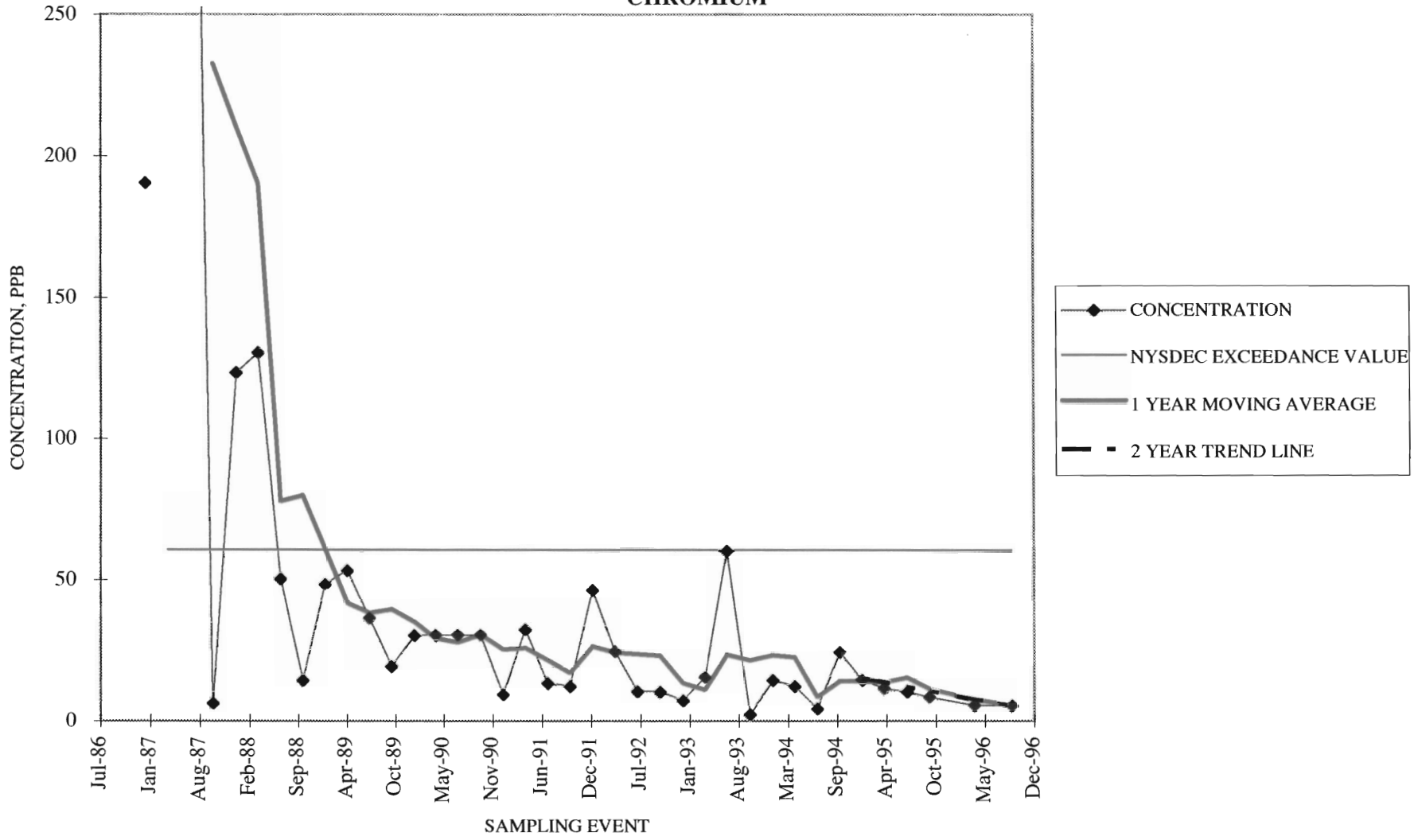


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WELL VDM - 11 : CHROMIUM

SAMPLING EVENT NO.	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87	190	60	50	TOTAL STD	85.1926	
Apr-87		60	50	TOTAL Sx	14.1988	
Jul-87	500	60	50	TOTAL MEAN	44.2189	
Oct-87	6	60	50	TOTAL N	37.0000	232.00
Jan-88	123	60	50	TOTAL df	36.0000	209.67
Apr-88	130	60	50			189.75
Jul-88	50	60	50			77.25
Oct-88	14	60	50			79.25
Jan-89	48	60	50			60.50
Apr-89	53	60	50			41.25
Jul-89	36	60	50			37.75
Oct-89	19	60	50			39.00
Jan-90	30	60	50			34.50
Apr-90	30	60	50			28.75
Jul-90	30	60	50			27.25
Oct-90	30	60	50			30.00
Jan-91	9	60	50			24.75
Apr-91	32	60	50			25.25
Jul-91	13	60	50			21.00
Oct-91	12	60	50			16.50
Jan-92	46	60	50			25.75
Apr-92	24	60	50			23.75
Jul-92	10.2	60	50			23.05
Oct-92	10	60	50			22.55
Jan-93	6.9	60	50			12.78
Apr-93	15	60	50			10.53
Jul-93	60	60	50			22.98
Oct-93	2	60	50			20.98
Jan-94	14	60	50			22.75
Apr-94	12	60	50			22.00
Jul-94	4	60	50			8.00
Oct-94	24	60	50			13.50
Jan-95	14	60	50			13.50
Apr-95	11	60	50			13.25
Jul-95	10	60	50			14.75
Oct-95	8	60	2			10.75
Apr-96	5	60	5			7
Sep-96	5	60	5			5

MOVING AVERAGE TREND TEST
VDM-11
CHROMIUM

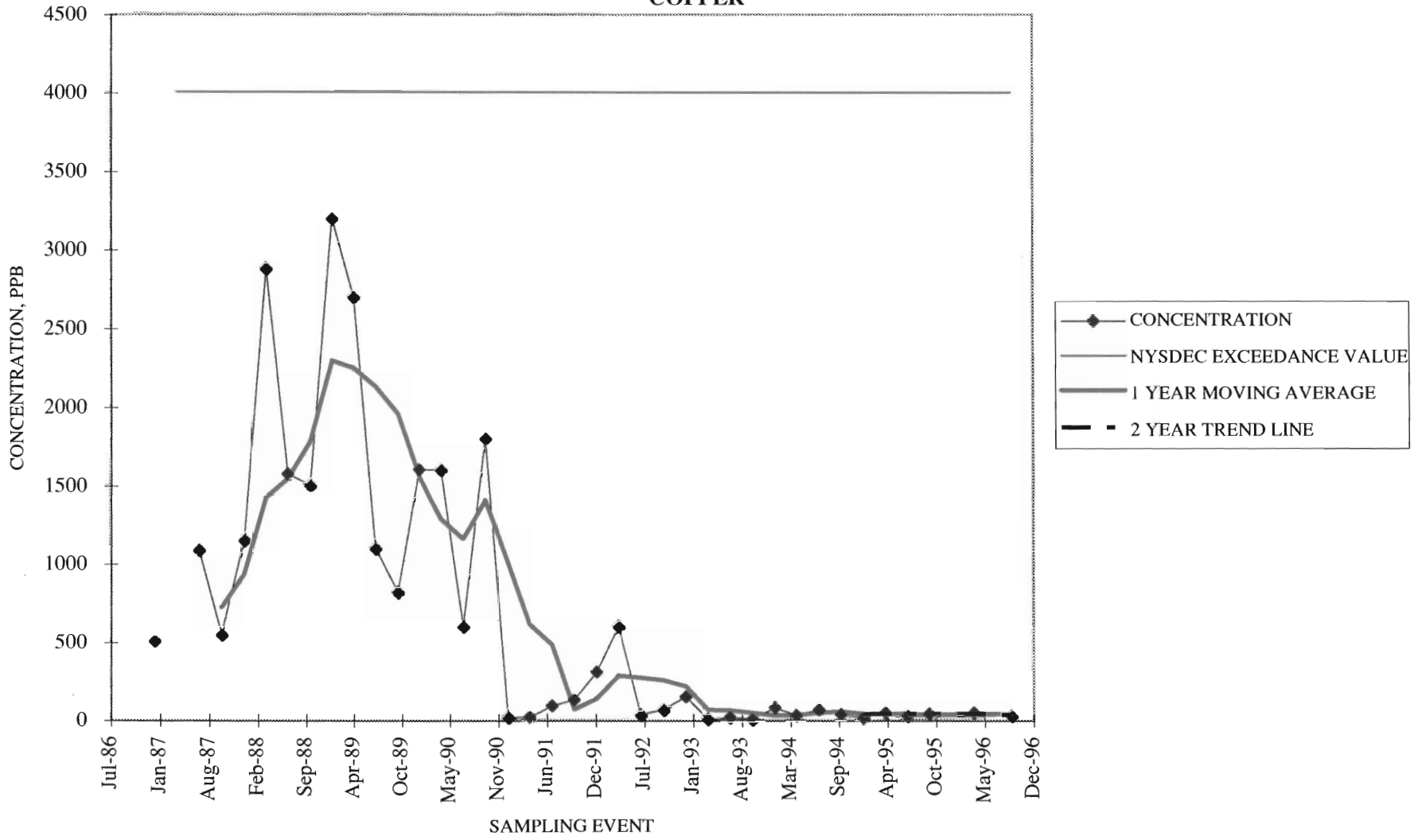


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WELL VDM - 11 : COPPER

SAMPLING EVENT NO.	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87	510	4000	200	TOTAL STD	876.8006	
Apr-87		4000	200	TOTAL Sx		
Jul-87	1090	4000	200	TOTAL MEAN	663.7892	
Oct-87	550	4000	200	TOTAL N	37.0000	716.67
Jan-88	1150	4000	200	TOTAL df	36.0000	930.00
Apr-88	2880	4000	200			1417.50
Jul-88	1570	4000	200			1537.50
Oct-88	1500	4000	200			1775.00
Jan-89	3200	4000	200			2287.50
Apr-89	2700	4000	200			2242.50
Jul-89	1100	4000	200			2125.00
Oct-89	820	4000	200			1955.00
Jan-90	1600	4000	200			1555.00
Apr-90	1600	4000	200			1280.00
Jul-90	600	4000	200			1155.00
Oct-90	1800	4000	200			1400.00
Jan-91	19	4000	200			1004.75
Apr-91	21	4000	200			610.00
Jul-91	90	4000	200			482.50
Oct-91	130	4000	200			65.00
Jan-92	310	4000	200			137.75
Apr-92	600	4000	200			282.50
Jul-92	35.5	4000	200			268.88
Oct-92	66.7	4000	200			253.05
Jan-93	150	4000	200			213.05
Apr-93	10	4000	200			65.55
Jul-93	20	4000	200			61.68
Oct-93	5	4000	200			46.25
Jan-94	80	4000	200			28.75
Apr-94	31	4000	200			34.00
Jul-94	68	4000	200			46.00
Oct-94	40	4000	200			54.75
Jan-95	15	4000	200			38.50
Apr-95	50	4000	200			43.25
Jul-95	30	4000	200			33.75
Oct-95	41	4000	10			34.00
Apr-96	48	4000	10			41.75
Sep-96	30	4000	30			39

MOVING AVERAGE TREND TEST
VDM-11
COPPER

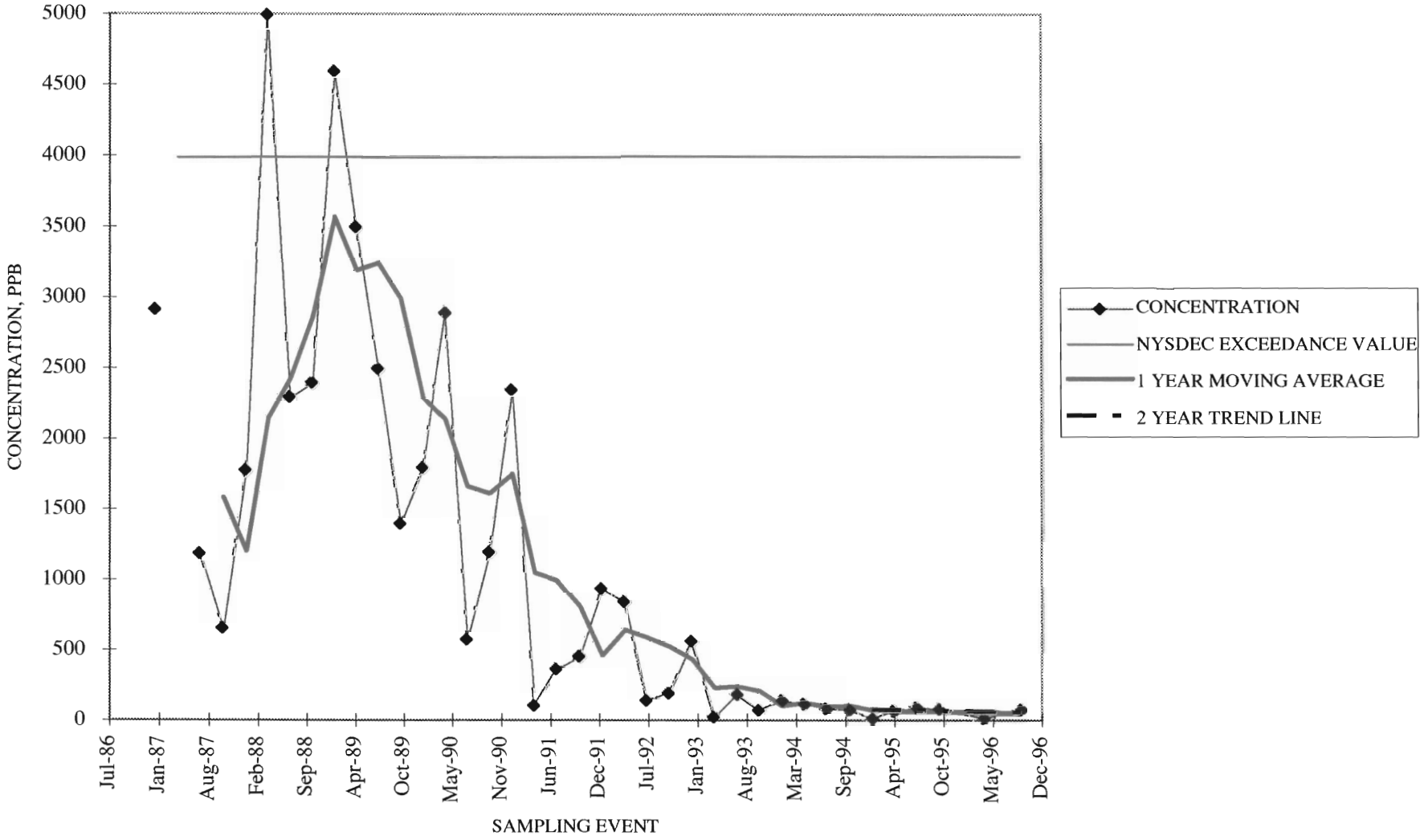


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WELL VDM - 11 : ZINC

SAMPLING EVENT NO.	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Jan-87	2920	4000	300	TOTAL STD	1329.189	
Apr-87		4000	300	TOTAL Sx	221.531	
Jul-87	1190	4000	300	TOTAL MEAN	1130.270	
Oct-87	660	4000	300	TOTAL N	37.000	1590.00
Jan-88	1780	4000	300	TOTAL df	36.000	1210.00
Apr-88	5000	4000	300			2157.50
Jul-88	2300	4000	300			2435.00
Oct-88	2400	4000	300			2870.00
Jan-89	4600	4000	300			3575.00
Apr-89	3500	4000	300			3200.00
Jul-89	2500	4000	300			3250.00
Oct-89	1400	4000	300			3000.00
Jan-90	1800	4000	300			2300.00
Apr-90	2900	4000	300			2150.00
Jul-90	580	4000	300			1670.00
Oct-90	1200	4000	300			1620.00
Jan-91	2350	4000	300			1757.50
Apr-91	110	4000	300			1060.00
Jul-91	370	4000	300			1007.50
Oct-91	460	4000	300			822.50
Jan-92	940	4000	300			470.00
Apr-92	850	4000	300			655.00
Jul-92	145	4000	300			598.75
Oct-92	197	4000	300			533.00
Jan-93	570	4000	300			440.50
Apr-93	30	4000	300			235.50
Jul-93	190	4000	300			246.75
Oct-93	75	4000	300			216.25
Jan-94	145	4000	300			110.00
Apr-94	120	4000	300			132.50
Jul-94	88	4000	300			107.00
Oct-94	80	4000	300			108.25
Jan-95	20	4000	300			77.00
Apr-95	70	4000	300			64.50
Jul-95	96	4000	300			66.50
Oct-95	84	4000	20			67.50
Apr-96	20	4000	20			55
Sep-96	80	4000	20			50

MOVING AVERAGE TREND TEST
VDM-11
ZINC

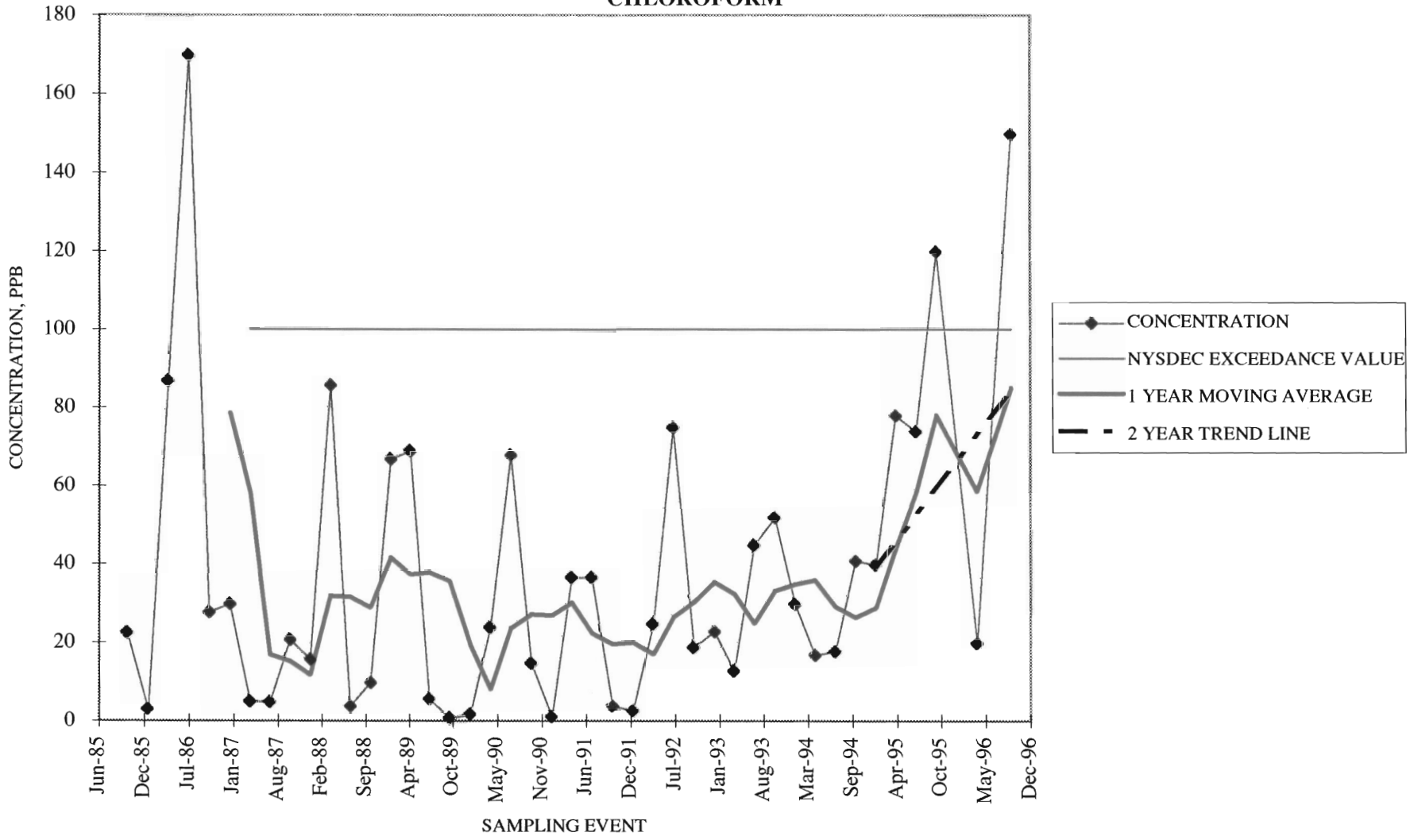


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WELL VDM - 14 : CHLOROFORM

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Oct-85	22.7	100	8	TOTAL STD	39.13672	
Jan-86	3.2	100	8	TOTAL Sx	6.038927	
Apr-86	87	100	8	TOTAL MEAN	38.64535	
Jul-86	170	100	8	TOTAL N	43	70.73
Oct-86	28	100	8	TOTAL df	42	72.05
Jan-87	30	100	8			78.75
Apr-87	5.2	100	8			58.30
Jul-87	5.1	100	8			17.08
Oct-87	21	100	8			15.33
Jan-88	16	100	8			11.83
Apr-88	86	100	8			32.03
Jul-88	4	100	8			31.75
Oct-88	10	100	8			29.00
Jan-89	67	100	8			41.75
Apr-89	69	100	8			37.50
Jul-89	5.9	100	8			37.98
Oct-89	1	100	8			35.73
Jan-90	2	100	8			19.48
Apr-90	24	100	8			8.23
Jul-90	68	100	8			23.75
Oct-90	15	100	8			27.25
Jan-91	1.25	100	8			27.06
Apr-91	36.8	100	8			30.26
Jul-91	36.8	100	8			22.46
Oct-91	4	100	8			19.71
Jan-92	2.8	100	8			20.10
Apr-92	25	100	8			17.15
Jul-92	75	100	8			26.70
Oct-92	19	100	8			30.45
Jan-93	23	100	8			35.50
Apr-93	13	100	8			32.50
Jul-93	45	100	8			25.00
Oct-93	52	100	8			33.25
Jan-94	30	100	8			35.00
Apr-94	17	100	8			36.00
Jul-94	18	100	8			29.25
Oct-94	41	100	8			26.50
Jan-95	40	100	8			29.00
Apr-95	78	100	8			44.25
Jul-95	74	100	8			58.25
Oct-95	120	100	8			78.00
Apr-96	20	100	8			58.5
Sep-96	150	100	10			85

