ENVIRON

November 21, 2001

Federal Express

Carl Hoffman
New York State Department of Environmental Conservation
Bureau of Hazardous Site Control
50 Wolf Road; Room 252
Albany, New York 12233-7010

Re: September 2001 Ground Water Monitoring Results
Former Bulova Corporation Facility
Valley Stream, New York
NYSDEC Site No. 1-30-084

Dear Mr. Hoffman:

ENVIRON International Corporation (ENVIRON) has prepared this letter, on behalf of Bulova Corporation (Bulova), to present results of the ground water monitoring activities completed during September 2001 at the former Bulova facility in Valley Stream, New York (the "Site"). The ground water monitoring activities completed during September 2001 represent the sixth quarterly sampling event to be performed during a two-year monitoring period. The following sections briefly summarize the results of these activities. As detailed in the *Operation and Maintenance Plan*, ENVIRON will prepare a report regarding the on-going monitoring activities following the two-year monitoring period.

The quarterly monitoring activities completed during September 2001 included the measurement of ground water levels at seven monitoring wells (MW-HD1 through MW-HD7) and the collection of ground water samples from four monitoring wells (MW-HD2, MW-HD4, MW-HD6, and MW-HD7). Activities completed during the September 2001 monitoring event were performed in accordance with the procedures detailed in the *Operation and Maintenance Plan* (ENVIRON, March 2000/May 24, 2000).

Ground water elevation data is summarized in Table 1 and presented on Figures 1 and 2. Consistent with the results of prior investigations, ground water level measurements collected during September 2001 indicate that local ground water flow at the Site is directed toward the southeast at a very small hydraulic gradient of less than 0.001 ft/ft. The ground water elevation at off-site monitoring well MW-HD7 indicates that regional ground water flow may be directed toward the south/southwest.

214 Carnegie Center • Princeton, New Jersey 08540-6284 • USA • Tel: (609) 452-9000 • Fax: (609) 452-0284 • www.environcorp.com

Analytical results associated with the September 2001 ground water sampling event are summarized in Table 2. Consistent with the previously-identified seasonal fluctuations of VOC concentrations in ground water at the Site, the September 2001 sampling event detected increased VOC concentrations at upgradient monitoring well MW-HD2. Reported VOC concentrations at monitoring well MW-HD4 were generally lower than prior sampling events and VOC concentrations at downgradient well MW-HD6 continue to display an overall decreasing trend. Historical site-related VOC concentrations at MW-HD4 are depicted in Figures 3 and 4. VOC concentrations detected at monitoring well MW-HD7 during September were generally consistent with prior sampling results. As noted below, the detection of Freon 113 in the sample collected from MW-HD7 is believed to be a laboratory artifact and not indicative of Freon-impacted ground water at MW-HD7.

A Data Usability Summary Report associated with the September 2001 sampling event is provided in Attachment A. Based on ENVIRON's review, all samples were successfully analyzed for the requested compounds with the exception of the reported Freon 113 concentration in the ground water sample collected from off-site monitoring well MW-HD7. The sample from MW-HD7 was analyzed directly after the ground water sample collected from on-site monitoring well MW-HD6. Based on ENVIRON's review, the reported Freon 113 concentration in the sample from MW-HD7 is believed to be a laboratory artifact as a result of carryover within the analytical instruments. The order of sample analyses at the laboratory will be revised during the remaining monitoring events to minimize the potential for cross-contamination at the laboratory.

Please contact us at your earliest convenience to discuss any questions or comments regarding the quarterly monitoring activities. The next quarterly monitoring event is scheduled for December 2001.