MOVING AVERAGE TREND TEST
VDM-14
CHLOROFORM

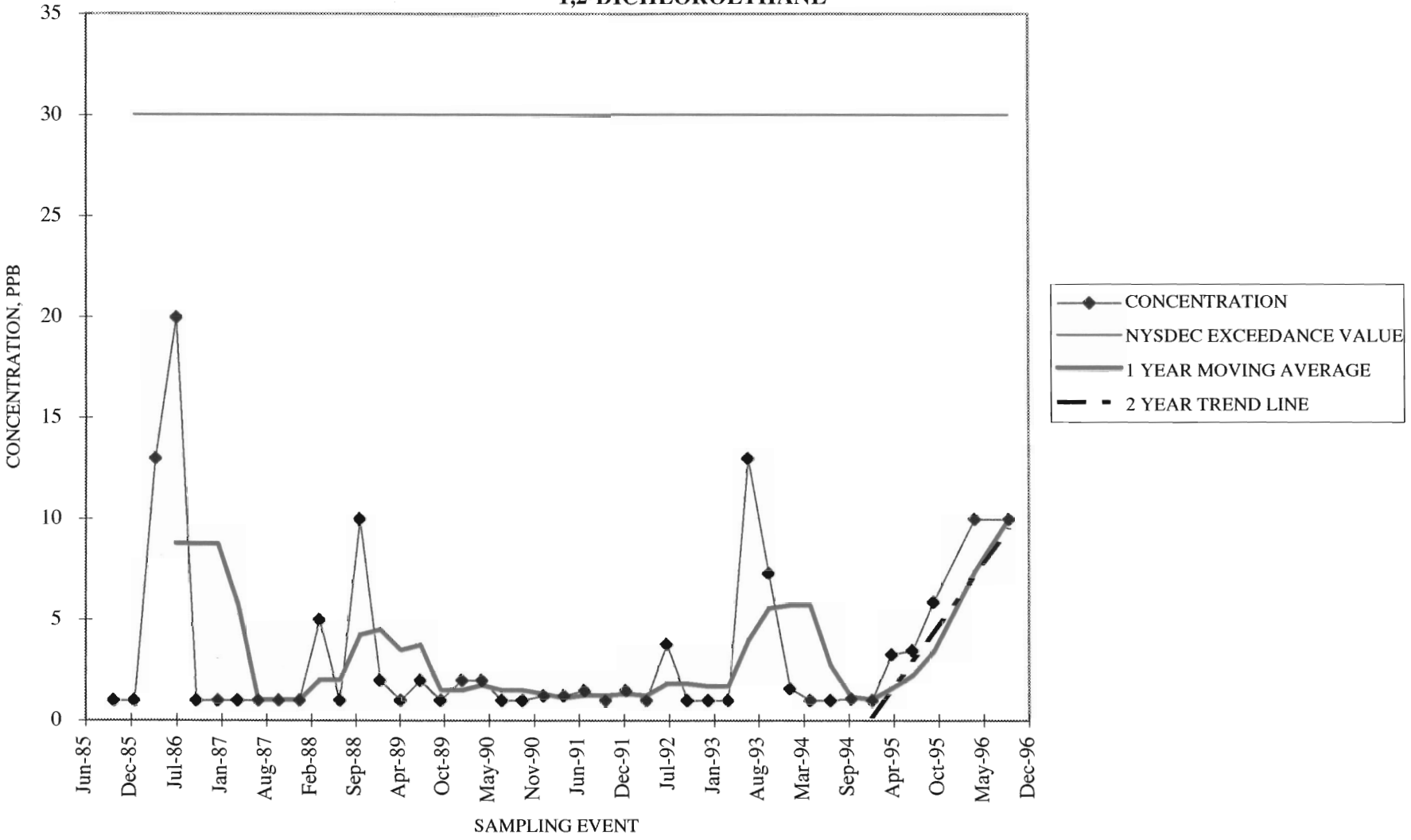


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WELL VDM - 14 : 1,2-DICHLOROETHANE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Oct-85	1	30	5	TOTAL STD	4.226563	
Jan-86	1	30	5	TOTAL Sx	0.652173	
Apr-86	13	30	5	TOTAL MEAN	3.302326	
Jul-86	20	30	5	TOTAL N	43	8.75
Oct-86	1	30	5	TOTAL df	42	8.75
Jan-87	1	30	5			8.75
Apr-87	1	30	5			5.75
Jul-87	1	30	5			1.00
Oct-87	1	30	5			1.00
Jan-88	1	30	5			1.00
Apr-88	5	30	5			2.00
Jul-88	1	30	5			2.00
Oct-88	10	30	5			4.25
Jan-89	2	30	5			4.50
Apr-89	1	30	5			3.50
Jul-89	2	30	5			3.75
Oct-89	1	30	5			1.50
Jan-90	2	30	5			1.50
Apr-90	2	30	5			1.75
Jul-90	1	30	5			1.50
Oct-90	1	30	5			1.50
Jan-91	1.25	30	5			1.31
Apr-91	1.25	30	5			1.13
Jul-91	1.5	30	5			1.25
Oct-91	1	30	5			1.25
Jan-92	1.5	30	5			1.31
Apr-92	1	30	5			1.25
Jul-92	3.8	30	5			1.83
Oct-92	1	30	5			1.83
Jan-93	1	30	5			1.70
Apr-93	1	30	5			1.70
Jul-93	13	30	5			4.00
Oct-93	7.3	30	5			5.58
Jan-94	1.6	30	5			5.73
Apr-94	1	30	5			5.73
Jul-94	1	30	5			2.73
Oct-94	1.1	30	5			1.18
Jan-95	1	30	5			1.03
Apr-95	3.3	30	5			1.60
Jul-95	3.5	30	5			2.23
Oct-95	5.9	30	2			3.43
Apr-96	10	30	10			7.35
Sep-96	10	30	10			10

MOVING AVERAGE TREND TEST
VDM-14
1,2-DICHLOROETHANE

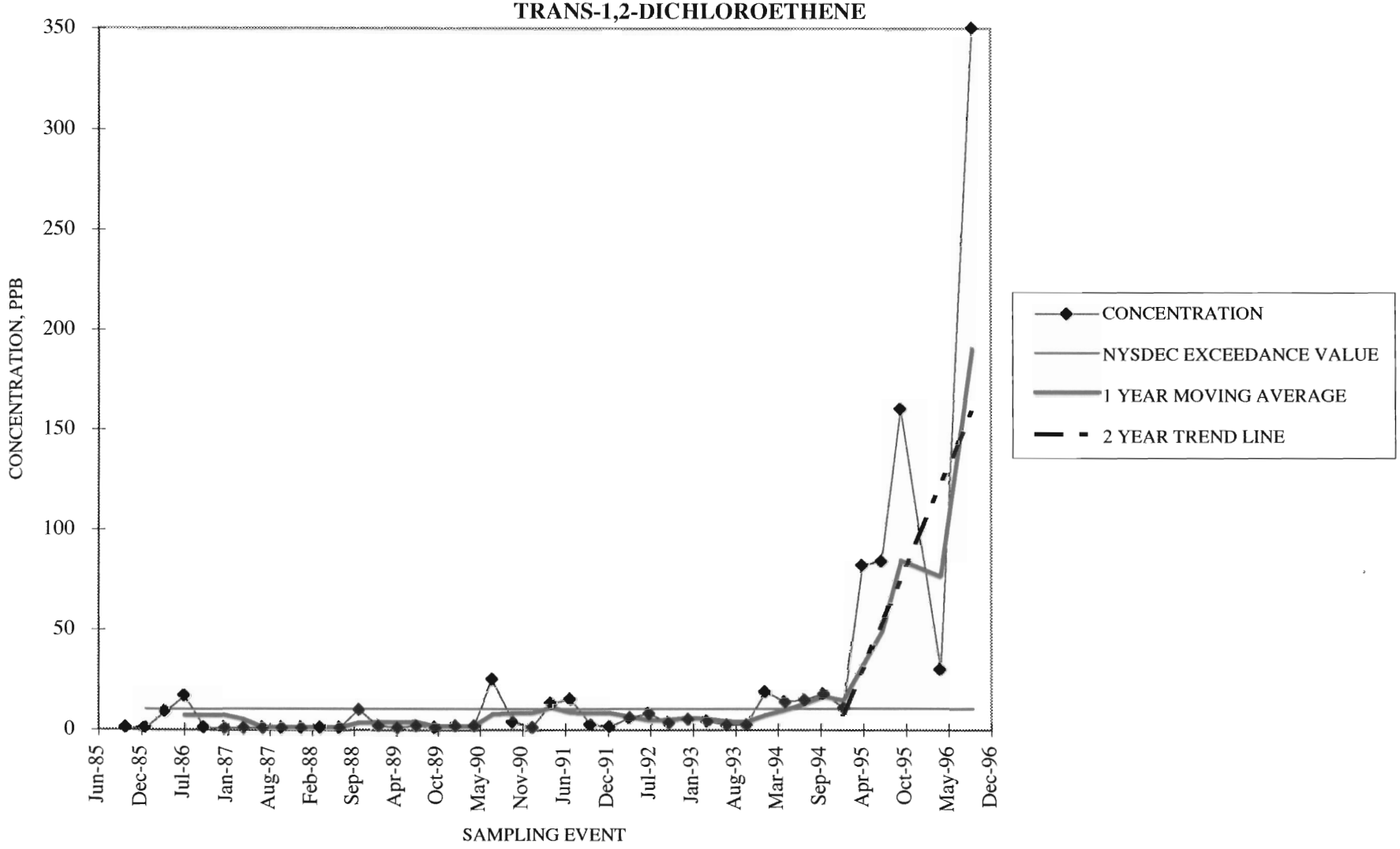


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WELL VDM - 14 : TRANS-1,2-DICHLOROETHENE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Oct-85	1	10	5	TOTAL STD	58.16309	
Jan-86	1	10	5	TOTAL Sx	8.97476	
Apr-86	9	10	5	TOTAL MEAN	21.70581	
Jul-86	17	10	5	TOTAL N	43	7.00
Oct-86	1	10	5	TOTAL df	42	7.00
Jan-87	1	10	5			7.00
Apr-87	1	10	5			5.00
Jul-87	1	10	5			1.00
Oct-87	1	10	5			1.00
Jan-88	1	10	5			1.00
Apr-88	1	10	5			1.00
Jul-88	1	10	5			1.00
Oct-88	10	10	5			3.25
Jan-89	2	10	5			3.50
Apr-89	1	10	5			3.50
Jul-89	2	10	5			3.75
Oct-89	1	10	5			1.50
Jan-90	2	10	5			1.50
Apr-90	2	10	5			1.75
Jul-90	25	10	5			7.50
Oct-90	3.7	10	5			8.18
Jan-91	1.25	10	5			7.99
Apr-91	13.1	10	5			10.76
Jul-91	15.1	10	5			8.29
Oct-91	2.5	10	5			7.99
Jan-92	1.5	10	5			8.05
Apr-92	6	10	5			6.28
Jul-92	8	10	5			4.50
Oct-92	3.5	10	5			4.75
Jan-93	5.4	10	5			5.73
Apr-93	4.3	10	5			5.30
Jul-93	2.5	10	5			3.93
Oct-93	2.5	10	5			3.68
Jan-94	19	10	5			7.08
Apr-94	14	10	5			9.50
Jul-94	15	10	5			12.63
Oct-94	18	10	5			16.50
Jan-95	11	10	5			14.50
Apr-95	82	10	5			31.50
Jul-95	84	10	5			48.75
Oct-95	160	10	5			84.25
Apr-96	30	10	5			76
Sep-96	350	10	10			190

MOVING AVERAGE TREND TEST
VDM-14
TRANS-1,2-DICHLOROETHENE

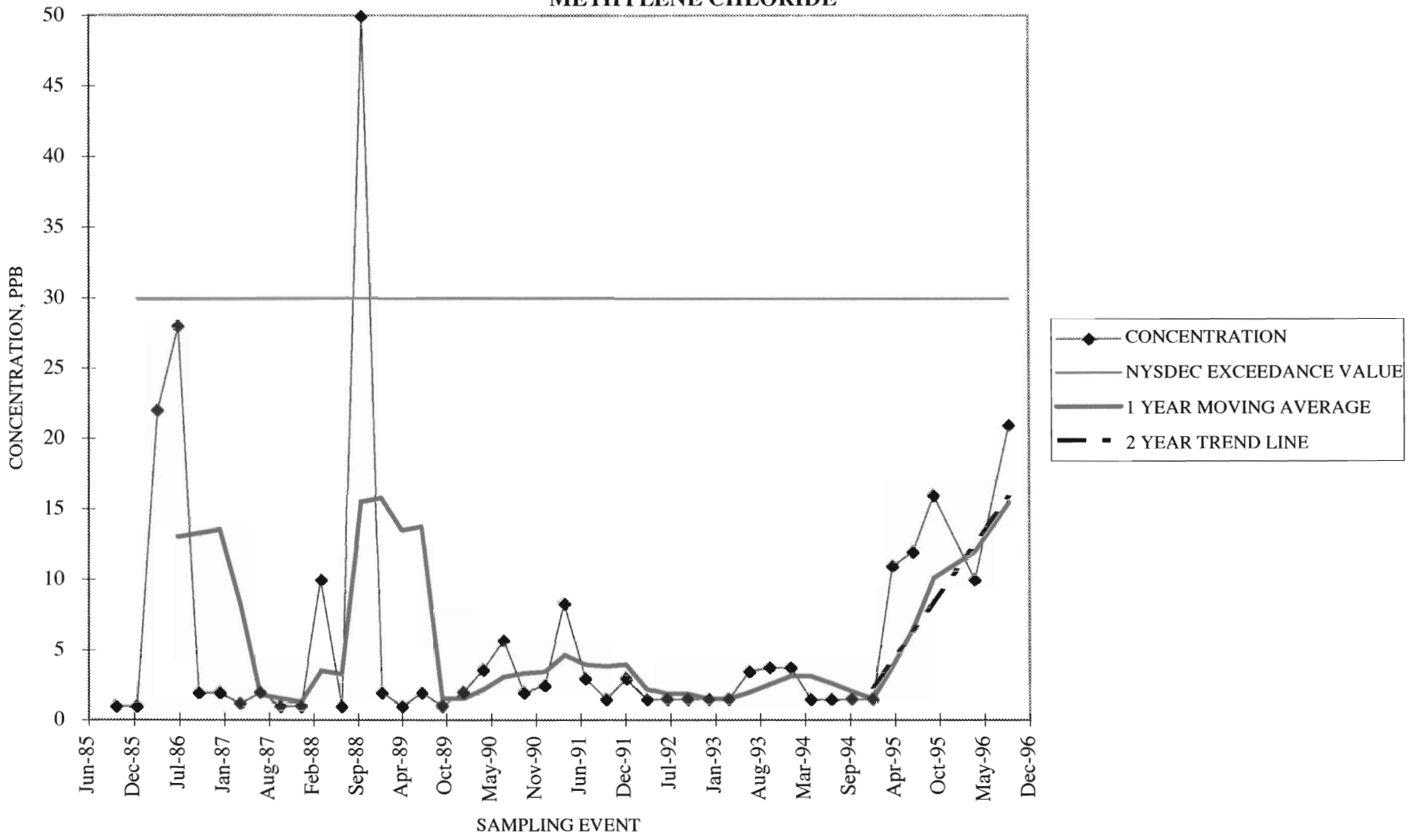


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WELL VDM - 14 : METHYLENE CHLORIDE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Oct-85	1	30	5	TOTAL STD	9.230453	
Jan-86	1	30	5	TOTAL Sx	1.42429	
Apr-86	22	30	5	TOTAL MEAN	5.916744	
Jul-86	28	30	5	TOTAL N	43	13.00
Oct-86	2	30	5	TOTAL df	42	13.25
Jan-87	2	30	5			13.50
Apr-87	1.2	30	5			8.30
Jul-87	2	30	5			1.80
Oct-87	1	30	5			1.55
Jan-88	1	30	5			1.30
Apr-88	10	30	5			3.50
Jul-88	1	30	5			3.25
Oct-88	50	30	5			15.50
Jan-89	2	30	5			15.75
Apr-89	1	30	5			13.50
Jul-89	2	30	5			13.75
Oct-89	1	30	5			1.50
Jan-90	2	30	5			1.50
Apr-90	3.6	30	5			2.15
Jul-90	5.7	30	5			3.08
Oct-90	2	30	5			3.33
Jan-91	2.5	30	5			3.45
Apr-91	8.32	30	5			4.63
Jul-91	3	30	5			3.96
Oct-91	1.5	30	5			3.83
Jan-92	3	30	5			3.96
Apr-92	1.5	30	5			2.25
Jul-92	1.5	30	5			1.88
Oct-92	1.5	30	5			1.88
Jan-93	1.5	30	5			1.50
Apr-93	1.5	30	5			1.50
Jul-93	3.5	30	5			2.00
Oct-93	3.8	30	5			2.58
Jan-94	3.8	30	5			3.15
Apr-94	1.5	30	5			3.15
Jul-94	1.5	30	5			2.65
Oct-94	1.5	30	5			2.08
Jan-95	1.5	30	5			1.50
Apr-95	11	30	5			3.88
Jul-95	12	30	5			6.50
Oct-95	16	30	5			10.13
Apr-96	10	30	10			12
Sep-96	21	30	10			15.5

MOVING AVERAGE TREND TEST
VDM-14
METHYLENE CHLORIDE

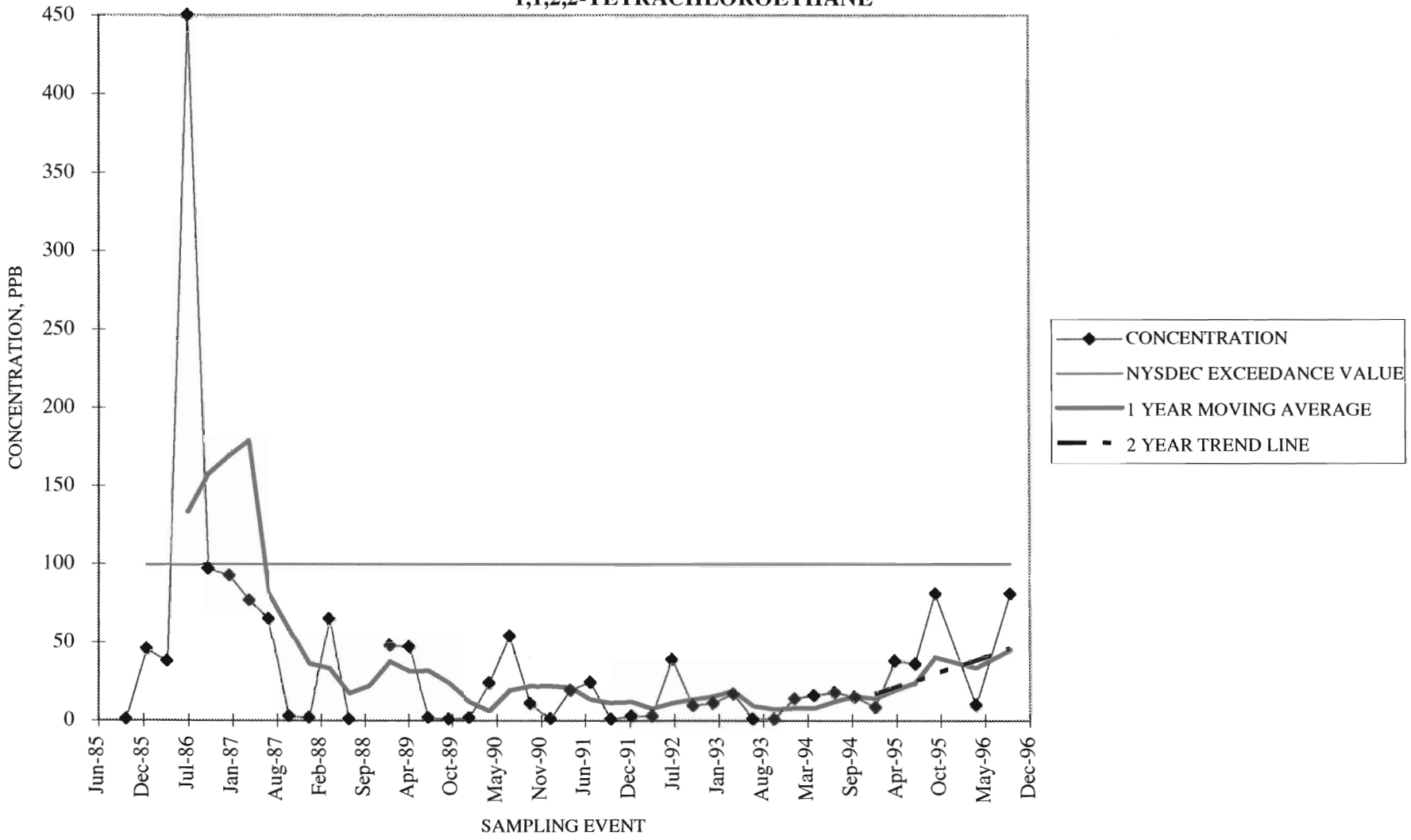


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WELL VDM - 14 : 1,1,2,2-TETRACHLOROETHANE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Oct-85	1	100	5	TOTAL STD	70.3105	
Jan-86	46	100	5	TOTAL Sx	10.98066	
Apr-86	38	100	5	TOTAL MEAN	37.50357	
Jul-86	450	100	5	TOTAL N	42	133.75
Oct-86	97	100	5	TOTAL df	41	157.75
Jan-87	93	100	5			169.50
Apr-87	77	100	5			179.25
Jul-87	65	100	5			83.00
Oct-87	3	100	5			59.50
Jan-88	2	100	5			36.75
Apr-88	65	100	5			33.75
Jul-88	1	100	5			17.75
Oct-88		100	5			22.67
Jan-89	48	100	5			38.00
Apr-89	47	100	5			32.00
Jul-89	2	100	5			32.33
Oct-89	1	100	5			24.50
Jan-90	2	100	5			13.00
Apr-90	24	100	5			7.25
Jul-90	54	100	5			20.25
Oct-90	11	100	5			22.75
Jan-91	1.25	100	5			22.56
Apr-91	19.6	100	5			21.46
Jul-91	24.4	100	5			14.06
Oct-91	1	100	5			11.56
Jan-92	3	100	5			12.00
Apr-92	3	100	5			7.85
Jul-92	39	100	5			11.50
Oct-92	9.3	100	5			13.58
Jan-93	11	100	5			15.58
Apr-93	17	100	5			19.08
Jul-93	1	100	5			9.58
Oct-93	1	100	5			7.50
Jan-94	14	100	5			8.25
Apr-94	16	100	5			8.00
Jul-94	18	100	5			12.25
Oct-94	15	100	5			15.75
Jan-95	8.6	100	5			14.40
Apr-95	38	100	5			19.90
Jul-95	36	100	5			24.40
Oct-95	81	100	2			40.90
Apr-96	10	100	10			34.25
Sep-96	81	100	10			45.5

MOVING AVERAGE TREND TEST
VDM-14
1,1,2,2-TETRACHLOROETHANE

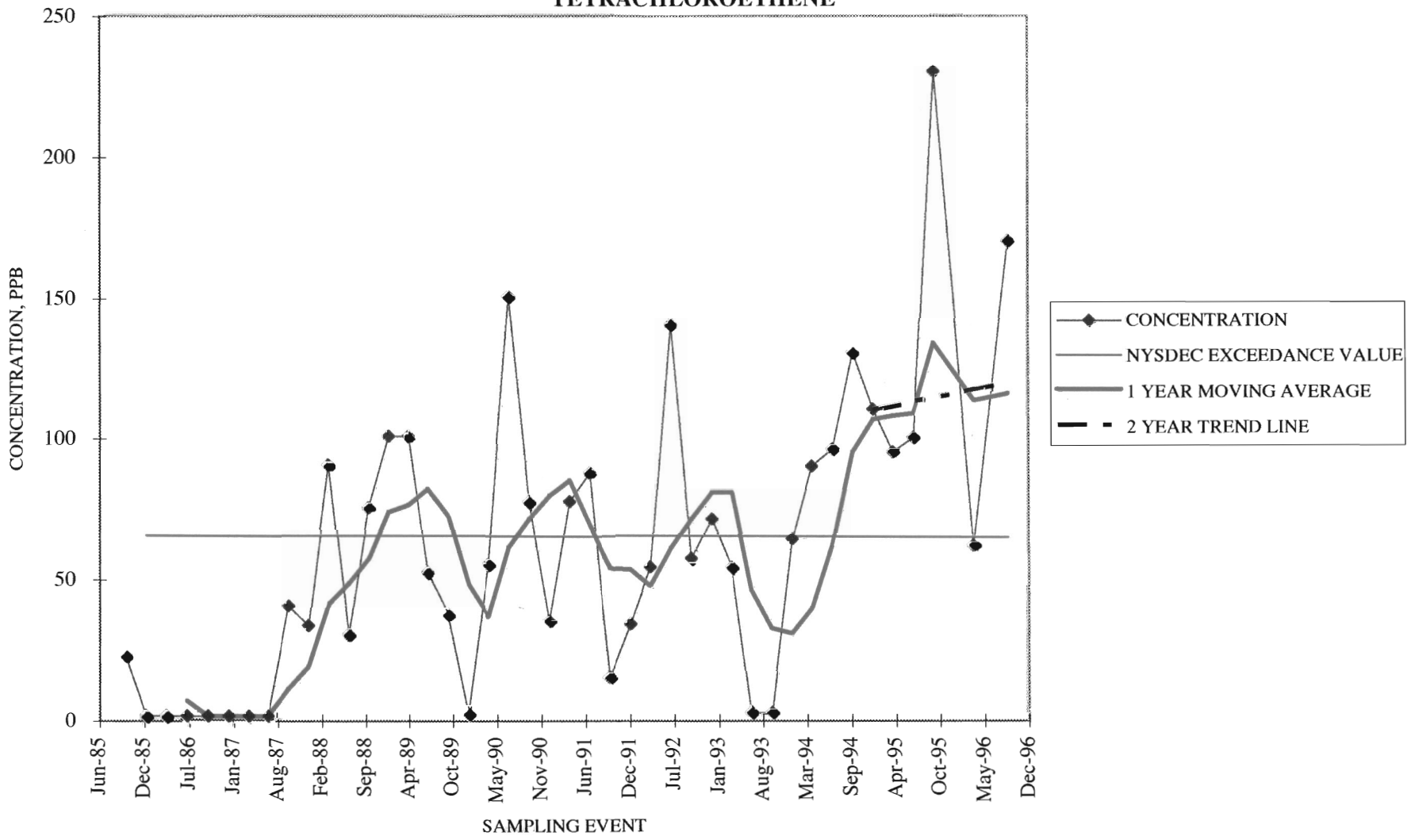


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WELL VDM - 14 : TETRACHLOROETHENE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Oct-85	22.4	65	5	TOTAL STD	51.81313	
Jan-86	1	65	5	TOTAL Sx	7.994939	
Apr-86	1	65	5	TOTAL MEAN	61.54651	
Jul-86	1	65	5	TOTAL N	43	6.35
Oct-86	1	65	5	TOTAL df	42	1.00
Jan-87	1	65	5			1.00
Apr-87	1	65	5			1.00
Jul-87	1	65	5			1.00
Oct-87	40	65	5			10.75
Jan-88	33	65	5			18.75
Apr-88	90	65	5			41.00
Jul-88	30	65	5			48.25
Oct-88	75	65	5			57.00
Jan-89	100	65	5			73.75
Apr-89	100	65	5			76.25
Jul-89	52	65	5			81.75
Oct-89	37	65	5			72.25
Jan-90	2	65	5			47.75
Apr-90	55	65	5			36.50
Jul-90	150	65	5			61.00
Oct-90	77	65	5			71.00
Jan-91	35	65	5			79.25
Apr-91	77.1	65	5			84.78
Jul-91	87.3	65	5			69.10
Oct-91	15	65	5			53.60
Jan-92	33.7	65	5			53.28
Apr-92	54	65	5			47.50
Jul-92	140	65	5			60.68
Oct-92	57	65	5			71.18
Jan-93	71	65	5			80.50
Apr-93	54	65	5			80.50
Jul-93	2.5	65	5			46.13
Oct-93	2.5	65	5			32.50
Jan-94	64	65	5			30.75
Apr-94	90	65	5			39.75
Jul-94	96	65	5			63.13
Oct-94	130	65	5			95.00
Jan-95	110	65	5			106.50
Apr-95	95	65	5			107.75
Jul-95	100	65	5			108.75
Oct-95	230	65	5			133.75
Apr-96	62	65	5			113.5
Sep-96	170	65	10			116

MOVING AVERAGE TREND TEST
VDM-14
TETRACHLOROETHENE

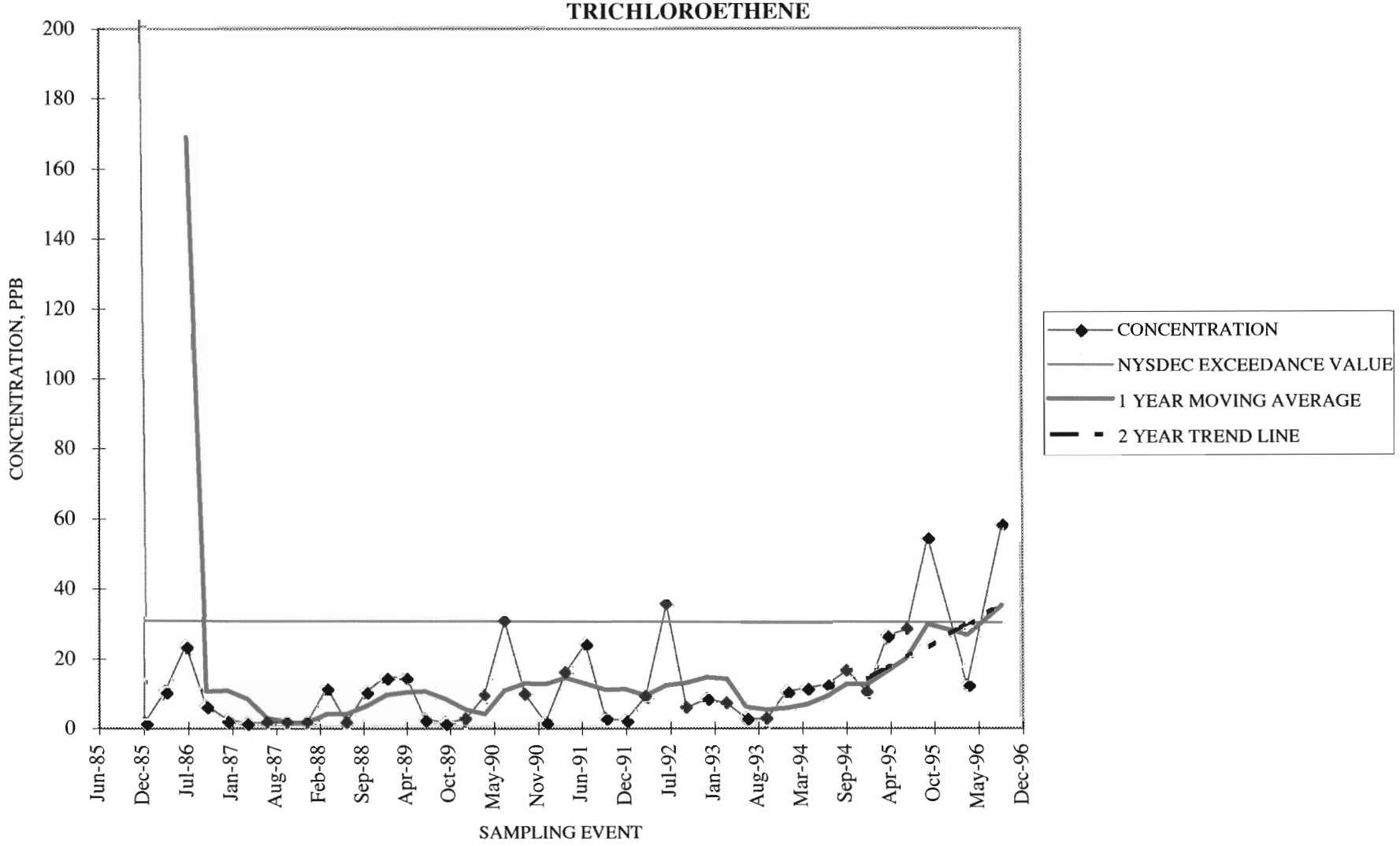


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WELL VDM - 14 : TRICHLOROETHENE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Oct-85	639	30	5	TOTAL STD	95.40652	
Jan-86	1	30	5	TOTAL Sx	14.72155	
Apr-86	10	30	5	TOTAL MEAN	26.47767	
Jul-86	23	30	5	TOTAL N	43	168.25
Oct-86	5.8	30	5	TOTAL df	42	9.95
Jan-87	1.7	30	5			10.13
Apr-87	1	30	5			7.88
Jul-87	1	30	5			2.38
Oct-87	1	30	5			1.18
Jan-88	1	30	5			1.00
Apr-88	11	30	5			3.50
Jul-88	1	30	5			3.50
Oct-88	10	30	5			5.75
Jan-89	14	30	5			9.00
Apr-89	14	30	5			9.75
Jul-89	2	30	5			10.00
Oct-89	1	30	5			7.75
Jan-90	2	30	5			4.75
Apr-90	8.8	30	5			3.45
Jul-90	30	30	5			10.45
Oct-90	9.2	30	5			12.50
Jan-91	1.25	30	5			12.31
Apr-91	15.4	30	5			13.96
Jul-91	23.7	30	5			12.39
Oct-91	2.5	30	5			10.71
Jan-92	1.89	30	5			10.87
Apr-92	8.6	30	5			9.17
Jul-92	35	30	5			12.00
Oct-92	5.6	30	5			12.77
Jan-93	8.1	30	5			14.33
Apr-93	7	30	5			13.93
Jul-93	2.5	30	5			5.80
Oct-93	2.5	30	5			5.03
Jan-94	10	30	5			5.50
Apr-94	11	30	5			6.50
Jul-94	12	30	5			8.88
Oct-94	16	30	5			12.25
Jan-95	10	30	5			12.25
Apr-95	26	30	5			16.00
Jul-95	28	30	5			20.00
Oct-95	54	30	5			29.50
Apr-96	12	30	5			26.5
Sep-96	58	30	10			35