Sincerely,

Thomas V. Fusillo
Principal

Michael J. Potts
Manager

TVF\MJP:srh
02-1961A\PRIN_WP\13764v6.DOC

Attachments

cc: C. Montroy (NYSDEC)
B. Weber (Bulova)

TABLES

TABLE 1
Ground Water Elevation Data
Former Bulova Corporation Facility – Valley Stream, New York

Monitoring Well	Top of Casing Elevation (ft AMSL)	September 25, 2001	
		Depth to Water (ft TOC)	Elevation (ft AMSL)
MW-HD1	9.93	5.87	4.06
MW-HD2	9.45	5.24	4.21
MW-HD3	9.93	5.92	4.01
MW-HD4	10.09	6.40	3.69
MW-HD5	9.45	5.63	3.82
MW-HD6	9.97	6.37	3.60
MW-HD7	9.33	5.49	3.84

Notes:

1. Abbreviations:
   TOC: Top of casing
   AMSL: Above mean sea level

TABLE 2
Summary of September 2001 Ground Water Sampling Results
Former Bulova Corporation Facility - Valley Stream, New York

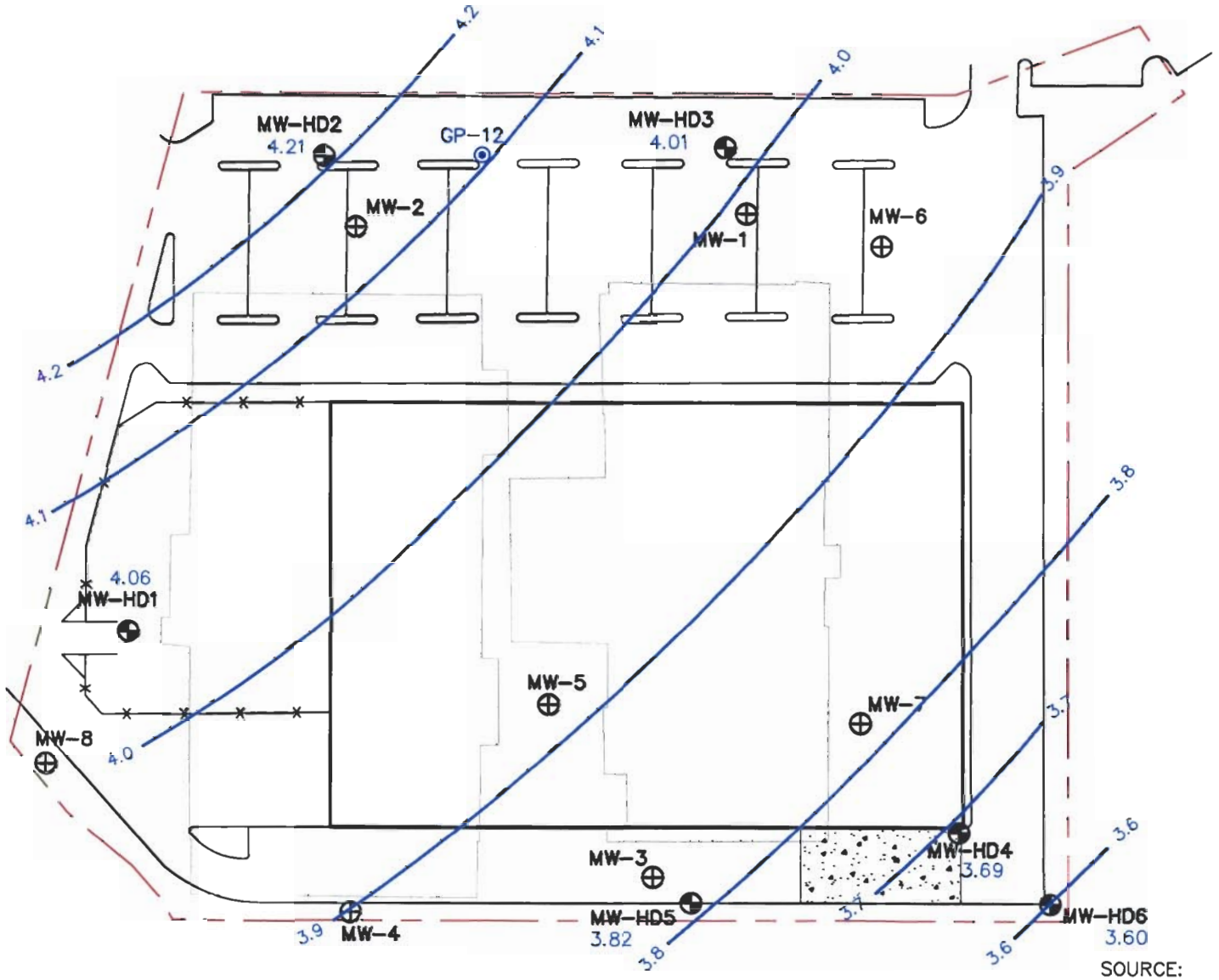