MOVING AVERAGE TREND TEST
VDM-14
TRICHLOROETHENE

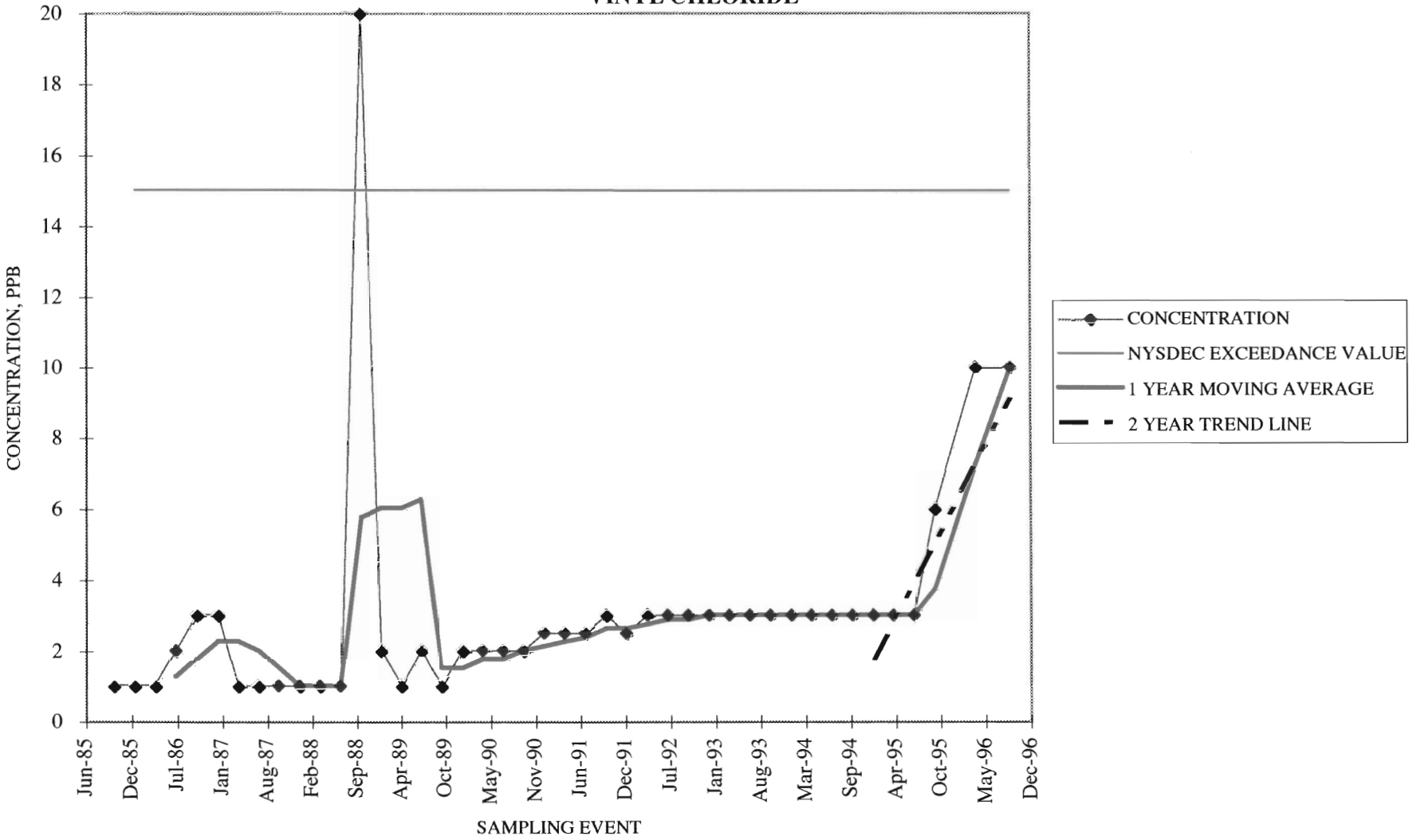


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WELL VDM - 14 : VINYL CHLORIDE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Oct-85	1	15	2	TOTAL STD	3.227032	
Jan-86	1	15	2	TOTAL Sx	0.497942	
Apr-86	1	15	2	TOTAL MEAN	3.069767	
Jul-86	2	15	2	TOTAL N	43	1.25
Oct-86	3	15	2	TOTAL df	42	1.75
Jan-87	3	15	2			2.25
Apr-87	1	15	2			2.25
Jul-87	1	15	2			2.00
Oct-87	1	15	2			1.50
Jan-88	1	15	2			1.00
Apr-88	1	15	2			1.00
Jul-88	1	15	2			1.00
Oct-88	20	15	2			5.75
Jan-89	2	15	2			6.00
Apr-89	1	15	2			6.00
Jul-89	2	15	2			6.25
Oct-89	1	15	2			1.50
Jan-90	2	15	2			1.50
Apr-90	2	15	2			1.75
Jul-90	2	15	2			1.75
Oct-90	2	15	2			2.00
Jan-91	2.5	15	2			2.13
Apr-91	2.5	15	2			2.25
Jul-91	2.5	15	2			2.38
Oct-91	3	15	2			2.63
Jan-92	2.5	15	2			2.63
Apr-92	3	15	2			2.75
Jul-92	3	15	2			2.88
Oct-92	3	15	2			2.88
Jan-93	3	15	2			3.00
Apr-93	3	15	2			3.00
Jul-93	3	15	2			3.00
Oct-93	3	15	2			3.00
Jan-94	3	15	2			3.00
Apr-94	3	15	2			3.00
Jul-94	3	15	2			3.00
Oct-94	3	15	2			3.00
Jan-95	3	15	2			3.00
Apr-95	3	15	2			3.00
Jul-95	3	15	2			3.00
Oct-95	6	15	6			3.75
Apr-96	10	15	10			7.25
Sep-96	10	15	10			10

MOVING AVERAGE TREND TEST
VDM-14
VINYL CHLORIDE

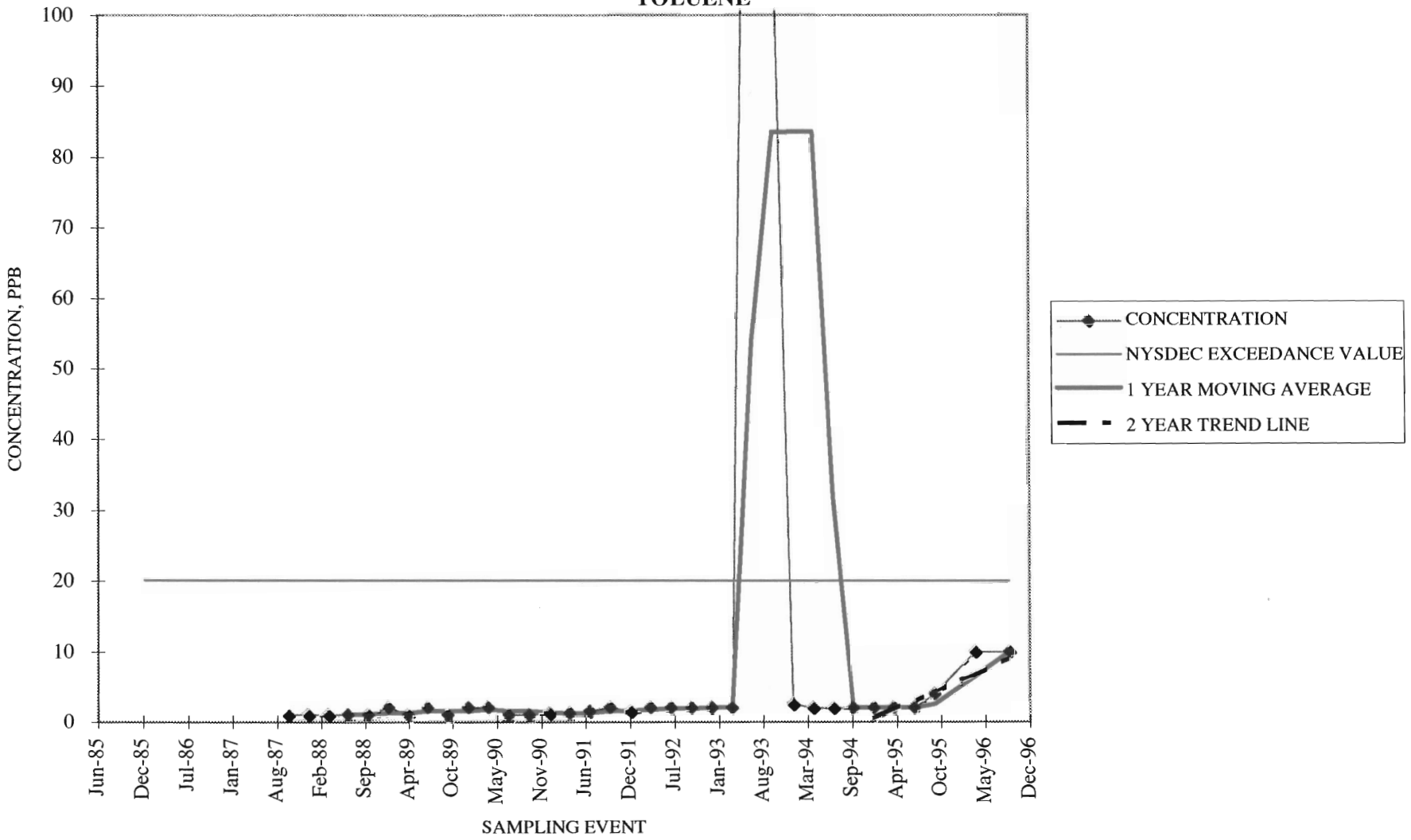


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WELL VDM - 14 : TOLUENE

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Oct-85		20	5	TOTAL STD	39.33832	
Jan-86		20	5	TOTAL Sx	6.746466	
Apr-86		20	5	TOTAL MEAN	11.51429	
Jul-86		20	5	TOTAL N	35	
Oct-86		20	5	TOTAL df	34	
Jan-87		20	5			
Apr-87		20	5			
Jul-87		20	5			
Oct-87	1	20	5			
Jan-88	1	20	5			
Apr-88	1	20	5			
Jul-88	1	20	5			1.00
Oct-88	1	20	5			1.00
Jan-89	2	20	5			1.25
Apr-89	1	20	5			1.25
Jul-89	2	20	5			1.50
Oct-89	1	20	5			1.50
Jan-90	2	20	5			1.50
Apr-90	2	20	5			1.75
Jul-90	1	20	5			1.50
Oct-90	1	20	5			1.50
Jan-91	1.25	20	5			1.31
Apr-91	1.25	20	5			1.13
Jul-91	1.5	20	5			1.25
Oct-91	2	20	5			1.50
Jan-92	1.5	20	5			1.56
Apr-92	2	20	5			1.75
Jul-92	2	20	5			1.88
Oct-92	2	20	5			1.88
Jan-93	2	20	5			2.00
Apr-93	2	20	5			2.00
Jul-93	210	20	5			54.00
Oct-93	120	20	5			83.50
Jan-94	2.5	20	5			83.63
Apr-94	2	20	5			83.63
Jul-94	2	20	5			31.63
Oct-94	2	20	5			2.13
Jan-95	2	20	5			2.00
Apr-95	2	20	5			2.00
Jul-95	2	20	5			2.00
Oct-95	4	20	4			2.50
Apr-96	10	20	10			6.5
Sep-96	10	20	10			10

MOVING AVERAGE TREND TEST
VDM-14
TOLUENE

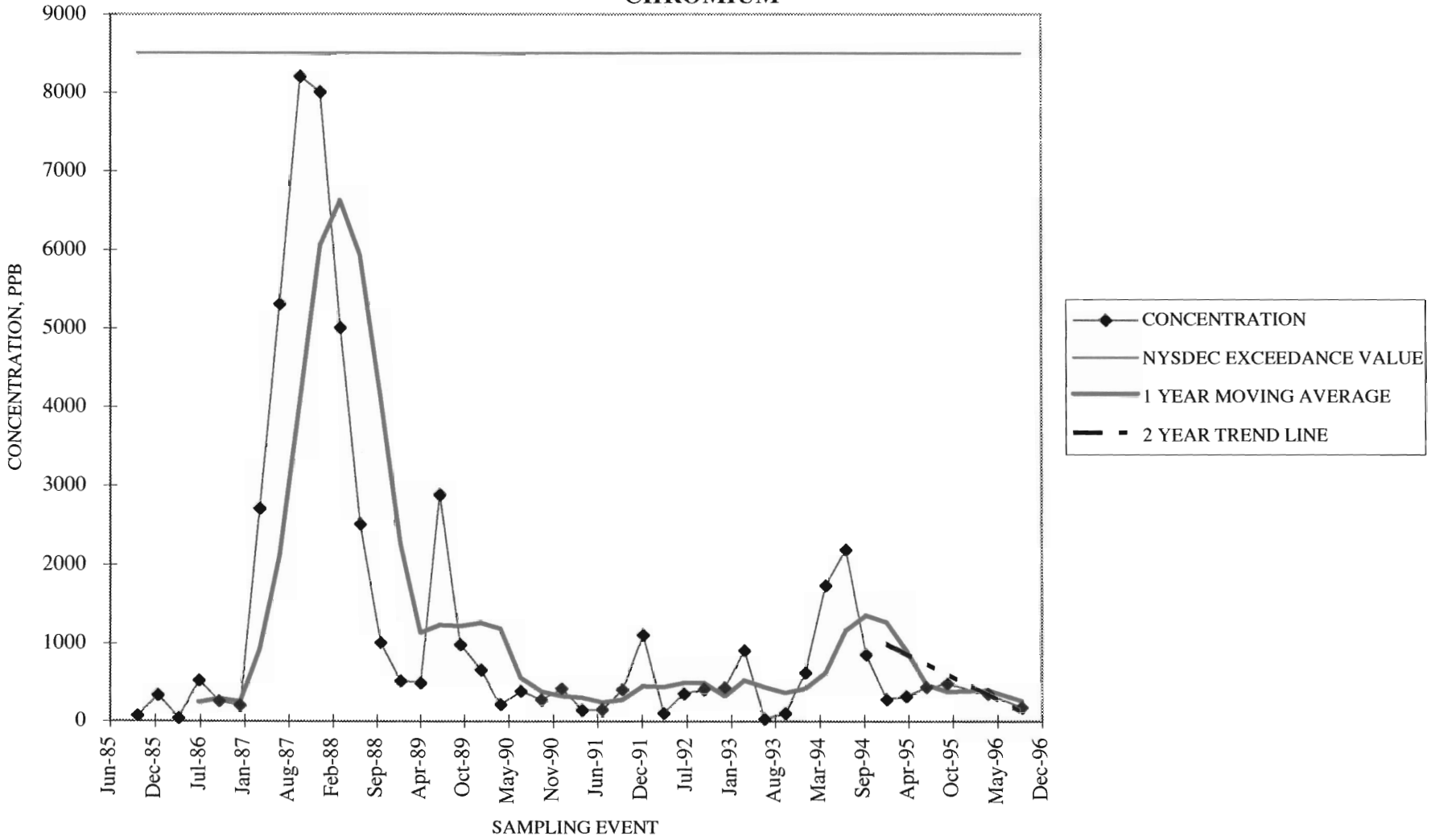


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WELL VDM - 14 : CHROMIUM

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Oct-85	64	8500	50	TOTAL STD	1920.718	
Jan-86	330	8500	50	TOTAL Sx	296.3733	
Apr-86	34	8500	50	TOTAL MEAN	1215.767	
Jul-86	520	8500	50	TOTAL N	43	237.00
Oct-86	240	8500	50	TOTAL df	42	281.00
Jan-87	190	8500	50			246.00
Apr-87	2700	8500	50			912.50
Jul-87	5300	8500	50			2107.50
Oct-87	8200	8500	50			4097.50
Jan-88	8000	8500	50			6050.00
Apr-88	5000	8500	50			6625.00
Jul-88	2500	8500	50			5925.00
Oct-88	1000	8500	50			4125.00
Jan-89	510	8500	50			2252.50
Apr-89	488	8500	50			1124.50
Jul-89	2880	8500	50			1219.50
Oct-89	970	8500	50			1212.00
Jan-90	650	8500	50			1247.00
Apr-90	208	8500	50			1177.00
Jul-90	380	8500	50			552.00
Oct-90	260	8500	50			374.50
Jan-91	406	8500	50			313.50
Apr-91	139	8500	50			296.25
Jul-91	140	8500	50			236.25
Oct-91	395	8500	50			270.00
Jan-92	1100	8500	50			443.50
Apr-92	100	8500	50			433.75
Jul-92	350	8500	50			486.25
Oct-92	400	8500	50			487.50
Jan-93	420	8500	50			317.50
Apr-93	900	8500	50			517.50
Jul-93	25	8500	50			436.25
Oct-93	100	8500	50			361.25
Jan-94	619	8500	50			411.00
Apr-94	1730	8500	50			618.50
Jul-94	2180	8500	50			1157.25
Oct-94	847	8500	50			1344.00
Jan-95	276	8500	50			1258.25
Apr-95	317	8500	50			905.00
Jul-95	430	8500	50			467.50
Oct-95	470	8500	2			373.25
Apr-96	340	8500	2			395
Sep-96	170	8500	5			255

MOVING AVERAGE TREND TEST
VDM-14
CHROMIUM

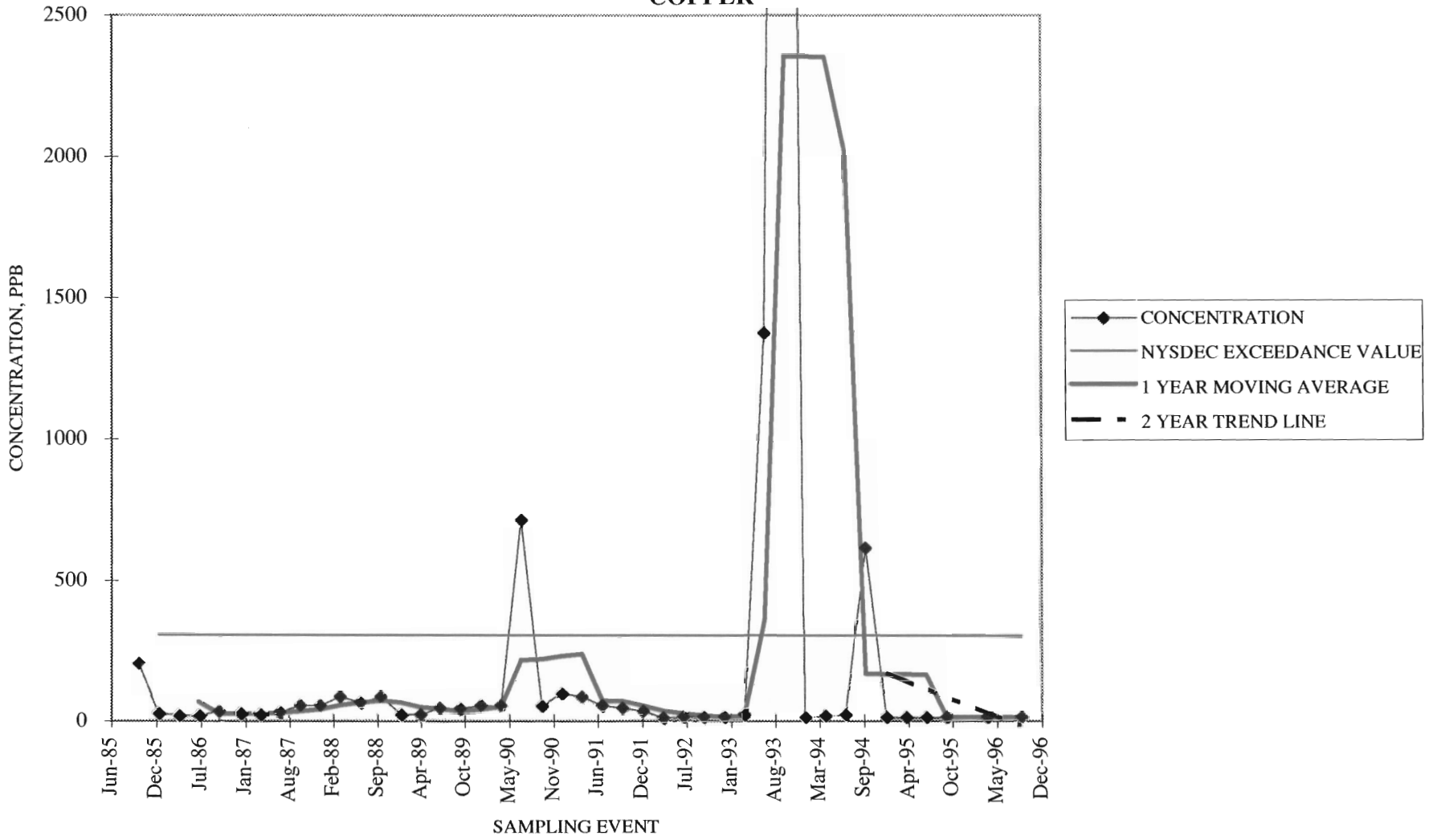


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WELL VDM - 14 : COPPER

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Oct-85	200	300	200	TOTAL STD	1214.874	
Jan-86	21	300	200	TOTAL Sx	187.4591	
Apr-86	14	300	200	TOTAL MEAN	280.6279	
Jul-86	15	300	200	TOTAL N	43	62.50
Oct-86	28	300	200	TOTAL df	42	19.50
Jan-87	22	300	200			19.75
Apr-87	18	300	200			20.75
Jul-87	26	300	200			23.50
Oct-87	50	300	200			29.00
Jan-88	50	300	200			36.00
Apr-88	80	300	200			51.50
Jul-88	60	300	200			60.00
Oct-88	80	300	200			67.50
Jan-89	19	300	200			59.75
Apr-89	16	300	200			43.75
Jul-89	40	300	200			38.75
Oct-89	39	300	200			28.50
Jan-90	50	300	200			36.25
Apr-90	50	300	200			44.75
Jul-90	710	300	200			212.25
Oct-90	50	300	200			215.00
Jan-91	93.3	300	200			225.83
Apr-91	79.7	300	200			233.25
Jul-91	50	300	200			68.25
Oct-91	40	300	200			65.75
Jan-92	30	300	200			49.93
Apr-92	5	300	200			31.25
Jul-92	10	300	200			21.25
Oct-92	10	300	200			13.75
Jan-93	10	300	200			8.75
Apr-93	18	300	200			12.00
Jul-93	1370	300	200			352.00
Oct-93	8000	300	200			2349.50
Jan-94	10	300	200			2349.50
Apr-94	15	300	200			2348.75
Jul-94	18	300	200			2010.75
Oct-94	610	300	200			163.25
Jan-95	10	300	200			163.25
Apr-95	10	300	200			162.00
Jul-95	10	300	200			160.00
Oct-95	10	300	10			10.00
Apr-96	10	300	10			10
Sep-96	10	300	10			10