Location Sample Collection Date Sample Method Comments	MW-HD2 9/25/01 Bailer	MW-HD4 9/25/01 Bailer	MW-HD6 9/25/01 Bailer	MW-HD6 9/25/01 Bailer Duplicate	MW-HD7 9/25/01 Bailer	New York Ambient Water Quality Criteria
Volatile Organic Compounds						
Benzene	**1.1**	ND	ND	ND	ND	0.7
Chlorobenzene	**61.4**	ND	ND	ND	ND	5
1,2-Dichlorobenzene	**13.6**	0.66 (j)	2.6 (j)	2.6 (j)	ND	3
1,3-Dichlorobenzene	2.7 (j)	ND	ND	ND	ND	3
1,4-Dichlorobenzene	**34.2**	1.8 (j)	7.7	**7.9**	ND	3
Dichlorofluoromethane	ND	2.4 (j)	ND	ND	ND	5
1,1-Dichloroethane	ND	**40.0**	2.0 (j)	2.0 (j)	ND	5
1,2-Dichloroethane	ND	**0.87 (j)**	ND	ND	ND	0.6
1,1-Dichloroethene	ND	**219**	ND	ND	ND	5
cis-1,2-Dichloroethene	ND	**15.6**	ND	ND	ND	5
Freon 113	ND	**190**	**252**	**258**	3.4 (j)*	5
Tetrachloroethene	0.64 (j)	4.6	4.0	3.8	ND	5
1,1,1-Trichloroethane	ND	**135**	2.8	2.9 (j)	ND	5
Trichloroethene	ND	**26.5**	2.3	2.3	2.1	5

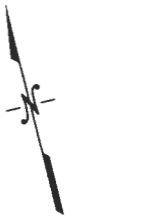
Notes:

1. All concentrations are reported in micrograms per liter (µg/L) (parts per billion [ppb]).
2. Only targeted compounds detected in one or more samples are listed in this table.
3. Bold values meet or exceed the New York Ambient Water Quality Criteria.
4. Abbreviations:
   - ND = Not Detected
   - (j) = Estimated Concentration
   - * = Suspected Laboratory Artifact and believed to be unrelated to Ground Water Quality at MW-HD7.

02-1961A\PRIN_WP\13764v6.DOC

FIGURES





LEGEND

- PROPERTY BOUNDARY
- BUILDING OUTLINE
- FORMER BUILDING
- PAVED AREA
- CONCRETE AREA
- ⊕ ABANDONED MONITORING WELL
- ◓ MONITORING WELL
- 4.0 APPROXIMATE GROUNDWATER CONTOUR AND ELEVATION; SEPTEMBER 25, 2001 (FT AMSL)

SOURCE:
HENDERSON AND BODWELL CONSULTING ENGINEERS
GRADING & UTILITIES PLAN, SEPT. 1992

ENVIRON

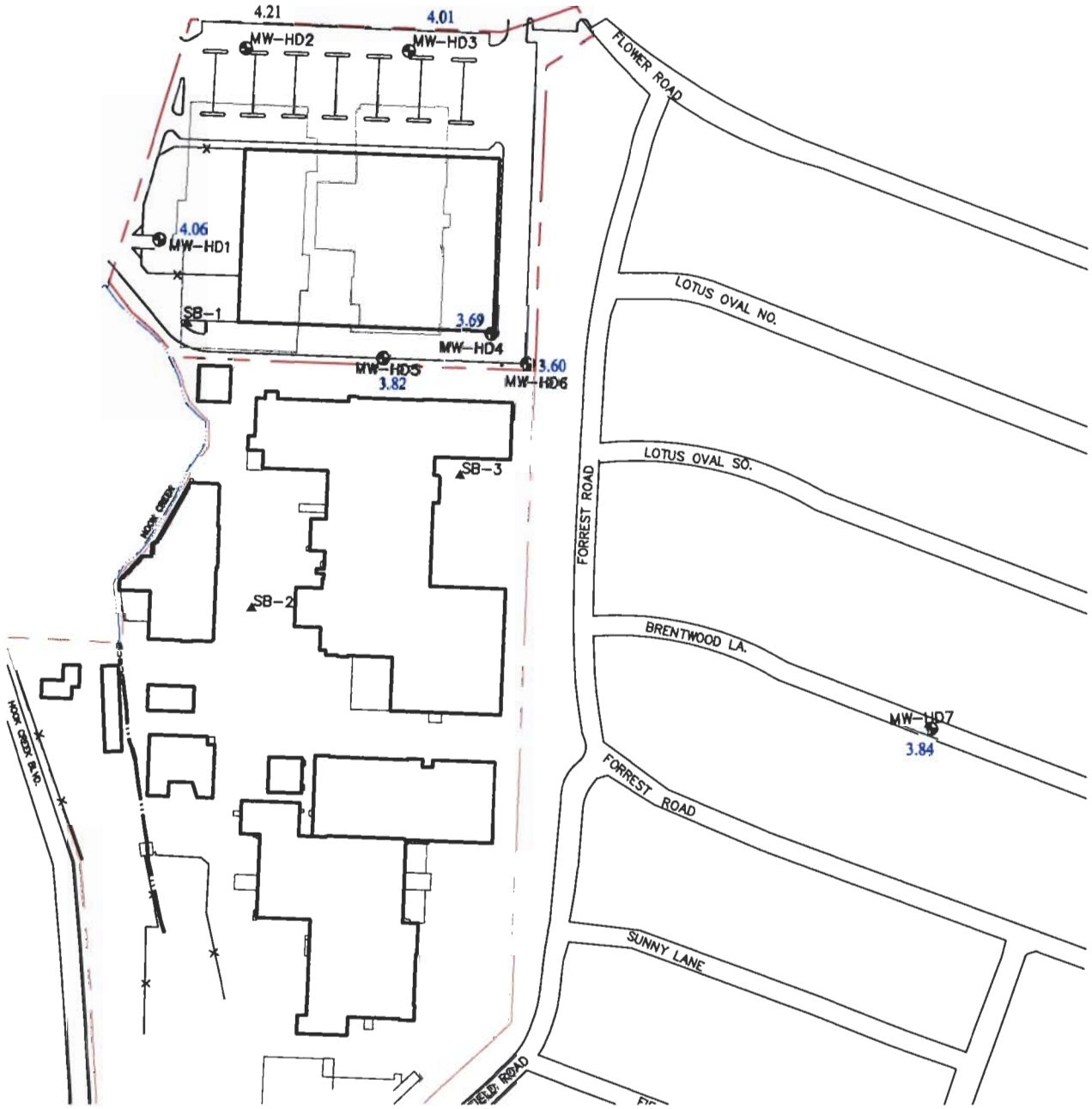
DRAFTED BY: TSP/kpm | DATE: 11/16/01

GROUND WATER POTENTIOMETRIC SURFACE – SEPTEMBER 2001

FORMER BULOVA CORPORATION FACILITY
VALLEY STREAM, NEW YORK

FIGURE
1

1961AW14



ENVIRON

DRAFTED BY: TSP/kpm | DATE: 11/16/01

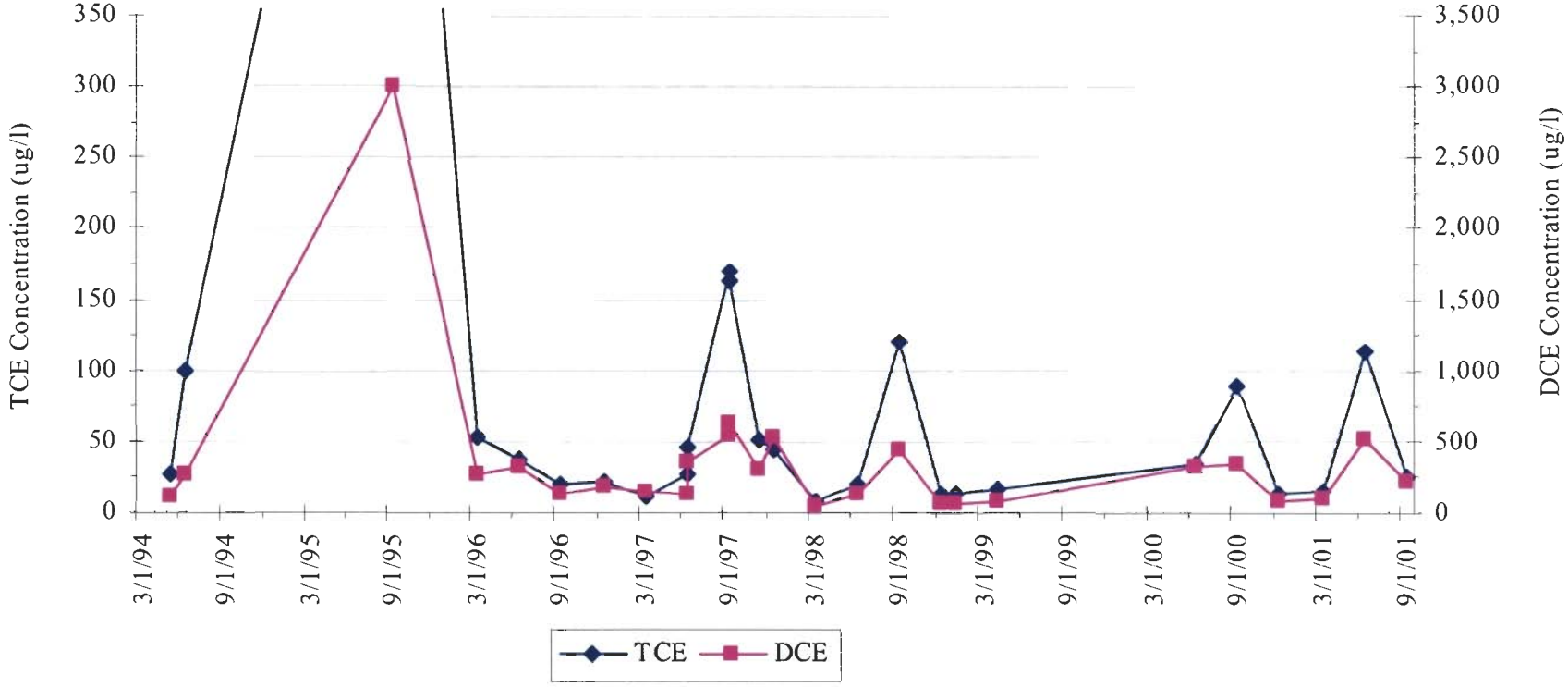
GROUND WATER ELEVATIONS–SEPTEMBER 2001

FORMER BULOVA CORPORATION FACILITY
VALLEY STREAM, NEW YORK

FIGURE
2

1961AG4B

TCE/DCE Concentrations - MW-HD4



NOTE: REPORTED TCE CONCENTRATION DURING SEPTEMBER 1995 IS BEYOND SCALE OF FIGURE.

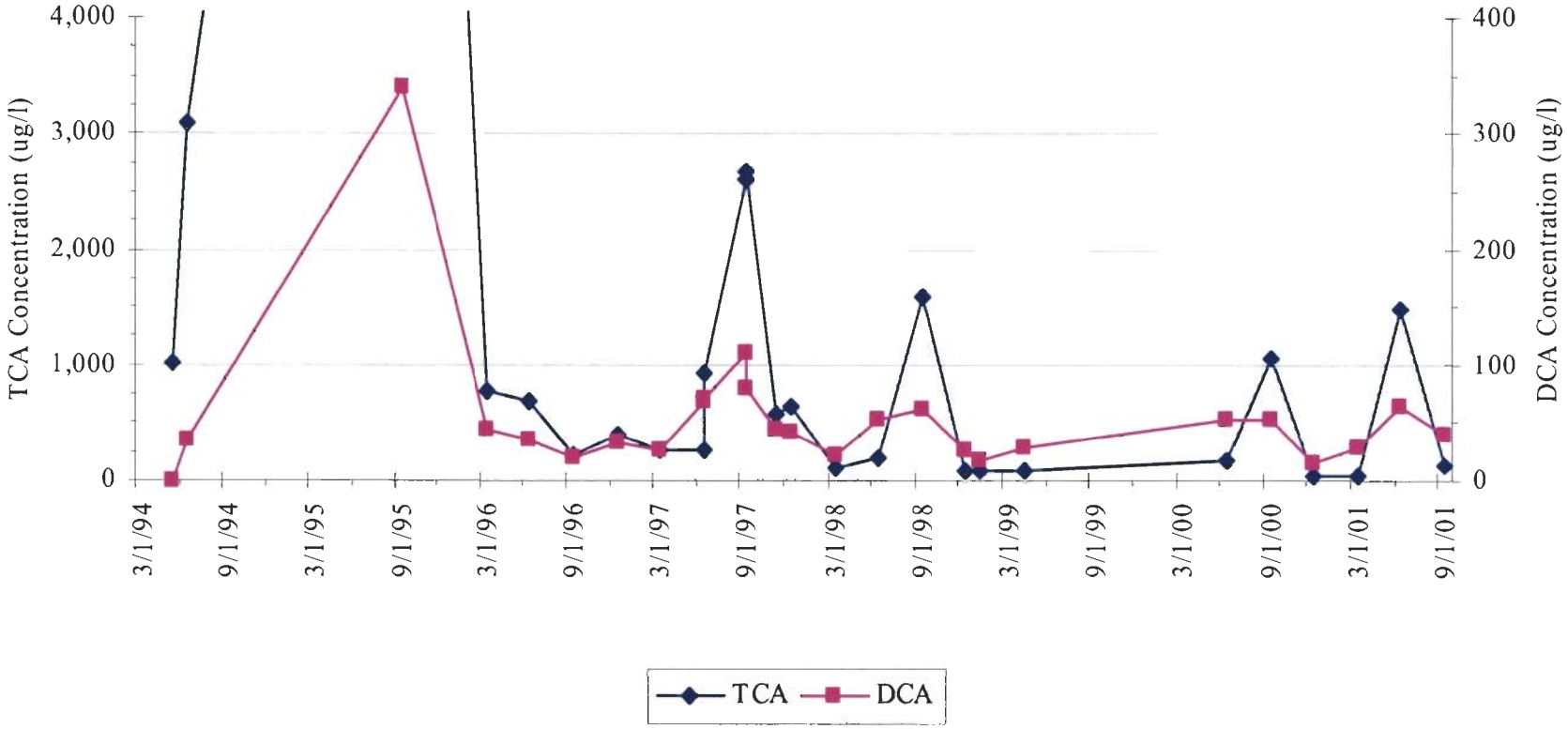
ENVIRON

DRAFTED BY: HFZ | DATE: 4/09/01

TCE/DCE Concentrations - MW-HD4
Former Bulova Corporation Facility
Valley Stream, New York

FIGURE
4
021961AD02.PPT

TCA/DCA Concentrations - MW-HD4



NOTE: REPORTED TCA CONCENTRATION DURING SEPTEMBER 1995 IS BEYOND SCALE OF FIGURE.

ENVIRON

DRAFTED BY: HFZ/KPM | DATE: 2/3/01

TCA/DCA Concentrations - MW-HD4
Former Bulova Corporation Facility
Valley Stream, New York

FIGURE
3
021961AD02.PPT

ATTACHMENT A

Data Usability Summary Report

DATA USABILITY SUMMARY REPORT (DUSR)
BULOVA: VALLEY STREAM
SAMPLING EVENT – SEPTEMBER 2001

I. INTRODUCTION

During this sampling event, a total of seven aqueous samples, including wash and trip blanks were collected by ENVIRON and submitted to Accutest Laboratories (Accutest) in Dayton, New Jersey for analysis. The aqueous samples were analyzed for priority pollutant volatile organics (VOC) plus Freon 113 using SW846 Method 8260. Accutest prepared one data package (Job Number E99399) using the Category B Deliverables for New York Analytical Services Protocol (ASP). ENVIRON reviewed the analytical and quality assurance/quality control (QA/QC) results contained in the data packages as well as the raw data. The data validation procedure and criteria were based on the *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (October 1999), and the appropriate methods where applicable. The USEPA data qualifiers used in this report are listed in Table 1.

Overall, the data is acceptable. The data package provided by Accutest met the requirements for a DUSR. No data transfer deviations were identified. A description of the data review is provided in Section II and summarizes the problems detected that required the qualification of data. All samples were successfully analyzed for the requested analyses. Note that the Freon 113 concentration reported for sample MWHD7-010925 is suspect and might be the result of carryover between samples (see part H, **Compound Identification, Quantitation and Detection Limits**)

TABLE 1 Data Qualifier Definitions	
The following definitions provide brief explanations of the national qualifiers assigned to results in the data review process.	
U	The analyte was analyzed for, but was not detected above, the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
N	The analysis indicates the presence of any analyte for which there is presumptive evidence to make a "tentative identification."
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

I. DATA REVIEW

VOLATILE ORGANIC ANALYSIS
(SW846 Method 8260)

A. Technical Holding Time
The holding time requirement was met for all samples.

B. Instrument Performance Check
All field samples were analyzed within the 12-hour period following the injection of the BFB. Method 8260 requires analysis within 12 hours of the instrument performance check.

C. Calibration

Initial Calibration

No problems were identified during this review.

Continuing Calibration

No problems requiring data qualification were identified during this review.

D. Blanks
No problems were identified during this review.

E. Surrogate Standards
No problems requiring the qualification of data were identified during this review.

F. Matrix Spike/Matrix Spike Duplicate/Blank Spike (MS/MSD/BS)
The MS/MSD/BS analyses are used to determine long-term precision and accuracy of the analytical method for various matrices and/or sites. MS/MSD analyses are not used by themselves to qualify data points but are used in conjunction with other QC data to determine data usability issues. No problems requiring the qualification of data were identified during this review.

G. Internal Standards
No problems were identified during this review.

H. Compound Identification, Quantitation and Detection Limits

Sample MWHD7-010925: The concentration of Freon 113 reported for this sample (3.4 J µg/l) is suspect and should be used with caution. This result may be carryover from the undiluted analysis of sample MWHD6-010925D. This sample was run directly before sample MWHD7 with no laboratory blank in-between samples. The on-column concentration for sample MWHD6 for Freon 113 is 258 µg/l. The laboratory did not re-analyze sample MWHD7 for possible carryover.

I. Overall Data Assessment

Data quality is acceptable.

02-1961A\PRIN_WP\13764v6.DOC