MOVING AVERAGE TREND TEST
VDM-14
COPPER

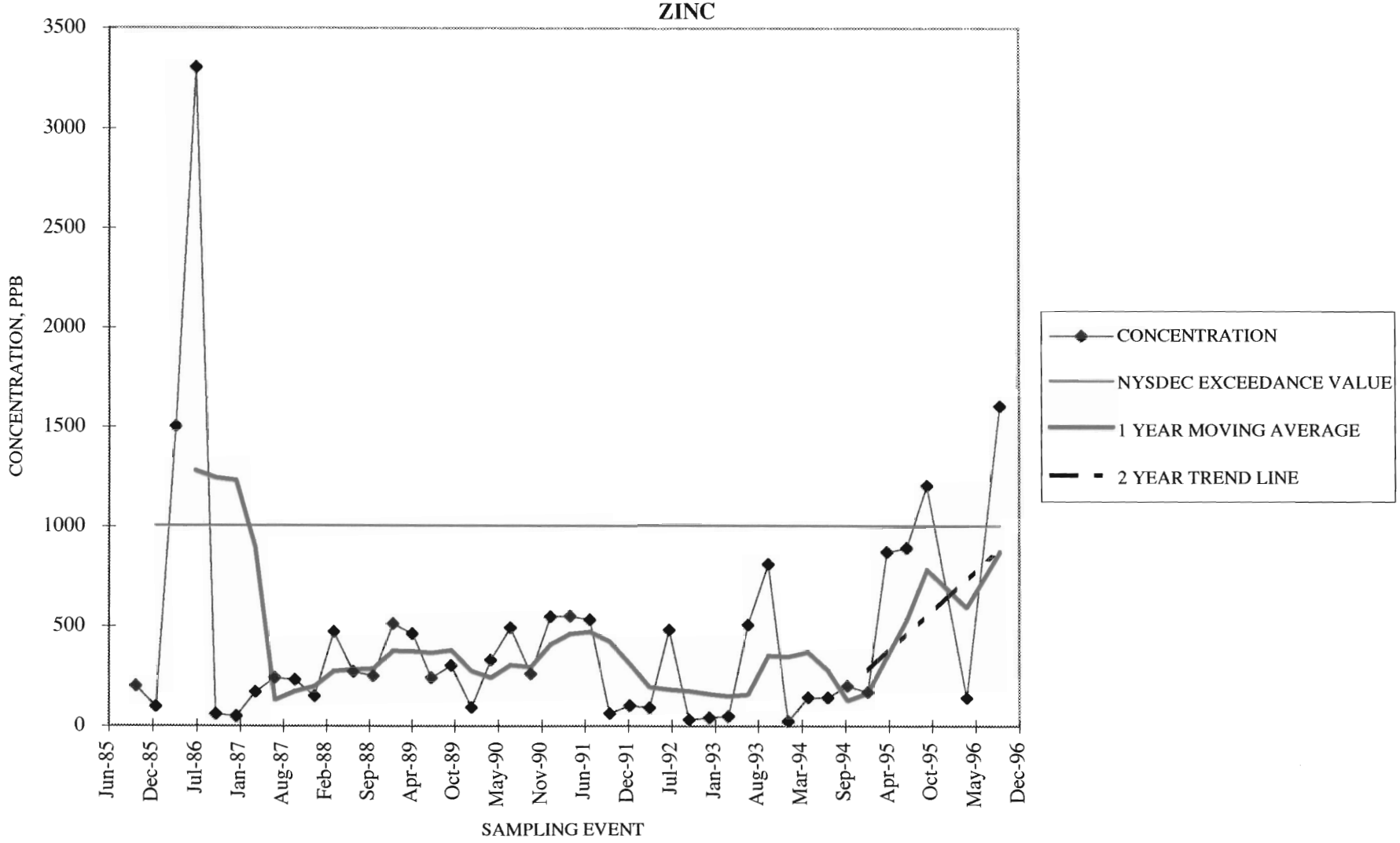


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WELL VDM - 14 : ZINC

SAMPLING EVENT	CONCENTRATION PPB	DEC EXCEEDANCE VALUE	DETECTION LIMIT	STATISTICS		MOVING AVERAGE
Oct-85	200	1000	300	TOTAL STD	575.4748	
Jan-86	95	1000	300	TOTAL Sx	88.79769	
Apr-86	1500	1000	300	TOTAL MEAN	437.7674	
Jul-86	3300	1000	300	TOTAL N	43	1273.75
Oct-86	57	1000	300	TOTAL df	42	1238.00
Jan-87	47	1000	300			1226.00
Apr-87	170	1000	300			893.50
Jul-87	240	1000	300			128.50
Oct-87	230	1000	300			171.75
Jan-88	150	1000	300			197.50
Apr-88	470	1000	300			272.50
Jul-88	270	1000	300			280.00
Oct-88	250	1000	300			285.00
Jan-89	510	1000	300			375.00
Apr-89	460	1000	300			372.50
Jul-89	240	1000	300			365.00
Oct-89	300	1000	300			377.50
Jan-90	90	1000	300			272.50
Apr-90	330	1000	300			240.00
Jul-90	490	1000	300			302.50
Oct-90	260	1000	300			292.50
Jan-91	545	1000	300			406.25
Apr-91	550	1000	300			461.25
Jul-91	530	1000	300			471.25
Oct-91	60	1000	300			421.25
Jan-92	100	1000	300			310.00
Apr-92	91	1000	300			195.25
Jul-92	480	1000	300			182.75
Oct-92	31	1000	300			175.50
Jan-93	40	1000	300			160.50
Apr-93	47	1000	300			149.50
Jul-93	506	1000	300			156.00
Oct-93	810	1000	300			350.75
Jan-94	24	1000	300			346.75
Apr-94	141	1000	300			370.25
Jul-94	142	1000	300			279.25
Oct-94	200	1000	300			126.75
Jan-95	170	1000	300			163.25
Apr-95	869	1000	300			345.25
Jul-95	889	1000	300			532.00
Oct-95	1200	1000	20			782.00
Apr-96	140	1000	20			592.25
Sep-96	1600	1000	20			870

MOVING AVERAGE TREND TEST
VDM-14
ZINC



Malcolm
Pirnie

ATTACHMENT B

MALCOLM PIRNIE

MALCOLM PIRNIE, INC.
ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS

April 16, 1996

Mr. Matthew Barmasse
Van De Mark Group
One North Transit Road
Lockport, NY 14094

Re: Post-Closure Monitoring Moving Average Trend Test

Dear Mr. Barmasse:

In accordance with the proposed "Water Quality Data Evaluation" methodology (Attachment A) for Van De Mark (VDM) in November of 1995, a Moving Average Trend Test was performed to evaluate trends in groundwater quality of four downgradient wells at the Van De Mark landfill. This letter report has been prepared to present a summary of the completed statistical evaluation of post-closure monitoring data.

BACKGROUND

VDM conducts quarterly groundwater monitoring of their closed landfill to fulfill the requirements of their post-closure monitoring permit. The monitoring program, initiated in 1987 (year of landfill closure), consists of sample collection and analysis of groundwater from monitoring wells VDM-9, VDM-10, VDM-11, VDM-14, and D-55 (background). Groundwater is analyzed for volatile organic compounds, phenols, and metals. Since 1987, VDM has compiled the analytical data for each quarter on computerized spreadsheets.

METHODOLOGY

VDM provided Malcolm Pirnie, Inc. with historic analytical data for wells VDM-9, -10, -11, and -14 on computer diskette consisting of four Lotus 123 spreadsheet files. Volatile organic compounds, phenols, and metals data are in the same file for each well. The spreadsheet files were converted from Lotus 123 to Microsoft Excel for wells VDM-9, -10, -11, and -14. MPI added analytical data for the fourth quarter of 1995 to the spreadsheets. Additionally, historical laboratory data for background well D-55 was manually added to complete the analytical database. Analytical results which are reported as "Not Detected" were recorded in the spreadsheet at the detection limit of the analytical method used. Tables were generated for each parameter and are presented in Attachment B. Each table summarizes parameter concentration for each sampling event number, DEC Exceedance Value, laboratory detection limit, one year moving average, standard deviation, and mean.

S 3515 ABBOTT ROAD P O BOX 1938 BUFFALO NY 14219-0138 716-828-1300 FAX 716-828-0431

RECYCLED PAPER

Volatile organic compound and phenols analytical data were evaluated separately for each well by calculating the moving average for the nine years of analytical data for each parameter. The moving average calculation involves averaging four sequential concentrations in succession for all analytical data (one year moving average). The actual concentration and one year moving average concentration versus quarterly sampling event (i.e. time) is then graphically presented. The NYSDEC Exceedance Value is also indicated on the graph. A trend line is best fit to the last two years of the moving average. The inflection of the two year trend line indicates an increasing, decreasing, or neutral trend. Neutral is defined as having no significant increasing or decreasing trend. Graphs for each parameter monitored in Wells VDM-9, -10, -11 and -14 are included in Attachment B and precede the corresponding data table.

Since inorganic compounds are naturally occurring, metals data were evaluated by establishing a background mean and standard deviation for each metal parameter for the upgradient well D-55. Tables were generated for each metal parameter in well D-55 and present sampling event number, concentration, DEC Exceedance Value, standard deviation, and three times the standard deviation. For metal parameters from wells VDM-9, -10, -11, and -14, the one year moving average was calculated. Actual concentration and one year moving average concentration versus quarterly sampling event number and two year trend line were graphically presented with the DEC Exceedance Value.

RESULTS

The two-year trend line was established for each individual parameter for wells VDM -9, -10, -11, and -14 presented in Attachment B. The trend analysis results are summarized in Table 1. The trend is presented as an increasing, decreasing, or neutral trend. The table identifies those parameters that are present at concentrations above NYSDEC Exceedance Values for the most recent sampling quarter (fourth quarter 1995). For metal parameters, Table 1 also identifies concentration data that exceeds three times the background water quality concentration standard deviation and exceeds the NYSDEC Exceedance Value for that parameter.

A total of five organic parameters in wells VDM -9, -10, and -14 illustrate an upward trend for the most recent quarter at concentrations exceeding the NYSDEC Exceedance Value. Neutral trends were observed for all parameters of well VDM-11. Inorganic parameter concentration trends were predominantly neutral or decreasing. However, the most recent zinc concentration from wells VDM-10 and -14 exceed three times the background water quality standard deviation and are greater than the NYSDEC Exceedance Value. Analytical data for 18-Mile Creek is required to evaluate potential off-site environmental impacts resulting from the observation of increasing two-year trends.

RECYCLED PAPER

If you have any questions regarding this statistical evaluation, please do not hesitate to call.

Very truly yours,

MALCOLM PIRNIE, INC.

Patrick T. Martin, P.E.
Senior Project Engineer

2557-003-101
haf/PM04116.L3

RECYCLED PAPER

ATTACHMENT C

VANDEMARK CHEMICAL COMPANY, INC.

QUARTERLY LANDFILL MONITORING

SEPTEMBER, 1996

Prepared By:

ADVANCED ENVIRONMENTAL SERVICES INC.

"A Company Dedicated to Honesty, Quality and Service"

October 9, 1996
REF: FAN4632H/C

QA/QC VERIFICATION FOR PROJECT ID 632H

The following report, as well as the supporting data, have been carefully reviewed for accuracy, adherance to the cited methods, and completeness. All data contained in this report was generated in accordance with the AES Laboratory Quality Assurance/Quality Control Program.

Metals Department

Inorganic Chemistry

Organic Chemistry

Field Services

Quality Control

Project Manager

All 'Total' results on soil matrices are calculated on a dry weight basis, unless otherwise noted.
Analyses noted as 'Performed in the laboratory' require immediate testing and should be performed in the field.

The following are standard abbreviations:

BQL - Below Quantifiable Limits
ND - None Detected
NG - No Growth of Colonies
NR - Not Requested
D - Indicates a dilution was required

VanDeMark Landfill

WELL PURGING DATA:

Well ID #: D-55

Date: 9-17-96 Start Time: 11:00 Am Finish Time: 11:15 Am

A = M.P. Elevation: 469.36 feet

B = Depth to Water: 36.26 + 2 1/4" (for cap) = _____ feet

C = Water Elevation: A - B = 433.10 feet

D = Depth of Well Installed: 422.40 feet

E = Static Water Level: C - D = 10.7 feet

F = Well Volume: E * 0.1636 = 1.74 gallons

Purge Volume Required: F * 3 = 5.23 gallons

Purge Volume Obtained: 2.5 gallons

Depth of Well as Measured: _____ feet

WELL SAMPLING DATA:

Time: 1:40 Pm Recharge Time: 2.5 hours

A = Top of Well Casing: 469.36 feet

B = Depth to Water: 36.79 + 2 1/4" (for cap) = _____ feet

C = Water Elevation Level: A - B = 432.57 feet

D = Depth of Well Installed: 422.40 feet

E = Static Water Level: C - D = 10.17 feet

F = Well Volume: E * 0.1636 = 1.66 gallons

pH of Sample: 7.94 Was pH meter calibrated? Yes

Samples Obtained:
1 - 500 ml plastic bottle for Total Metals (HNO3 added)
1 - 250 ml glass jar for Total Phenols (H2SO4 added)
1 - 100 ml plastic bottle for Total Chlorides
2 - 40 ml glass vials for Volatile Organics

Sampler: _____ Weather Conditions: Cloudy, Rain

Comments: _____

McINTOSH & McINTOSH, P.C.
CONSULTING ENGINEERS, LAND SURVEYORS, PLANNERS
NEW YORK • MAINE • PENNSYLVANIA • VERMONT • CONNECTICUT
NEW HAMPSHIRE • KENTUCKY • OHIO • SOUTH CAROLINA • ARIZONA
NORTH CAROLINA • WEST VIRGINIA • RHODE ISLAND
MASSACHUSETTS • NEW JERSEY
Principal Office. 429 Pine Street, P.O Box 490 Lockport, New York 14095
716 - 433-2535 BUFFALO, N Y
716 - 434-9138 625-8360
FAX # 716-433-2627

December 9, 1992

Van De Mark Chemical Co., Inc.
One North Transit Road
Lockport, NY 14094

Attention: Mr. Joe Venturo

Re: Measured Elevations on Landfill
Wells VDM 9, 10 and 11

Well No.	Top of PVC Pipe	(Published)	Ground Elev.	(Published)
9	447.37	(447.22)	445.0	(444.3)
10	444.89	(444.67)	443.1	(442.6)
11	450.74	(450.42)	448.55	(447.4)
Check Wells:				
12	451.52	(447.52)	450.4	(444.7)
D-55	469.45	(469.36)	467.45	(467.4)

NOTE:

Elevations based on BM1 - top conc. wall s.w. corner ruins elev. 454.02 as shown on map of Van De Mark Chemical Co., Inc., Dwg. No. VDM 1966 by William W. Whitmore, P.E. P.C., datum unknown.

Measured By: L. Zimpfer

VanDeMark Landfill

WELL PURGING DATA:

Well ID #: VDM-9

Date: 9-17-96 Start Time: 10:20 Am Finish Time: 10:30 Am

A = M.P. Elevation: ~~451.14~~ 447.37 feet

B = Depth to Water: 25.21 + 1 3/4" (for cap) = _____ feet

C = Water Elevation: A - B = 422.16 feet

D = Depth of Well Installed: 416.40 feet

E = Static Water Level: C - D = 5.76 feet

F = Well Volume: E * 0.1636 = .94 gallons

Purge Volume Required: F * 3 = 2.82 gallons

Purge Volume Obtained: 1.0 gallons

Depth of Well as Measured:. _____ feet

WELL SAMPLING DATA:

Time: 2:30 Pm Recharge Time: 4 hours

A = Top of Well Casing: ~~451.14~~ 447.37 feet

B = Depth to Water: 26.12 + 1 3/4" (for cap) = _____ feet

C = Water Elevation Level: A - B = 421.25 feet

D = Depth of Well Installed: 416.40 feet

E = Static Water Level: C - D = 4.85 feet

F = Well Volume: E * 0.1636 = .79 gallons

pH of Sample: 4.37 Was pH meter calibrated? Yes

Samples Obtained:
1 - 500 ml plastic bottle for Total Metals (HNO3 added)
1 - 250 ml glass jar for Total Phenols (H2SO4 added)
1 - 100 ml plastic bottle for Total Chlorides
2 - 40 ml glass vials for Volatile Organics

Sampler: [signature] Weather Conditions: Cloudy, Rain

Comments: _____

VanDeMark Landfill

WELL PURGING DATA:

Well ID #: VDM-10

Date: 9-17-96 Start Time: 10:05 Am Finish Time: 10:15 Am

A = M.P. Elevation: 444.89 ~~448.67~~ feet

B = Depth to Water: 33.03 + 2 1/4" (for cap) = _____ feet

C = Water Elevation: A - B = 411.86 feet

D = Depth of Well Installed: 398.70 feet

E = Static Water Level: C - D = 13.16 feet

F = Well Volume: E * 0.1636 = 2.15 gallons

Purge Volume Required: F * 3 = 6.45 gallons

Purge Volume Obtained: 3.0 gallons

Depth of Well as Measured: _____ feet

WELL SAMPLING DATA:

Time: 2:50 Pm Recharge Time: 4.5 hours

A = Top of Well Casing: 444.89 ~~448.67~~ feet

B = Depth to Water: 42.91 + 2 1/4" (for cap) = _____ feet

C = Water Elevation Level: A - B = 401.98 feet

D = Depth of Well Installed: 398.70 feet

E = Static Water Level: C - D = 3.28 feet

F = Well Volume: E * 0.1636 = .53 gallons

pH of Sample: 5.77 Was pH meter calibrated? Yes

Samples Obtained:
1 - 500 ml plastic bottle for Total Metals (HNO3 added)
1 - 250 ml glass jar for Total Phenols (H2SO4 added)
1 - 100 ml plastic bottle for Total Chlorides
2 - 40 ml glass vials for Volatile Organics

Sampler: [signature] Weather Conditions: CLOUDY RAIN

Comments: _____

VanDeMark Landfill

WELL PURGING DATA:

Well ID #: VDM-11

Date: 9-17-96 Start Time: 9:55am Finish Time: 10:00 Am

A = M.P. Elevation: 450.74 ~~453.95~~ feet

B = Depth to Water: 19.73 + 2 1/4" (for cap) = _____ feet

C = Water Elevation: A - B = 431.01 feet

D = Depth of Well Installed: 427.70 feet

E = Static Water Level: C - D = 3.31 feet

F = Well Volume: E * 0.1636 = .54 gallons

Purge Volume Required: F * 3 = 1.62 gallons

Purge Volume Obtained: .54 gallons

Depth of Well as Measured: _____ feet

WELL SAMPLING DATA:

Time: 3:00 Pm Recharge Time: 5.0 hours

A = Top of Well Casing: 450.74 ~~452.95~~ feet

B = Depth to Water: 21.15 + 2 1/4" (for cap) = _____ feet

C = Water Elevation Level: A - B = 429.59 feet

D = Depth of Well Installed: 427.70 feet

E = Static Water Level: C - D = 1.89 feet

F = Well Volume: E * 0.1636 = .31 gallons

pH of Sample: 5.81 Was pH meter calibrated? Yes

Samples Obtained:
1 - 500 ml plastic bottle for Total Metals (HNO3 added)
1 - 250 ml glass jar for Total Phenols (H2SO4 added)
1 - 100 ml plastic bottle for Total Chlorides
2 - 40 ml glass vials for Volatile Organics

Sampler: [signature] Weather Conditions: CLOUDY, RAIN

Comments: _____

VanDeMark Landfill

WELL PURGING DATA:

Well ID #: VDM-14

Date: 9-17-96 Start Time: 10:40Am Finish Time: 10:45 Am

A = M.P. Elevation: 446.31 feet

B = Depth to Water: 10.39 + 2 1/4" (for cap) = _____ feet

C = Water Elevation: A - B = 435.92 feet

D = Depth of Well Installed: 433.93 feet

E = Static Water Level: C - D = 1.99 feet

F = Well Volume: E * 0.1636 = .32 gallons

Purge Volume Required: F * 3 = .97 gallons

Purge Volume Obtained: 1.25 gallons

Depth of Well as Measured: _____ feet

WELL SAMPLING DATA:

Time: 2:25 Pm Recharge Time: 3.5 hours

A = Top of Well Casing: 446.31 feet

B = Depth to Water: 10.51 + 2 1/4" (for cap) = _____ feet

C = Water Elevation Level: A - B = 435.80 feet

D = Depth of Well Installed: 433.93 feet

E = Static Water Level: C - D = 1.90 feet

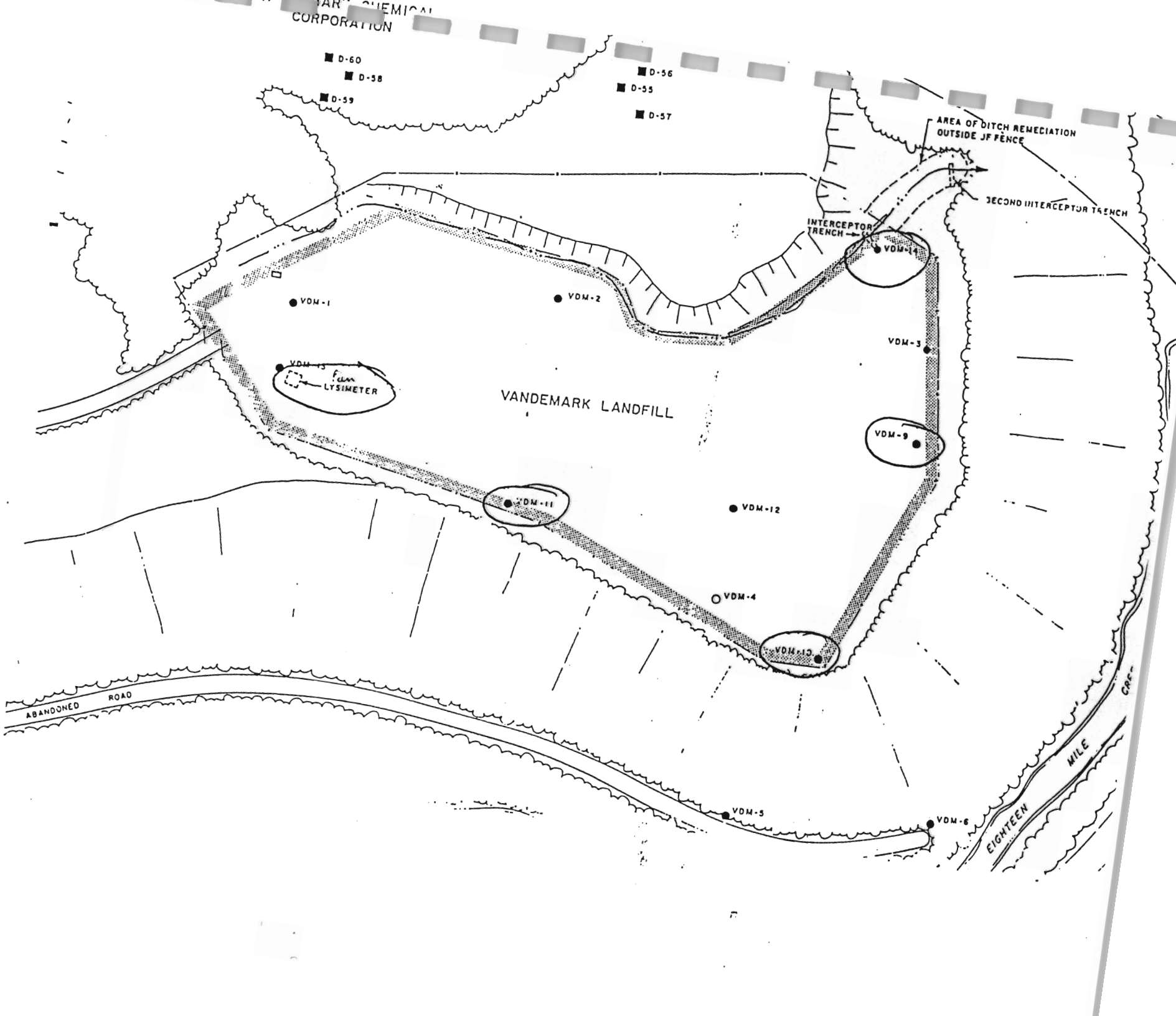
F = Well Volume: E * 0.1636 = .31 gallons

pH of Sample: 4.35 Was pH meter calibrated? Yes

Samples Obtained:
1 - 500 ml plastic bottle for Total Metals (HNO3 added)
1 - 250 ml glass jar for Total Phenols (H2SO4 added)
1 - 100 ml plastic bottle for Total Chlorides
2 - 40 ml glass vials for Volatile Organics

Sampler: [signature] Weather Conditions: Cloudy Rain

Comments: _____


CORPORATION
D-60
D-58
D-59
D-56
D-55
D-57
AREA OF DITCH REMEDIATION OUTSIDE JF FENCE
SECOND INTERCEPTOR TRENCH
INTERCEPTOR TRENCH
VDM-1
VDM-2
VDM-3
VDM-14
VDM-9
VDM-11
VDM-12
VDM-4
VDM-13
VDM-5
VDM-6
LYSIMETER
VANDEMARK LANDFILL
ABANDONED ROAD
EIGHTEEN MILE CREEK

GROUND WATER OBSERVATION WELL REPORT

PROJECT Somerset Railroad - Van De Mark

LOCATION N1,160,756 E468,241

Date Completed 10/19/81 Original Depth 46.7 (cored)

Inspected By J. C. Isham Date 10/19/81

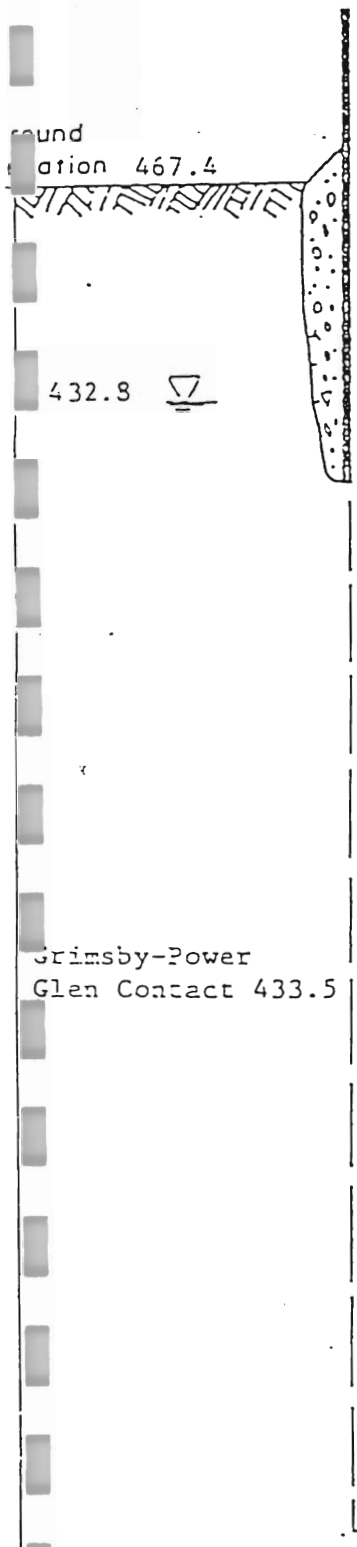
Checked By _____ Date _____

Page 7 of 23

Well No. D-55

Aquifer Grimsby-Power Glen Contact

Elev. Interval 420.7-439.4'



Elevation of top of surface casing / riser pipe.	469.36/469.36'
Heigth of top of surface casing / riser pipe above ground surface	2.0/2.0'
Depth of surface seal below ground surface	3.0'
Type of surface seal: Cement	
I.D. of surface casing.	4"
Type of surface casing: Cast iron with lock cap	
Depth of surface casing below ground	3.0'
I.D. of riser pipe.	2"
Type of riser pipe: Sch 80 PVC	
Diameter of borehole	0.5'
Depth of borehole (reamed)	45.0'
Type of backfill: Cement	
Elev./depth top of seal.	442.3/25.1'
Type of seal: Bentonite	
Elev./depth bottom of seal.	439.4/28.0'
Type of sand pack. 0-02 (fine to med. sand)	
Depth of top of sand pack.	439.4/28.0'
Elev./depth top of screened section.	432.9/34.5'
Type of screened section: Sch 80 PVC	
Describe openings 0.010" machine slot - horizontal slot	
I.D. of screened section.	2.0"
Elev./depth bottom of screened section.	423.3/44.1'
Length of blank section.	0.9'
Elev./depth bottom of plugged blank section	422.4/45.0'
Elev./depth bottom of sand column.	422.4/45.0'
Type of backfill below observation pipe. Cuttings	
Elev./depth of hole.	420.7/46.7'

STRATIGRAPHIC AND INSTRUMENTATION LOG

PROJECT NAME: VAN DE MARK LANDFILL SITE JOB NO: 1277 HOLE NO: VDM-9

CLIENT: VAN DE MARK CHEMICAL COMPANY DATE COMPLETED: DECEMBER 9, 1983

HOLE TYPE: 8" ø HOLLOW STEM AUGER LOCATION: MID-SOUTHERN LIMIT OF LANDFILL

GEOLOGIST/ENGINEER: DAVE BLACK GROUND ELEVATION: 444.7 TOP OF PIPE ELEVATION: 447.22

DEPTH (ELEVATION)	STRATIGRAPHY DESCRIPTION & REMARKS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS/FOOT	PENETRATION TEST BLOWS/FOOT
450		Protective Casing w/ Locking cap				
		447.22				
445	Rock fragments, some red silt	Grout	1	SS	40	
					43	
			2	SS	34	
					43	
440	Red silt and rock fragments		3	SS	22	
					26	
			4	SS	11	
		Bentonite Plug			37	
435	Red sandy silt, some rock fragments		5	SS	15	
					93	
			6	SS	75	
					46	
		Sand Pack	7	SS	54	
	Red clayey silt, dense with orange streaks				96	
430	Dark red layered shale, very soft		8	SS	50	
	Grey-brown siltstone, very soft, layered; fine sand interbeds, red and yellow-green mottling throughout	2" ø PVC Well			100+	
	Not sampled (427.6-assumed top of rock)	427.6	9	SS	100+	
	Grey sandstone, moderately hard				--	
	Grey-brown siltstone, very soft, layered; fine sand interbeds, red and yellowish green mottling throughout		10	SS	100+	
425					--	
	Not sampled Grey weathered shale, thin layers, some red and some yellowish green staining of horizontal planes		11	SS	100+	
	Not sampled		12	SS	100+	
	Dark green-grey sandstone, medium grained, moderately soft, thin layered, some fractures (formation not determined)	421.2				
420		5" PVC Screen				
		415.4				
415						

(37) GRAIN SIZE ANALYSIS ▼ WATER FOUND ▽ STATIC WATER LEVEL

STRATIGRAPHIC AND INSTRUMENTATION LOG

PROJECT NAME: VAN DE MARK LANDFILL SITE JOB NO: 1277 HOLE NO: VDM-10 Pg 1 of 2

CLIENT: VAN DE MARK CHEMICAL COMPANY DATE COMPLETED: DECEMBER 7, 1993

HOLE TYPE: 8" I.D. HOLLOW STEM AUGER LOCATION: SOUTHWEST CORNER LANDFILL

GEOLOGIST/ENGINEER: DAVE BLACK GROUND ELEVATION: 442.6 TOP OF PIPE ELEVATION: 444.67

DEPTH (ELEVATION)	STRATIGRAPHY DESCRIPTION & REMARKS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS/FOOT	PENETRATION TEST BLOWS/FOOT
445		Protective Casing w/ Locking cap; 444.67				
	Red clayey silt, some rock fragments, fine gravel, and root fibers	442.6	1	SS	25	
	Rock fragments				91	
440	Soft rock fragments, some red clayey silt, pebbles, trace root fibers		2	SS	100	
					77	
			3	SS	25	
					25	
	No recovery	Grout	4	SS	36	
					35	
435	Rock fragments, some red clayey silty sand		5	SS	44	
					97	
	Dense grey siltstone, layered, greenish		6	SS	25	
					100+	
	Auger refusal Light grey sandstone, medium grained	430.6				
430	Grey interbedded shale and dolomite/limestone - fissile to thin bedded - highly fractured (vertical and horizontal) - hematitic staining on fracture faces					
	Increasing dolomite beds	Bentonite Plug				
425						
	Grey dolomite/limestone, aphanitic - thin bedded, highly fractured - hematitic and MnO staining on fractures	Sand Pack				
420	Greenish grey to buff interbedded siltstone and sandstone, aphanitic to fine grained - thin to medium beds - frequent fractures along horizontal parting planes and some vertical fractures - some MnO staining - allocnthonous sandstone fragments					
415	Grey shale, moderately soft interbedded with moderately hard buff sandstone	2" PVC				
	Buff sandstone moderately hard interbedded with grey moderately soft shale (thin beds)					

(57) GRAIN SIZE ANALYSIS ▼ WATER FOUND ▽ STATIC WATER LEVEL

STRATIGRAPHIC AND INSTRUMENTATION LOG

PROJECT NAME: VAN DE MARK LANDFILL SITE JOB NO: 1277 HOLE NO: VDM-10 Pg 2 of 2

CLIENT: VAN DE MARK CHEMICAL COMPANY DATE COMPLETED: DECEMBER 7, 1983

HOLE TYPE 8" ø HOLLOW STEM AUGER LOCATION: SOUTH-EAST CORNER OF LANDFILL

GEOLOGIST/ENGINEER: MIKE BLACK GROUND ELEVATION: 412.5 TOP OF PIPE ELEVATION: 414.67

DEPTH (ELEVATION)	STRATIGRAPHY DESCRIPTION & REMARKS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE BLOWS/FOOT	PENETRATION TEST BLOWS/FOOT
410	Buff sandstone moderately hard interbedded with grey moderately soft shale (thin beds)	2" PVC; Sand Pack; 5' PVC Screen; 398.7; 397.2				
405						
	Buff sandstone moderately hard, massive					
	WHIRLPOOL-QUEENSTON interface (olive green) Red shale moderately soft - thin bedded - green shale interbed					
400						
395						

(37) GRAIN SIZE ANALYSIS ▼ WATER FOUND ▽ STATIC WATER LEVEL

STRATIGRAPHIC AND INSTRUMENTATION LOG

PROJECT NAME: VAN DE MARK LANDFILL SITE JOB NO: 1277 HOLE NO: VDM-11

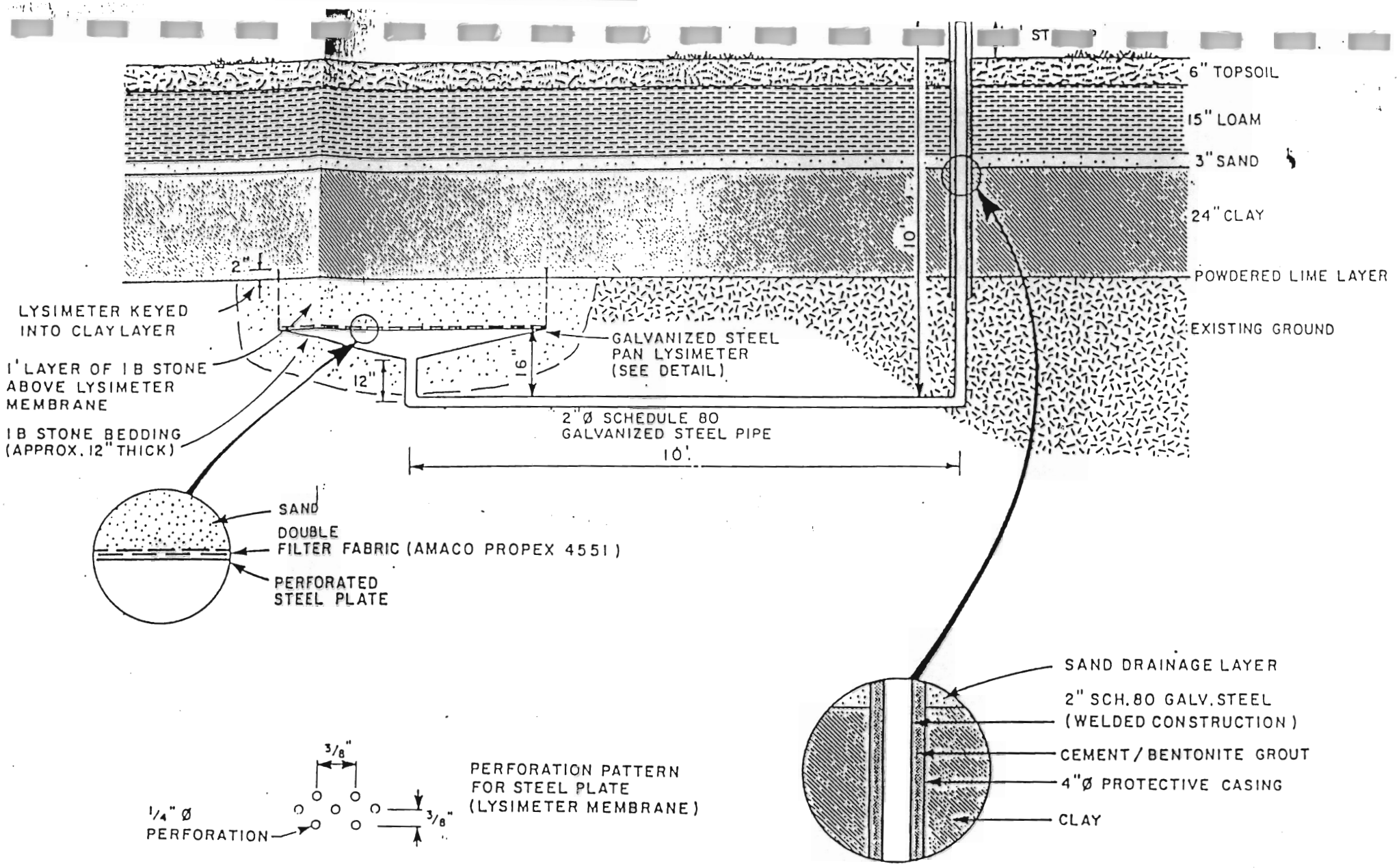
CLIENT: VAN DE MARK CHEMICAL COMPANY DATE COMPLETED: DECEMBER 9, 1983

HOLE TYPE: 8" ø HOLLOW STEM AUGER LOCATION: MID-WESTERN LIMIT OF LANDFILL

GEOLOGIST / ENGINEER: DAVE BLACK GROUND ELEVATION: 447.4 TOP OF PIPE ELEVATION: 450.42

PROFILE			MONITOR INSTALLATION	SAMPLE			PENETRATION TEST BLOWS / FOOT
DEPTH (ELEVATION)	STRATIGRAPHY DESCRIPTION & REMARKS			NUMBER	TYPE	BLOWS / FOOT	20 40 60 80
455			Protective Steel Casing w/ Locking Cap				
450			450.42				
	Red silt, rock fragments Trace unknown green material		447.4	1	SS	44	
						33	
445	Red silt, rock fragments, dark oily appearance to soils, some fine sand and cinders throughout		Grout	2	SS	17	
						49	
				3	SS	32	
						30	
				4	SS	16	
440			Bentonite Plug				
	Greenish rock fragments (sandstone)					53	
	Red silt and greenish sandstone fragments having some red staining		2" ø PVC	5	SS	69	
						25	
	Same - less sandstone fragments		Sand Pack	6	SS	74	
						100+	
435	Red-brown clayey silt with grey and yellow-green mottling, some rock fragments			7	SS	48	
	Auger refusal		433.4			100+	
	Dark red-brown sandstone, fine grained, well cemented, highly fractured						
	Green-grey shale, fine grained - sandstone interbeds - many horizontal fractures - some vertical fractures		5' PVC Screen				
430			427.7 427.5				
425							

(37) GRAIN SIZE ANALYSIS ▼ WATER FOUND ▽ STATIC WATER LEVEL



TYPICAL DETAIL - LYSIMETER SYSTEM

N.T.S.

Advanced Environmental Services, Inc.
2186 Liberty Drive
Niagara Falls, New York 14304
(716) 283-3120

QUARTERLY GROUNDWATER MONITORING - WELL INFORMATION
September 17, 1996

VAN DeMARK CHEMICAL COMPANY, INC.

One North Transit Road
Lockport, New York

AES Code: FAN **Project I.D. #632H**

Monitoring Well Identification	Evacuation Date	Top of Inner Casing Elevation (ft.)	Monitoring Well Diameter	Water Level (ft.)	Water Elevation (ft.)	Bottom of Well (ft.)	Volume of Standing Water (gallons)	Volume of Evacuated Water (gallons)	Appearance of Water Purged
D-55	9/17/96	469.45	2	36.26	433.19	46.96	1.75	2.5 (DRY)	Clear
VDM-9	9/17/96	447.37	2	25.21	422.16	30.97	0.94	1.0 (DRY)	Clear
VDM-10	9/17/96	444.89	2	33.03	411.86	46.19	2.15	3.0 (DRY)	Clear with odor
VDM-11	9/17/96	450.74	2	19.73	431.01	23.04	0.54	0.54 (DRY)	Clear
VDM-14	9/17/96	446.31	2	10.39	435.92	12.38	0.32	1.3	Orange to clear

Field Technician 10-2-96 Date

Advanced Environmental Services, Inc.
2186 Liberty Drive
Niagara Falls, New York 14304
(716) 283-3120

QUARTERLY GROUNDWATER MONITORING - FIELD PARAMETER INFORMATION
September 17, 1996

VAN DeMARK CHEMICAL COMPANY, INC.

One North Transit Road
Lockport, New York

AES Code: FAN **Project I.D. #632H**

Monitoring Well I.D.	Sampling Date	Sampling Time	Water Level (ft.)	Well Volume (gallons)	pH (Standard Units)	Field Comments/Observations
D-55	9/17/96	1:40 PM	36.79	1.66	7.94	Clear, no odor.
VDM-9	9/17/96	2:30 PM	26.12	0.79	4.37	Clear, no odor.
VDM-10	9/17/96	2:50 PM	42.91	0.53	5.77	Clear with an odor
VDM-11	9/17/96	3:00 PM	21.15	0.31	5.81	Clear, no odor.
VDM-14	9/17/96	2:25 PM	10.51	0.30	4.35	Clear, no odor.
Blind Dup	9/17/96	2:25 PM	N/A	N/A	3.85	Clear, no odor.
18 mile creek	9/17/96	2:10 PM	N/A	N/A	7.91	Slightly Tan
Trip Blank	9/17/96	8:30 AM	N/A	N/A	9.80	Deionized water from AES, Inc.

The Blind Duplicate site is VDM-14.

10-2-96

Field Technician Date

CLIENT: VanDeMark Chemical Company, Inc.
SAMPLE ID: VDM-9
COLLECTION METHOD: Grab
COLLECTION DATE(S): 09/17/96
SAMPLE TYPE: Groundwater

AES CLIENT ID: VANDEMAR
AES SAMPLE ID: 632H-1

PROJECT ID: 632H

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Chloroform	120 D	µg/L	10	SW 846 8240
1,2-Dichloroethane	25	µg/L	10	SW 846 8240
trans-1,2-Dichloroethene	250 D	µg/L	10	SW 846 8240
Methylene chloride	46	µg/L	10	SW 846 8240
1,1,2,2-Tetrachloroethane	140 D	µg/L	10	SW 846 8240
Tetrachloroethene	130 D	µg/L	10	SW 846 8240
Trichloroethene	45	µg/L	10	SW 846 8240
Vinyl chloride	ND	µg/L	10	SW 846 8240
Toluene	ND	µg/L	10	SW 846 8240
Total Chromium	10	ug/L	5	SW 846 7191
Total Copper	1400	ug/L	10	SW 846 6010
Total Iron	710000 D	ug/L	50	SW 846 6010
Total Zinc	590	ug/L	20	SW 846 6010
Chloride	14000000	µg/L	2000	EPA 325.3
pH *	4.37	Std.	0.01	EPA 150.1

* Analysis performed in the field.

CLIENT: VanDeMark Chemical Company, Inc.
SAMPLE ID: VDM-10
COLLECTION METHOD: Grab
COLLECTION DATE(S): 09/17/96
SAMPLE TYPE: Groundwater

AES CLIENT ID: VANDEMAR
AES SAMPLE ID: 632H-2

PROJECT ID: 632H

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Chloroform	40	µg/L	10	SW 846 8240
1,2-Dichloroethane	ND	µg/L	10	SW 846 8240
trans-1,2-Dichloroethene	ND	µg/L	10	SW 846 8240
Methylene chloride	ND	µg/L	10	SW 846 8240
1,1,2,2-Tetrachloroethane	ND	µg/L	10	SW 846 8240
Tetrachloroethene	ND	µg/L	10	SW 846 8240
Trichloroethene	ND	µg/L	10	SW 846 8240
Vinyl chloride	ND	µg/L	10	SW 846 8240
Toluene	ND	µg/L	10	SW 846 8240
Total Chromium	18	ug/L	5	SW 846 7191
Total Copper	2300	ug/L	10	SW 846 6010
Total Iron	4400	ug/L	50	SW 846 6010
Total Zinc	2200	ug/L	20	SW 846 6010
Chloride	9500000	µg/L	2000	EPA 325.3
pH *	5.77	Std.	0.01	EPA 150.1

* Analysis performed in the field.

CLIENT: VanDeMark Chemical Company, Inc.
SAMPLE ID: VDM-11
COLLECTION METHOD: Grab
COLLECTION DATE(S): 09/17/96
SAMPLE TYPE: Groundwater

AES CLIENT ID: VANDEMAR
AES SAMPLE ID: 632H-3

PROJECT ID: 632H

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Chloroform	11	µg/L	10	SW 846 8240
1,2-Dichloroethane	ND	µg/L	10	SW 846 8240
trans-1,2-Dichloroethene	ND	µg/L	10	SW 846 8240
Methylene chloride	ND	µg/L	10	SW 846 8240
1,1,2,2-Tetrachloroethane	ND	µg/L	10	SW 846 8240
Tetrachloroethene	ND	µg/L	10	SW 846 8240
Trichloroethene	ND	µg/L	10	SW 846 8240
Vinyl chloride	ND	µg/L	10	SW 846 8240
Toluene	ND	µg/L	10	SW 846 8240
Total Chromium	ND	ug/L	5	SW 846 7191
Total Copper	30	ug/L	10	SW 846 6010
Total Iron	270	ug/L	50	SW 846 6010
Total Zinc	80	ug/L	20	SW 846 6010
Chloride	1250000	µg/L	2000	EPA 325.3
pH *	5.81	Std.	0.01	EPA 150.1

* Analysis performed in the field.

CLIENT: VanDeMark Chemical Company, Inc.
SAMPLE ID: VDM-14
COLLECTION METHOD: Grab
COLLECTION DATE(S): 09/17/96
SAMPLE TYPE: Groundwater

AES CLIENT ID: VANDEMAR
AES SAMPLE ID: 632H-4

PROJECT ID: 632H

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Chloroform	150 D	µg/L	10	SW 846 8240
1,2-Dichloroethane	ND	µg/L	10	SW 846 8240
trans-1,2-Dichloroethene	350 D	µg/L	10	SW 846 8240
Methylene chloride	21	µg/L	10	SW 846 8240
1,1,2,2-Tetrachloroethane	81 D	µg/L	10	SW 846 8240
Tetrachloroethene	170 D	µg/L	10	SW 846 8240
Trichloroethene	58	µg/L	10	SW 846 8240
Vinyl chloride	ND	µg/L	10	SW 846 8240
Toluene	ND	µg/L	10	SW 846 8240
Total Chromium	170 D	ug/L	5	SW 846 7191
Total Copper	ND	ug/L	10	SW 846 6010
Total Iron	880000 D	ug/L	50	SW 846 6010
Total Zinc	1600	ug/L	20	SW 846 6010
Chloride	7450000	µg/L	2000	EPA 325.3
pH *	4.35	Std.	0.01	EPA 150.1

* Analysis performed in the field.

CLIENT: VanDeMark Chemical Company, Inc.
SAMPLE ID: D-55
COLLECTION METHOD: Grab
COLLECTION DATE(S): 09/17/96
SAMPLE TYPE: Groundwater

AES CLIENT ID: VANDEMAR
AES SAMPLE ID: 632H-5

PROJECT ID: 632H

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Chloroform	ND	µg/L	10	SW 846 8240
1,2-Dichloroethane	ND	µg/L	10	SW 846 8240
trans-1,2-Dichloroethene	ND	µg/L	10	SW 846 8240
Methylene chloride	ND	µg/L	10	SW 846 8240
1,1,2,2-Tetrachloroethane	ND	µg/L	10	SW 846 8240
Tetrachloroethene	ND	µg/L	10	SW 846 8240
Trichloroethene	ND	µg/L	10	SW 846 8240
Vinyl chloride	ND	µg/L	10	SW 846 8240
Toluene	ND	µg/L	10	SW 846 8240
Total Chromium	ND	ug/L	5	SW 846 7191
Total Copper	ND	ug/L	10	SW 846 6010
Total Iron	1100	ug/L	50	SW 846 6010
Total Zinc	ND	ug/L	20	SW 846 6010
Chloride	17000	µg/L	2000	EPA 325.3
pH *	7.94	Std.	0.01	EPA 150.1

* Analysis performed in the field.

CLIENT: VanDeMark Chemical Company, Inc.
SAMPLE ID: 18 Mile Creek
COLLECTION METHOD: Grab
COLLECTION DATE(S): 09/17/96
SAMPLE TYPE: Groundwater

AES CLIENT ID: VANDEMAR
AES SAMPLE ID: 632H-6

PROJECT ID: 632H

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Chloroform	ND	µg/L	10	SW 846 8240
1,2-Dichloroethane	ND	µg/L	10	SW 846 8240
trans-1,2-Dichloroethene	ND	µg/L	10	SW 846 8240
Methylene chloride	ND	µg/L	10	SW 846 8240
1,1,2,2-Tetrachloroethane	ND	µg/L	10	SW 846 8240
Tetrachloroethene	ND	µg/L	10	SW 846 8240
Trichloroethene	ND	µg/L	10	SW 846 8240
Vinyl chloride	ND	µg/L	10	SW 846 8240
Toluene	ND	µg/L	10	SW 846 8240
Total Chromium	ND	ug/L	5	SW 846 7191
Total Copper	ND	ug/L	10	SW 846 6010
Total Iron	4400	ug/L	50	SW 846 6010
Total Zinc	20	ug/L	20	SW 846 6010
Chloride	68000	µg/L	2000	EPA 325.3
pH *	7.91	Std.	0.01	EPA 150.1

* Analysis performed in the field.

CLIENT: VanDeMark Chemical Company, Inc.
SAMPLE ID: Blind Duplicate
COLLECTION METHOD:
COLLECTION DATE(S): 09/17/96
SAMPLE TYPE: DI Water

AES CLIENT ID: VANDEMAR
AES SAMPLE ID: 632H-7

PROJECT ID: 632H

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Chloroform	160 D	µg/L	50	SW 846 8240
1,2-Dichloroethane	ND	µg/L	50	SW 846 8240
trans-1,2-Dichloroethene	310 D	µg/L	50	SW 846 8240
Methylene chloride	ND	µg/L	50	SW 846 8240
1,1,2,2-Tetrachloroethane	84 D	µg/L	50	SW 846 8240
Tetrachloroethene	210 D	µg/L	50	SW 846 8240
Trichloroethene	60 D	µg/L	50	SW 846 8240
Vinyl chloride	ND	µg/L	50	SW 846 8240
Toluene	ND	µg/L	50	SW 846 8240
Total Chromium	150 D	ug/L	5	SW 846 7191
Total Copper	ND	ug/L	10	SW 846 6010
Total Iron	880000 D	ug/L	50	SW 846 6010
Total Zinc	1600	ug/L	20	SW 846 6010
Chloride	8250000	µg/L	2000	EPA 325.3
pH *	3.85	Std.	0.01	EPA 150.1

* Analysis performed in the field.

CLIENT: VanDeMark Chemical Company, Inc.
SAMPLE ID: Trip Blank
COLLECTION METHOD: Grab
COLLECTION DATE(S): 09/17/96
SAMPLE TYPE: Groundwater

AES CLIENT ID: VANDEMAR
AES SAMPLE ID: 632H-8

PROJECT ID: 632H

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Chloroform	ND	µg/L	10	SW 846 8240
1,2-Dichloroethane	ND	µg/L	10	SW 846 8240
trans-1,2-Dichloroethene	ND	µg/L	10	SW 846 8240
Methylene chloride	ND	µg/L	10	SW 846 8240
1,1,2,2-Tetrachloroethane	ND	µg/L	10	SW 846 8240
Tetrachloroethene	ND	µg/L	10	SW 846 8240
Trichloroethene	ND	µg/L	10	SW 846 8240
Vinyl chloride	ND	µg/L	10	SW 846 8240
Toluene	ND	µg/L	10	SW 846 8240

CLIENT: VanDeMark Chemical Company, Inc. AES CLIENT ID: VANDEMAR
SAMPLE ID: METHOD BLANK
COLLECTION METHOD:
COLLECTION DATE(S):
SAMPLE TYPE: PROJECT ID: 632H

Analytical Parameters	Analytical Results	Units	Practical Quantifiable Limit	Method
Chloroform	ND	µg/L	10	SW 846 8240
1,2-Dichloroethane	ND	µg/L	10	SW 846 8240
trans-1,2-Dichloroethene	ND	µg/L	10	SW 846 8240
Methylene chloride	ND	µg/L	10	SW 846 8240
1,1,2,2-Tetrachloroethane	ND	µg/L	10	SW 846 8240
Tetrachloroethene	ND	µg/L	10	SW 846 8240
Trichloroethene	ND	µg/L	10	SW 846 8240
Vinyl chloride	ND	µg/L	10	SW 846 8240
Toluene	ND	µg/L	10	SW 846 8240
Total Chromium	ND	ug/L	5	SW 846 7191
Total Copper	ND	ug/L	10	SW 846 6010
Total Iron	ND	ug/L	50	SW 846 6010
Total Zinc	ND	ug/L	20	SW 846 6010
Chloride	ND	µg/L	2000	EPA 325.3

CLIENT: VanDeMark Chemical Company, Inc.

AES CLIENT ID: VANDEMAR
PROJECT ID: 632H

ACCURACY

Analytical Parameter(s)	Method	Sample ID	Type	Percent Recovery
Chloroform	SW 846 8240	632H-7	Matrix Spike	120
Chloroform	SW 846 8240	632H-7	Matrix Spike Duplicate	114
Chloroform	SW 846 8240	---	Independent Standard	112
1,2-Dichloroethane	SW 846 8240	632H-7	Matrix Spike	114
1,2-Dichloroethane	SW 846 8240	632H-7	Matrix Spike Duplicate	114
1,2-Dichloroethane	SW 846 8240	---	Independent Standard	114
trans-1,2-Dichloroethene	SW 846 8240	632H-7	Matrix Spike	88
trans-1,2-Dichloroethene	SW 846 8240	632H-7	Matrix Spike Duplicate	100
trans-1,2-Dichloroethene	SW 846 8240	---	Independent Standard	98
Methylene chloride	SW 846 8240	632H-7	Matrix Spike	118
Methylene chloride	SW 846 8240	632H-7	Matrix Spike Duplicate	124
Methylene chloride	SW 846 8240	---	Independent Standard	118
1,1,2,2-Tetrachloroethane	SW 846 8240	632H-7	Matrix Spike	126
1,1,2,2-Tetrachloroethane	SW 846 8240	632H-7	Matrix Spike Duplicate	174
1,1,2,2-Tetrachloroethane	SW 846 8240	---	Independent Standard	116
Tetrachloroethene	SW 846 8240	632H-7	Matrix Spike	94
Tetrachloroethene	SW 846 8240	632H-7	Matrix Spike Duplicate	134
Tetrachloroethene	SW 846 8240	---	Independent Standard	114
Trichloroethene	SW 846 8240	632H-7	Matrix Spike	112
Trichloroethene	SW 846 8240	632H-7	Matrix Spike Duplicate	122
Trichloroethene	SW 846 8240	---	Independent Standard	106
Vinyl chloride	SW 846 8240	632H-7	Matrix Spike	136
Vinyl chloride	SW 846 8240	632H-7	Matrix Spike Duplicate	126
Vinyl chloride	SW 846 8240	---	Independent Standard	148
Toluene	SW 846 8240	632H-7	Matrix Spike	114
Toluene	SW 846 8240	632H-7	Matrix Spike Duplicate	112
Toluene	SW 846 8240	---	Independent Standard	104
Total Chromium	SW 846 7191	632H-7	Matrix Spike	80
Total Chromium	SW 846 7191	---	Independent Standard	100

ADVANCED ENVIRONMENTAL SERVICES, INC.
QUALITY CONTROL REPORT

CLIENT: VanDeMark Chemical Company, Inc.

AES CLIENT ID: VANDEMAR
PROJECT ID: 632H

ACCURACY

Analytical Parameter(s)	Method	Sample ID	Type	Percent Recovery
Total Copper	SW 846 6010	632H-7	Matrix Spike	83
Total Copper	SW 846 6010	---	Independent Standard	98
Total Iron	SW 846 6010	632H-7	Matrix Spike	92
Total Iron	SW 846 6010	---	Independent Standard	99
Total Zinc	SW 846 6010	632H-7	Matrix Spike	90
Total Zinc	SW 846 6010	---	Independent Standard	103
Chloride	EPA 325.3	632H-7	Matrix Spike	100
Chloride	EPA 325.3	---	Independent Standard	114

CLIENT: VanDeMark Chemical Company, Inc.

AES CLIENT ID: VANDEMAR
PROJECT ID: 632H

PRECISION

Analytical Parameter(s)	Method	Sample ID	Type	Relative % Difference
Total Chromium	SW 846 7191	632H-7	Duplicate	12
Total Copper	SW 846 6010	632H-7	Duplicate	13
Total Iron	SW 846 6010	632H-7	Duplicate	0
Total Zinc	SW 846 6010	632H-7	Duplicate	20
Chloride	EPA 325.3	632H-7	Duplicate	0

NA = NOT AVAILABLE - ORIGINAL AND/OR DUPLICATE RESULTS ARE BELOW REPORTED LIMITS

CLIENT: VanDeMark Chemical Company, Inc.

AES CLIENT ID: VANDEMAR
PROJECT ID: 632H

ACCURACY - SURROGATE RECOVERIES

Analytical Parameter(s)	Method	Sample ID	Acceptable Range	Percent Recovery
1,2-Dichloroethane-d4	SW 846 8240	632H-1	76-114	108
1,2-Dichloroethane-d4	SW 846 8240	632H-2	76-114	106
1,2-Dichloroethane-d4	SW 846 8240	632H-3	76-114	109
1,2-Dichloroethane-d4	SW 846 8240	632H-4	76-114	105
1,2-Dichloroethane-d4	SW 846 8240	632H-5	76-114	110
1,2-Dichloroethane-d4	SW 846 8240	632H-6	76-114	107
1,2-Dichloroethane-d4	SW 846 8240	632H-7	76-114	110
1,2-Dichloroethane-d4	SW 846 8240	632H-8	76-114	108
1,2-Dichloroethane-d4	SW 846 8240	BLANK	76-114	104
Toluene-d8	SW 846 8240	632H-1	88-110	109
Toluene-d8	SW 846 8240	632H-2	88-110	107
Toluene-d8	SW 846 8240	632H-3	88-110	108
Toluene-d8	SW 846 8240	632H-4	88-110	110
Toluene-d8	SW 846 8240	632H-5	88-110	109
Toluene-d8	SW 846 8240	632H-6	88-110	109
Toluene-d8	SW 846 8240	632H-7	88-110	108
Toluene-d8	SW 846 8240	632H-8	88-110	110
Toluene-d8	SW 846 8240	BLANK	88-110	109
4-Bromofluorobenzene	SW 846 8240	632H-1	86-115	108
4-Bromofluorobenzene	SW 846 8240	632H-2	86-115	104
4-Bromofluorobenzene	SW 846 8240	632H-3	86-115	96
4-Bromofluorobenzene	SW 846 8240	632H-4	86-115	106
4-Bromofluorobenzene	SW 846 8240	632H-5	86-115	105
4-Bromofluorobenzene	SW 846 8240	632H-6	86-115	107
4-Bromofluorobenzene	SW 846 8240	632H-7	86-115	100
4-Bromofluorobenzene	SW 846 8240	632H-8	86-115	104
4-Bromofluorobenzene	SW 846 8240	BLANK	86-115	102

Advanced Environmental Services, Inc.
Sample Traceability Report

Project Identification FAN 4 632H

Sample #	Sample Collection	Group #	Run #	Prep Method	Prep Date	Analyst	Analytical Methodology	Analysis Date	Analyst
632H-1-7	9/17/96	2611	30	-	-	-	325.3	9/30/96	[illegible]

Please note: Areas marked by a dash indicate that no sample preparation isrequired under the applied methodology.

Advanced Environmental Services, Inc.
Sample Traceability Report

Project Identification FAN 632H

Sample #	Sample Collection	Group #	Run #	Prep Method	Prep Date	Analyst	Analytical Methodology	Analysis Date	Analyst
632H-1	9-17-96	4000	44	—	—	—	8240	9-26-96	MM
-2				—	—	—			
-3				—	—	—			
-4				—	—	—		9-30-96	
-5				—	—	—		9-26-96	
-6				—	—	—			
-7				—	—	—			
-8				—	—	—			

Please note: Areas marked by a dash indicate that no sample preparation isrequired under the applied methodology.

Advanced Environmental Services, Inc.
Sample Traceability Report

Project Identification FAN 632H

Sample #	Sample Collection	Group #	Run #	Prep Method	Prep Date	Analyst	Analytical Methodology	Analysis Date	Analyst
632H-1-7	9/17/96	–	–	3020	9/26/96	JK	7191	10/8/96	AVR
1	1	–	–	3010	9/25/96	JK	6010	10/7/96	AVR

Please note: Areas marked by a dash indicate that no sample preparation isrequired under the applied methodology.

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary
Inorganic Analysis

Laboratory Sample Code	Matrix	Metals Requested	Date Received	Date Digested	Date Analyzed
6321H-1	Groundwater	Arsenic			
	Groundwater	Chromium	9/17/96	9/26/96	10/8/96
	Groundwater	Copper	9/17/96	9/25/96	10/7/96
	Groundwater	Iron	9/17/96	9/25/96	10/7/96
	Groundwater	Lead			
	Groundwater	Mercury			
	Groundwater	Zinc	9/17/96	9/25/96	10/7/96
	Groundwater	Chloride	9/17/96		9/30/96
6321H-2	Groundwater	Arsenic			
	Groundwater	Chromium	9/17/96	9/26/96	10/8/96
	Groundwater	Copper	9/17/96	9/25/96	10/7/96
	Groundwater	Iron	9/17/96	9/25/96	10/7/96
	Groundwater	Lead			
	Groundwater	Mercury			
	Groundwater	Zinc	9/17/96	9/25/96	10/7/96
	Groundwater	Chloride	9/17/96	—	9/30/96
6321H-3	Groundwater	Arsenic			
	Groundwater	Chromium	9/17/96	9/26/96	10/8/96
	Groundwater	Copper	9/17/96	9/25/96	10/7/96
	Groundwater	Iron	9/17/96	9/25/96	10/7/96
	Groundwater	Lead			
	Groundwater	Mercury			
	Groundwater	Zinc	9/17/96	9/25/96	10/7/96
	Groundwater	Chloride	9/17/96	—	9/30/96

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary
Inorganic Analysis

Laboratory Sample Code	Matrix	Metals Requested	Date Received	Date Digested	Date Analyzed
6-32 H-4	Groundwater	Arsenic			
	Groundwater	Chromium	9/17/96	9/26/96	10/8/96
	Groundwater	Copper	9/17/96	9/25/96	10/7/96
	Groundwater	Iron	9/17/96	9/25/96	10/7/96
	Groundwater	Lead			
	Groundwater	Mercury			
	Groundwater	Zinc	9/17/96	9/25/96	10/7/96
	Groundwater	Chloride	9/17/96	—	9/30/96
6-32 H-5	Groundwater	Arsenic			
	Groundwater	Chromium	9/17/96	9/26/96	10/8/96
	Groundwater	Copper	9/17/96	9/25/96	10/7/96
	Groundwater	Iron	9/17/96	9/25/96	10/7/96
	Groundwater	Lead			
	Groundwater	Mercury			
	Groundwater	Zinc	9/17/96	9/25/96	10/7/96
	Groundwater	Chloride	9/17/96	—	9/30/96
6-32 H-6	Groundwater	Arsenic			
	Groundwater	Chromium	9/17/96	9/26/96	10/8/96
	Groundwater	Copper	9/17/96	9/25/96	10/7/96
	Groundwater	Iron	9/17/96	9/25/96	10/7/96
	Groundwater	Lead			
	Groundwater	Mercury			
	Groundwater	Zinc	9/17/96	9/25/96	10/7/96
	Groundwater	Chloride	9/17/96	—	9/30/96

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary
Inorganic Analysis

Laboratory Sample Code	Matrix	Metals Requested	Date Received	Date Digested	Date Analyzed
6321-1	Groundwater	Arsenic			
	Groundwater	Chromium	9/17/96	9/26/96	10/8/96
	Groundwater	Copper	9/17/96	9/25/96	10/7/96
	Groundwater	Iron	9/17/96	9/25/96	10/7/96
	Groundwater	Lead			
	Groundwater	Mercury			
	Groundwater	Zinc	9/17/96	9/25/96	10/7/96
	Groundwater	Chloride	9/17/96	–	9/30/96
	Groundwater	Arsenic			
	Groundwater	Chromium			
	Groundwater	Copper			
	Groundwater	Iron			
	Groundwater	Lead			
	Groundwater	Mercury			
	Groundwater	Zinc			
	Groundwater	Chloride			
	Groundwater	Arsenic			
	Groundwater	Chromium			
	Groundwater	Copper			
	Groundwater	Iron			
	Groundwater	Lead			
	Groundwater	Mercury			
	Groundwater	Zinc			
	Groundwater	Chloride			

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary
Inorganic Analysis

Laboratory Sample Code	Matrix	Analytical Protocol	Digestion Procedure	Matrix Modifier	Dilution Factor
632H-1	Groundwater	7060	7060	Ni(NO3)2	
	Groundwater	7191	3020	Mg(NO3)2	—
	Groundwater	6010	3010	--------	—
	Groundwater	6010	3010	--------	10
	Groundwater	7421	3020	La(NO3)3	
	Groundwater	7470	7470	--------	
	Groundwater	6010	3010	--------	—
	Groundwater	9252	--------	--------	500
632H-2	Groundwater	7060	7060	Ni(NO3)2	
	Groundwater	7191	3020	Mg(NO3)2	—
	Groundwater	6010	3010	--------	—
	Groundwater	6010	3010	--------	—
	Groundwater	7421	3020	La(NO3)3	
	Groundwater	7470	7470	--------	
	Groundwater	6010	3010	--------	—
	Groundwater	9252	--------	--------	200
632H-3	Groundwater	7060	7060	Ni(NO3)2	
	Groundwater	7191	3020	Mg(NO3)2	—
	Groundwater	6010	3010	--------	—
	Groundwater	6010	3010	--------	—
	Groundwater	7421	3020	La(NO3)3	
	Groundwater	7470	7470	--------	
	Groundwater	6010	3010	--------	—
	Groundwater	9252	--------	--------	50

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary
Inorganic Analysis

Laboratory Sample Code	Matrix	Analytical Protocol	Digestion Procedure	Matrix Modifier	Dilution Factor
632H-4	Groundwater	7060	7060	Ni(NO3)2	
	Groundwater	7191	3020	Mg(NO3)2	10
	Groundwater	6010	3010	--------	—
	Groundwater	6010	3010	--------	10
	Groundwater	7421	3020	La(NO3)3	
	Groundwater	7470	7470	--------	
	Groundwater	6010	3010	--------	—
	Groundwater	9252	--------	--------	10
632H-5	Groundwater	7060	7060	Ni(NO3)2	
	Groundwater	7191	3020	Mg(NO3)2	—
	Groundwater	6010	3010	--------	—
	Groundwater	6010	3010	--------	—
	Groundwater	7421	3020	La(NO3)3	
	Groundwater	7470	7470	--------	
	Groundwater	6010	3010	--------	—
	Groundwater	9252	--------	--------	—
632H-6	Groundwater	7060	7060	Ni(NO3)2	
	Groundwater	7191	3020	Mg(NO3)2	—
	Groundwater	6010	3010	--------	—
	Groundwater	6010	3010	--------	
	Groundwater	7421	3020	La(NO3)3	
	Groundwater	7470	7470	--------	
	Groundwater	6010	3010	--------	—
	Groundwater	9252	--------	--------	—

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary
Inorganic Analysis

Laboratory Sample Code	Matrix	Analytical Protocol	Digestion Procedure	Matrix Modifier	Dilution Factor
632H-7	Groundwater	7060	7060	Ni(NO3)2	
	Groundwater	7191	3020	Mg(NO3)2	10
	Groundwater	6010	3010	--------	—
	Groundwater	6010	3010	--------	10
	Groundwater	7421	3020	La(NO3)3	
	Groundwater	7470	7470	--------	
	Groundwater	6010	3010	--------	—
	Groundwater	9252	--------	--------	100
	Groundwater	7060	7060	Ni(NO3)2	
	Groundwater	7191	3020	Mg(NO3)2	
	Groundwater	6010	3010	--------	
	Groundwater	6010	3010	--------	
	Groundwater	7421	3020	La(NO3)3	
	Groundwater	7470	7470	--------	
	Groundwater	6010	3010	--------	
	Groundwater	9252	--------	--------	
	Groundwater	7060	7060	Ni(NO3)2	
	Groundwater	7191	3020	Mg(NO3)2	
	Groundwater	6010	3010	--------	
	Groundwater	6010	3010	--------	
	Groundwater	7421	3020	La(NO3)3	
	Groundwater	7470	7470	--------	
	Groundwater	6010	3010	--------	
	Groundwater	9252	--------	--------	

Historical Data - VDM9

		1ST/96	3RD/96
	Units		
Evacuation Date		3/19/96	9/17/96
Top of Casing Elevation	Feet	447.37	447.37
Water Level	Feet	24.61	25.21
Water Elevation (Before Purge)		422.76	422.16
Well Bottom	Feet	30.97	30.97
Sample Date:		3/19/96	9/17/96
Laboratory Sample Number:		AES	AES
Carbon tetrachloride	ug/l	<10	
Chloroform	ug/l	66	120 D
Chloromethane	ug/l	<10	
1,2-Dichloroethane	ug/l	11	25
trans-1,2-Dichloroethene	ug/l	140	250 D
Methylene chloride	ug/l	20	46
1,1,2,2-Tetrachloroethane	ug/l	51	140 D
Tetrachloroethene	ug/l	130	130 D
Trichloroethene	ug/l	29	45
Vinyl chloride	ug/l	<10	<10
Toluene	ug/l	<10	<10
Acetone	ug/l	<10	
Priority Pollutant Phenol	ug/l	<10	
Total Arsenic	ug/l	<5.0	
Total Chromium	ug/l	155	10
Total Copper	ug/l	394	1400
Total Iron	ug/l	244000	710000 D
Total Lead	ug/l	<5.0	
Total Mercury	ug/l	<1.0	
Total Zinc	ug/l	293	590
Chloride	ug/l	4800000	14000000
pH *	SU	4.56	4.37

Historical Data - VDM10

Quarter >		1ST/96	3RD/96
	Units		
Evacuation Date		3/19/96	9/17/96
Top of Casing Elevation	Feet	444.89	444.89
Water Level (Feet)	Feet	31.2	33.03
Water Elevation (Before Purge)		413.69	411.86
Well Bottom (Feet)	Feet	46.19	46.19
Sample Date:		3/19/96	9/17/96
Laboratory Sample Number:		AES	AES
Carbon tetrachloride	ug/l	<10	
Chloroform	ug/l	22	40
Chloromethane	ug/l	<10	
1,2-Dichloroethane	ug/l	<10	<10
trans-1,2-Dichloroethene	ug/l	<10	<10
Methylene chloride	ug/l	<10	<10
1,1,2,2-Tetrachloroethane	ug/l	<10	<10
Tetrachloroethene	ug/l	<10	<10
Trichloroethene	ug/l	<10	<10
Vinyl chloride	ug/l	<10	<10
Toluene	ug/l	<10	<10
Acetone	ug/l	<10	
Priority Pollutant Phenol	ug/l	<10	
Total Arsenic	ug/l	11	
Total Chromium	ug/l	17	18
Total Copper	ug/l	453	2300
Total Iron	ug/l	3630	4400
Total Lead	ug/l	10	
Total Mercury	ug/l	<1.0	
Total Zinc	ug/l	762	2200
Chloride	ug/l	2300000	9500000
pH *	SU	5.92	5.77

Historical Data - VDM11

Quarter >		1ST/96	3RD/96
	Units		
Evacuation Date		3/19/96	9/17/96
Top of Casing Elevation	Feet	450.74	450.74
Water Level (Feet)	Feet	18.36	19.73
Water Elevation (Before Purge)		432.38	431.01
Well Bottom (Feet)	Feet	23.04	23.04
Sample Date:		3/19/96	9/17/96
Laboratory Sample Number:		AES	AES
Carbon tetrachloride	ug/l	<10	
Chloroform	ug/l	<10	11
Chloromethane	ug/l	<10	
1,2-Dichloroethane	ug/l	<10	<10
trans-1,2-Dichloroethene	ug/l	<10	<10
Methylene chloride	ug/l	<10	<10
1,1,2,2-Tetrachloroethane	ug/l	<10	<10
Tetrachloroethene	ug/l	<10	<10
Trichloroethene	ug/l	<10	<10
Vinyl chloride	ug/l	<10	<10
Toluene	ug/l	<10	<10
Acetone	ug/l	<10	
Priority Pollutant Phenol	ug/l	<10	
Total Arsenic	ug/l	<5.0	
Total Chromium	ug/l	<5.0	<5
Total Copper	ug/l	48	30
Total Iron	ug/l	1230	270
Total Lead	ug/l	<5.0	
Total Mercury	ug/l	<1.0	
Total Zinc	ug/l	<20	80
Chloride	ug/l	50000	1250000
pH *	SU	7.02	5.81

Historical Data - VDM14

Quarter >		1ST/96	3RD/96
	Units		
Evacuation Date		3/19/96	9/17/96
Top of Casing Elevation	Feet	446.31	446.31
Water Level	Feet	9.97	10.39
Water Elevation (Before Purge)		436.34	435.92
Well Bottom	Feet	12.38	12.38
Sample Date:		3/19/96	9/17/96
Laboratory Sample Number:		AES	AES
Carbon tetrachloride	ug/l	<10	
Chloroform	ug/l	20	150 D
Chloromethane	ug/l	<10	
1,2-Dichloroethane	ug/l	<10	<10
trans-1,2-Dichloroethene	ug/l	30	350 D
Methylene chloride	ug/l	<10	21
1,1,2,2-Tetrachloroethane	ug/l	<10	81 D
Tetrachloroethene	ug/l	62	170 D
Trichloroethene	ug/l	12	58
Vinyl chloride	ug/l	<10	<10
Toluene	ug/l	<10	<10
Acetone	ug/l	<10	
Priority Pollutant Phenol	ug/l	<10	
Total Arsenic	ug/l	<5.0	
Total Chromium	ug/l	340	170 D
Total Copper	ug/l	<10	<10
Total Iron	ug/l	82500	880000 D
Total Lead	ug/l	<5.0	
Total Mercury	ug/l	<1.0	
Total Zinc	ug/l	140	1600
Chloride	ug/l	1100000	7450000
pH *	SU	6.18	4.35

Historical Data - D-55

Quarter >		1ST/96	3RD/96
	Units		
Evacuation Date		3/19/96	9/17/96
Top of Casing Elevation	Feet	469.45	469.45
Water Level	Feet	36	36.26
Water Elevation (Before Purge)		433.45	433.19
Well Bottom	Feet	46.96	46.96
Sample Date:		3/19/96	9/17/96
Laboratory Sample Number:		AES	AES
Carbon tetrachloride	ug/l	<10	
Chloroform	ug/l	<10	<10
Chloromethane	ug/l	<10	
1,2-Dichloroethane	ug/l	<10	<10
trans-1,2-Dichloroethene	ug/l	<10	<10
Methylene chloride	ug/l	<10	<10
1,1,2,2-Tetrachloroethane	ug/l	<10	<10
Tetrachloroethene	ug/l	<10	<10
Trichloroethene	ug/l	<10	<10
Vinyl chloride	ug/l	<10	<10
Toluene	ug/l	<10	<10
Acetone	ug/l	<10	
Priority Pollutant Phenol	ug/l	<10	
Total Arsenic	ug/l	<5.0	
Total Chromium	ug/l	11	<5
Total Copper	ug/l	<10	<10
Total Iron	ug/l	738	1100
Total Lead	ug/l	<5.0	
Total Mercury	ug/l	<1.0	
Total Zinc	ug/l	<20	<20
Chloride	ug/l	13	17000
pH *	SU	7.28	7.94

CHAIN OF CUSTODY RECORD

ADVANCED
ENVIRONMENTAL SERVICES, INC.
2186 LIBERTY DRIVE
NIAGARA FALLS, NEW YORK 14304
(716) 283-3120
(800) 791-3120
FAX (716) 283-4727

PROJECT NAME: VAN DE MARK

SAMPLER'S SIGNATURE: Todd Abel

PROJECT I.D. #: ~~6322~~ 632H

JOB CODE: FAN

DATE	TIME	SAMPLE IDENTIFICATION	GRAB	COMP	SAMPLE TYPE	CONTAINER CLASSIFICATION: UNPRESERVED	HNO3	H2SO4	HCL	NAOH	VIAL (PRES.)	VIAL (UNPRES.)	TOTAL	PARAMETERS/REMARKS
9-17-96	14:30	VDM - 9			GROUNDWATER	1	1				2		4	CHLORIDE, METALS, VOLATILES
	14:50	VDM - 10				1	1				2		4	
	15:00	VDM - 11				1	1				2		4	
	14:25	VDM - 14				1	1				2		4	
	13:40	D - 55				1	1				2		4	
	—	BLIND DUPLICATE				3	3				6		12	
	14:10	18-MILE CREEK				1	1				2		4	
	8:30	TRIP BLANK				1	1				2		4	

TOTAL NUMBER OF CONTAINERS 40

NOTE: Please indicate required analysis, and whom we may contact with questions, if you have not yet done so through your customer service representative.

	DATE	TIME	RECEIVED BY:
1. RELINQUISHED BY: Todd Abel	9-17-96	16:10	
2. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
3. RELINQUISHED BY:	DATE	TIME	RECEIVED BY: