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# 2004 1st QUARTER GROUNDWATER MONITORING REPORT

## FOR

# FORMER ANGELES CHEMICAL COMPANY FACILITY 8915 SORENSEN AVENUE SANTA FE SPRINGS, CALIFORNIA


**Prepared by:**
**Blakely Environmental Investigations, Inc.**
**4359 Phelan Road**
**Phelan, CA 92371**
**(760)-868-8572**

**David A. Blakely**
**Sr. Scientist**
**REA II #20025**

**Hiram D. Garcia**
**REA II #20048**

**James V. Jazmin**
**C 22847**


REGISTERED ENVIRONMENTAL ASSESSOR II
DAVID BLAKELY
No. 20025
Expires 10/04
STATE OF CALIFORNIA

REGISTERED ENVIRONMENTAL ASSESSOR II
HIRAM D. GARCIA
No. 20048
Expires: 02/05
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
JAMES V. JAZMIN
No. C 22847
Exp: 12-31-05
CIVIL
STATE OF CALIFORNIA

ANCHEM0419

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## 1.0) INTRODUCTION

Blakely Environmental Investigations, Inc. (BEII) was contracted by Greve Financial Services ((310) 753-5770) to perform quarterly groundwater monitoring at the former Angeles Chemical Company (ACC), Inc. facility located at 8915 Sorensen Avenue, Santa Fe Springs, California (See Figure 1, Site Location Map). The quarterly groundwater monitoring was requested by the Department of Toxics Substance Control (DTSC) correspondence dated September 18, 2001. This report presents the results of the 2004 1st quarter monitoring episode performed from March 18 and 19 of 2004.

## 2.0) SITE DESCRIPTION

The site is approximately 1.8 acres in size and completely fenced. The site is bound by Sorensen Avenue on the east, Air Liquide Corporation to the north and northwest, Plastall Metals Corporation to the north, and a Southern Pacific Railroad easement and Mckesson Chemical Company to the south.

The ACC has operated as a chemical repackaging facility from 1976 to 2000. A total of thirty-four (34) underground storage tanks (USTs) existed beneath the site. Two (2) USTs, one gasoline and one diesel, and sixteen (16) chemical USTs were excavated and removed under the oversight of the Santa Fe Springs Fire Department. All 16 remaining chemical USTs were decommissioned in place and slurry filled.

## 3.0) PREVIOUS SITE ASSESSMENT WORK

In January 1990; SCS Engineers, Inc. (SCS) conducted a site investigation. SCS advanced eight borings from 5' below grade surface (bgs) to 50' bgs. Soil samples collected and analyzed identified benzene, 1,1-Dichloroethane (1,1-DCA), 1,1-Dichloroethene (1,1-DCE), MEK, methyl isobutyl ketone (MIBK), toluene, 1,1,1 Trichloroethane (1,1,1-TCA), Tetrachloroethylene (PCE), and xylenes at detectable concentrations.

In June 1990, SCS performed an additional site investigation at the site by advancing six additional borings advanced from 20.5' bgs to 60' bgs. A monitoring well (MW-1) was also installed. Soil sample analysis identified detectable concentrations of the above mentioned VOCs in addition to acetone and methylene chloride. Dissolved benzene, 1,1-DCA, 1,1-DCE, PCE, Trichloroethylene (TCE), and trans-1,2-dichloroethene were detected in MW-1 above maximum contaminant levels.

Between 1993 and 1994, SCS performed further testing at the site. Soil samples were collected from nine borings. Five borings were converted to groundwater monitoring wells MW-2, MW-3, MW-4, MW-6, and MW-7. The predominant compounds detected in soil and groundwater were acetone, MEK, MIBK, chlorinated VOCs, and BTEX.

In 1996 and 1999, SCS performed separate soil vapor extraction pilot tests using several treatment technologies on extraction well E-1 screened from 7' bgs and 22' bgs. Laboratory analysis identified maximum soil vapor gas concentrations as 1,1,1-TCA (30,300 ppmV) with detectable concentrations of 1,1-DCE, TCE, methylene chloride, toluene, PCE and xylenes. The radius of influence was measured between 35 and 80 feet.

In November 1997, SCS performed a soil vapor survey at the site. Soil vapor samples were collected at twenty-three locations at 5' bgs. In addition, soil vapor samples were collected at 15' bgs in five of the twelve sampling points. The soil vapor survey identified maximum VOC concentrations near the railroad tracks located on the northern portion of the site.

BEII performed a soil vapor gas survey at the site from November 27 to December 1, 2000. A total of 36 soil vapor sample points, labeled SV1 through SV36, were selected by BEII and approved by the DTSC for analysis. Two discrete soil vapor samples were collected from each soil vapor sample point, one at 8' bgs and one at 20' bgs. SV1 was an exception since the first soil vapor sample was collected at 10' bgs instead of 8' bgs. Based on the soil vapor sample results, BEII identified relatively low level concentrations of VOCs in the silty clay soils at 8' bgs. However, the concentrations of VOCs are significantly higher in the sandy soils at 20' bgs. Results were submitted to the DTSC by BEII in a Report of Findings dated January 10, 2001 with laboratory reports (BEII Report of Findings dated January 10, 2001).

BEII performed an additional soil gas survey on the ACC site from January 14 to January 17, 2002. The purpose of the soil gas survey was to determine the lateral extent of VOC soil vapors in the vadose zone along the eastern, northern, and southern property line of the site. In addition, BEII performed a SGS on June 13, 2002 on the Air Liquide property to determine the lateral extent of VOC soil vapors in the vadose zone north of the ACC facility. Based on the soil gas survey results, BEII identified relatively low level concentrations of VOCs in the silty clay soils at 5' bgs, 7'bgs, 8' bgs, 10' bgs, and 12' bgs. However, the concentrations of VOCs are significantly higher in the sandy soils at 20' bgs, which are more permeable and conducive to soil vapor migration. Furthermore, VOC soil gas concentrations were higher along the southern property line than along the east and north property line. Results were submitted by BEII to the DTSC in a Report of Findings dated October 15, 2002 with laboratory reports.

BEII advanced two soil borings (BSB-1 and BSB-2) and installed two groundwater monitoring wells (MW-8 and MW-9) on the ACC site from June 5 to June 7, 2002. The purpose of the drilling was to help define the lateral and vertical extent of impacted soil along the eastern ACC property line and to help determine the extent of impacted groundwater. Soil borings BSB-1 and BSB-2 were advanced to 50' bgs and 30' bgs, respectively. Monitoring wells MW-8 and MW-9 were installed to 40.5' bgs and 45.5' bgs, respectively. Soil sample results identified elevated VOC concentrations from monitoring well MW-8 at depth between 29' and 40' bgs. Results were submitted by

BEII to the DTSC in a Report of Findings dated October 15, 2002 with laboratory reports.

BEII advanced eight soil borings (BSB-3 through BSB-10) and eleven cone penetrometer testing locations (CPT-1 though CPT-11) in August 2002 to help determine the extent of impacted soil and subsurface geology. In November and December of 2002, BEII advanced seven additional borings (BSB-11 through BSB-17), fifteen additional cone penetrometer locations (CPT-12 through CPT-26) and installed twelve additional monitoring wells (MW-10 through MW-21) to help further define the extent of VOC impacted soil/groundwater and the subsurface geology. Monitoring well MW-1 was also abandoned. In late June of 2003, BEII installed five additional monitoring wells (MW-22 through MW-26) to help define the extent of VOC impacted soil and groundwater. Monitoring wells MW-2, MW-3, and MW-7 were abandoned. Laboratory results were submitted by BEII to the DTSC. A Summary Site Characterization Report dated February 2004 was submitted by Shaw Environmental & Infrastructure, Inc. (Shaw) to the DTSC and included interpretations based on the above mentioned borings, CPT locations and monitoring wells. See Figure 2 for Site Layout Map.

## 4.0) REGIONAL GEOLOGY/HYDROGEOLOGY

The site is located near the northern boundary of the Santa Fe Springs Plain within the Los Angeles Coastal Plain at an elevation of approximately 150 feet above mean sea level. Surficial sediments consist of fluvial deposits composed of inter-bedded gravel, sand, silt, and clay. Available data from California Water Resources Bulletin No. 104 (June 1961) indicate that the surficial sediments may be Holocene and/or part of the upper Pleistocene Lakewood Formation, which ranges from 40 to 50 feet thick beneath the site. The Lakewood Formation has lateral lithologic changes with discontinuous permeable zones that vary in particle size. Stratified deposits of sand, silty sand, silt, and fine gravel comprising the upper portion of the lower Pleistocene San Pedro Formation underlies the Lakewood Formation.

The site lies within the Central Basin Pressure area, a division of the Central Ground Water Basin, which extends over most of the Coastal Plain. The shallow (perched) groundwater occurs within the Lakewood Formation. The deeper groundwater occurs in the Hollydale aquifer, which is the uppermost regional aquifer in the Pleistocene San Pedro Formation. The major water producing aquifers in the region are the Lynwood aquifer located approximately 200-feet bgs, the Silverado aquifer located at approximately 275-feet bgs, and the Sunnyside aquifer located at approximately 600-feet bgs.

## 5.0) SITE GEOLOGY/HYDROGEOLOGY

Based on the borings and CPT pushes, Shaw identified six distinct hydrostratigraphic units horizons beneath the ACC site. Uppermost is an "overburden" unit comprising a wide range of materials from fill to silty sands to clayey silts that is

designated as "unit A". Next is a well-defined clean sand (sometimes with gravel) horizon designated as "unit B". Following is a fine-grained predominantly silt zone designated as "unit C1" which is underlain by a coarser silty sand zone named "unit D". Next is the finest-grained unit observed, "unit C2" which is predominantly a clayey silt that can be finer (clay) at the top, and coarser (sandy silt) with depth. Finally, "unit E" is a clean coarse sand (similar to unit B) that is considered the top of the regional aquifer system.

A perched water zone, which is currently dry, was identified within unit B. The regional aquifer zone from 50' to 80' bgs (referred as the A1 zone), is identified within unit E. A zone of saturation (referred as the "first water" zone) exists between the A1 and the perched water zone.

For this report, monitoring wells MW-13, MW-14, MW-15, MW-17, MW-20 and MW-21 will be noted as upper A1 zone monitoring wells and MW-23, MW-24 and MW-25 as lower A1 zone monitoring wells. Monitoring wells MW-6, MW-8, MW-9, MW-10, MW-11, MW-12, MW-16, MW-18, MW-19, MW-22, and MW-26 will be noted as the first water zone monitoring wells. Monitoring well MW-4 contained residual water within the casing sump at 26.41' bgs and a depth to bottom of 26.60' bgs. MW-4 will be noted as a perched water zone well.

The groundwater gradient flowed historically to the southwest as identified by SCS. In March 2004, the first water was identified at depths between 34.36' bgs to 40.28' bgs beneath the site. The potentiometric groundwater flow direction of the first water zone is away from the high point (MW-10) with a hydraulic gradient of 0.035 ft/ft to the north and 0.04 to 0.07 ft/ft to the south (See Figure 3). Groundwater in the A1 zone was identified at depths between 43.25' bgs to 48.03' bgs beneath the site. The potentiometric groundwater flow in the A1 zone is to the west-southwest direction with a hydraulic gradient of 0.0075 ft/ft (See Figure 4). Depths to groundwater and their respective elevations are presented in Table 1.

Hydrographs are included as Figures 5 through 8 in this report. Groundwater elevations of both the first water and A1 zone tend to be higher in June and lower in December, which indicates a seasonal recharge in both hydrologic zones. In addition, the groundwater elevations in December 2003 are lower than those elevations from December 2002 in both the first water and A1 zones. The groundwater elevations from the southern first water monitoring wells (except MW-12) appear to be rising since the previous monitoring episode. Whereas groundwater elevations from the central and northern first water monitoring wells (except MW-19) have dropped since the last groundwater monitoring episode. Groundwater elevations in the A1 zone have also dropped since the December 2003 groundwater sampling episode.

## 6.0) GROUNDWATER MONITORING PROTOCOL

The purpose of the proposed groundwater monitoring was to provide data regarding the piezometric surface, water quality, and the presence of free product (FP), if any on a quarterly basis to the DTSC. Groundwater monitoring consisted of such activities as water level measurement, well sounding for detection of FP, collection of groundwater samples, field analysis, laboratory analysis, and reporting. The proposed work was performed as follows:

The depth to groundwater was measured in each well using a decontaminated water level indicator capable of measuring to with 1/100th of a foot. Prior to and following collection of measurements from each well, the portions of the water level indicator entering groundwater were decontaminated using a 3-stage decontamination procedure consisting of a potable wash with water containing Liquinox soap followed by a double purified water rinse. The depth to water was measured in all monitoring wells before any of the wells were purged. Wells were measured in the order of least contaminated to the most contaminated based on past analysis. For the ACC wells, the following order of wells was followed: MW-23, MW-24, MW-25, MW-20, MW-17, MW-12, MW-13, MW-9, MW-15, MW-14, MW-22, MW-11, MW-21, MW-26, MW-10, MW-4, MW-6, MW-16, MW-10, MW-19 and MW-18.

The well box and casing were opened carefully to preclude debris or dirt from falling into the open casing. Once the well cap was removed, the water level indicator was lowered into the well until a consistent tone was registered. Several soundings were repeated to verify the measured depth to groundwater. The depth of groundwater was measured from a reference point marked on the lip of each well casing. A licensed surveyor has surveyed the elevation of each reference point. The result was recorded on the field sampling log for each well. Other relevant information such as physical condition of the well, presence of hydrocarbon odors, etc. was also recorded as appropriate on the field sampling log.

The well sounder used for this project was equipped to measure free product (FP) layers thicker than 0.1 inches. FP was indicated as light non-aqueous phase liquid (LNAPL) or dense non-aqueous phase liquid (DNAPL).

Groundwater purging was conducted immediately following the sounding of all monitoring wells. Groundwater samples were analyzed for the following constituents (new wells for TPH-gas and VOCs only):

- Volatile organic compounds (VOCs) using EPA Method 8260B to include all Tentatively Identified Compounds (TICs).
- Total Petroleum Hydrocarbons as gasoline (TPH-gas) using EPA Method 8015 modified.
- Total dissolved solids (TDS) using EPA Method 160.1.

- Nitrates, chloride, sulfate, sulfide, ferrous iron, and manganese using EPA Methods 352.1, 325.3, 375.4, 376.1, 7380, and 7460, respectively.
- Alkalinity, carbonates, and bicarbonates using EPA Methods 310.1 and Standard Method 4500.
- Total organic carbon (TOC) and dissolved organic carbon (DOC) using EPA Method 415.1.
- 1,4-Dioxane using EPA method 8270.
- Ethylene using GC/FID.

## 6.1) Well Purging and Measurement of Field Parameters

Wells were purged in the above mentioned order (see Section 5.0) to minimize the potential for cross contamination. One equipment blank was collected daily to assess whether cross contamination has occurred. The wells were purged by Blaine Tech Services, Inc (Blaine) and sampled by BEII from March 18 to March 19, 2004 with partial attendance of Mr. Sanford Britt of the DTSC. Diffusion bags were removed on March 24, 2004. The purge protocol was presented in the Field Sampling Plan as Appendix A in the Groundwater Monitoring Work Plan dated October 23, 2001 and submitted to the DTSC.

Prior to purging, casing volumes was calculated based on total well depth, standing water level, and casing diameter. One casing volume was calculated as:

$$V = \pi(d/2)^2 h \times 7.48$$

where:

V is the volume of one well casing of water (in gallons, 1 $ft^3$ = 7.48 gallon);
d is the inner diameter of the well casing (in feet); and
h is the total depth of water in the well - the depth to water level (in feet).

A minimum of three casing volumes of water was purged from each well. Water was collected into a measured bucket to record the purge volume. All purged groundwater was containerized in 55-gallon hazardous waste drum for disposal at a later date.

The pump was initially set at approximately 2-feet below the measured groundwater level in each well. The pump was lowered slowly as the groundwater receded. This ensured that fresh formation water was sampled from each well. Great care was used when deploying the pump to avoid touching the bottom of the well and when initiating the pump to minimize sediment disturbances within the well from purging. A low pump rate of 1 gallon per minute (gpm) was used to prevent dewatering. None of the wells dewatered during this sampling episode.

After each well casing volume was purged; water temperature, pH, specific conductance (EC), and turbidity were measured using field test meters and the measurements were recorded on Well Monitoring Data Sheets (See Appendix A). Samples were collected after these parameters have stabilized; indicating that representative formation water has entered the well. The temperature, pH, and specific conductance should not vary by more than 10 percent from reading to reading. Turbidity should be less then 5 NTUs, however, the purging process stirred up silty material in each well which made the turbidity measurements of 5 NTUs unattainable. Groundwater samples were collected after water levels recharged to 80 percent of the static water column. Notations of water quality including color, clarity, odors, sediment, etc. were also noted in the data sheets.

All field meters were calibrated according to manufacturers' guidelines and specifications before and after each day of field use. Field meter probes were decontaminated before and after use at each well. The pH, conductivity, and temperature were measured with a Myron-L Ultra Meter and turbidity was measured with a HF Scientific DRT-15C meter. The calibration standards used for pH were 4 and 7 with expiration dates of July 2004. Conductivity was calibrated to a 3900 µs standard with an expiration date of July 2004. A 0.02 NTU standard was used to calibrate the turbidity with an expiration date of July 2004.

### 6.2) Well Sampling

Groundwater samples were collected by lowering a separate disposable bailer into each well. Groundwater was transferred from the bailer directly into the appropriate sample containers with preservative, if required, chilled, and processed for shipment to the laboratory. When transferring samples, care was taken not to touch the bailer-emptying device to the sample containers. Diffusion bags were used to collect water samples from MW-23, MW-24, and MW-25 at 2.5-feet and 7.5-feet above the well casing bottom. Water samples were transported to Southland Technical Services, Inc., a certified laboratory by the California Department of Health Services (Cert. #1986) to perform the requested analysis.

Groundwater samples were collected from monitoring in the following order: MW-20, MW-17, MW-12, MW-13, MW-9, MW-15, MW-14, MW-22, MW-11, MW-21, and MW-26. Groundwater samples were collected from MW-22 and MW-26 without purging for fear of complete dewatering with minimal recharge. Monitoring wells MW-23, MW-24 and MW-25 contained diffusion bags and were sampled on March 24, 2004. Monitoring wells MW-4, MW-6, MW-8, MW-10, MW-16, MW-18 and MW-19 identified FP as LNAPL at a thickness of 0.05-feet, 0.08-feet, 0.19-feet, 0.29-feet, 0.19-feet, 2.77-feet and

1.51-feet, respectively. The FP thickness in MW-6 is assumed based on the depth of the well bottom since no water was identified in the well.

Vials for VOC and TPH analysis were filled first to minimize aeration of groundwater collected in the bailer. The laboratory provided vials containing sufficient HCl preservative to lower the pH to less than 2. The vials were filled directly from the bottom-emptying device. The vial was capped with a cap containing a Teflon septum. Blind duplicate samples for the laboratory were labeled as "MW-1" and "MW-2" and were collected from monitoring wells MW-9 and MW-14, respectively. Equipment blanks were collected each day; one before purging MW-13 and MW-22. All vials were inverted and tapped to check for bubbles to insure zero headspace.

New nitrile gloves were worn during by sampling personnel for each well to prevent cross contamination of the samples. A solvent free label was affixed to each sample container/vial denoting the well identification, date and time of sampling, and an identifying code to distinguish each individual bottle.

### 6.3) Sample Handling

VOA vials, including laboratory trip blanks, were placed inside of one new Ziplock bag per well and stored in a cooler chilled to approximately 4°C with bagged ice. Water samples were logged on the chain-of-custody forms immediately following sampling of each well to insure proper tracking through analysis to the laboratory.

### 6.4) Waste Management

FP, purged groundwater, and decontamination water were stored in sealed 55-gallon drums for a period not to exceed 90 days. Stored wastes will be profiled for hazardous constituents and characterized as Non-Hazardous, California Hazardous, or RCRA Hazardous, as appropriate. Any transportation of waste will be under appropriate manifest. The purge water generated from previous groundwater sampling events (1,000 gallons) have been removed under manifest by Asbury Environmental Services to the Demenno/Kerdoon facility in Compton for disposal (See Appendix B for manifest).

## 7.0) FREE PRODUCT

Monitoring wells MW-4, MW-6, MW-8, MW-10, MW-16, MW-18 and MW-19 identified FP as LNAPL at a thickness of 0.05-feet, 0.08-feet, 0.19-feet, 0.29-feet, 0.19-feet, 2.77-feet and 1.51-feet, respectively. Each well that contains or has contained FP is tabulated as follows with the total amount of FP removed since each well was installed.

| Well ID | FP Removed (gallons) |
|---|---|
| MW-4 | 0.75 |
| MW-6 | 2 |
| MW-8 | 12.25 |
| MW-10 | 0.25 |
| MW-16 | 1 |
| MW-18 | 28.75 |
| MW-19 | 2.75 |

Laboratory analysis of FP was performed in October 2001 from MW-6, in June 2002 from MW-6 and MW-8, in December 2003 from MW-16 and MW-19 and in March 2004 from MW-10, MW-18 and MW-19. Laboratory analysis results are presented in Table 2. Based on the results, the FP contained in MW-6 and MW-8 appears to be different from the FP contained in MW-10, MW-16 and MW-19 when comparing TPH-gas concentrations. Furthermore, the VOC analysis results indicate that FP from MW-10 and MW-18 are similar compared to the FP from MW-19.

## 8.0) GROUNDWATER SAMPLE RESULTS

Groundwater samples collected from the first water zone monitoring wells MW-9, MW-11, MW-12, MW-22, and MW-26 in March 2004 contained dissolved TPH-gas ranging from 43,500 µg/L in MW-11 to 1,430 µg/L in MW-9. The second largest dissolved TPH-gas concentration in the first water was identified in MW-26 as 41,600 µg/L. See Table 3 and Figure 9 for dissolved TPH-gas concentrations. Graphs of dissolved contaminant concentrations over time are provided in Appendix D. Note that the previously high dissolved TPH-gas concentrations from MW-19, MW-10 and MW-18 represent the LNAPL that is now present in those first water wells.

Groundwater samples collected from the upper A1 zone monitoring wells MW-13, MW-14, MW-15, MW-17, MW-20 and MW-21 in March 2004 contained TPH-gas ranging from 2,650 µg/L in MW-21 to non-detect (<50 µg/L) in MW-13, MW-17 and MW-21. The lower A1 zone monitoring wells (MW-23, MW-24 and MW-25) were not analyzed for TPH-gas. See Table 3 and Figure 10 for dissolved TPH-gas concentrations. Contaminant graphs for the A1 zone identified higher dissolved TPH-gas concentrations in most wells during the month of December except for monitoring wells MW-15 and MW-21 located on the south side of the ACC site which identified maximum concentrations in March 2004.

Concentrations of dissolved BTEX ranged between 27,925 µg/L in MW-26 to <59.3 µg/L in MW-9 from the first water zone (See Table 4 and Figure 9 for dissolved BTEX concentrations). Monitoring well MW-11 also contained high levels of dissolved BTEX at 10,235 µg/L. Most of the total dissolved BTEX concentrations consist of benzene and toluene. Contaminant graphs for these two components are provided in Appendix D. In general, some first water wells contained their respective maximum dissolved benzene and toluene concentrations during the 3rd or 4th quarter.

Dissolved BTEX in the upper A1 zone ranged between 292 µg/L in MW-21 to <4 µg/L in MW-13, MW-17 and MW-20 (See Tables 4 and 5 and Figure 10 for dissolved BTEX concentrations). Like the first water zone, the upper A1 zone contains mostly benzene and toluene as the total dissolved BTEX concentration. Contaminant graphs for these two components contained higher dissolved benzene and toluene concentrations in most wells during the month of December except for monitoring wells MW-15 and MW-21 which identified maximum concentrations in March 2004. The lower A1 zone monitoring wells MW-23, MW-24, and MW-25 identified no detectable concentrations of dissolved BTEX.

Groundwater sample results from the first water zone identified high VOC concentrations compared to the relatively low VOC concentrations in the A1 zone (See Tables 4 and 5).

Dissolved PCE was identified in the first water zone at a maximum concentration of 4,160 µg/L from MW-26 located in the southwest corner of the ACC site. Dissolved TCE was also identified at a maximum of 3,000 µg/L from MW-26 in the first water zone (See Figure 11). Dissolved contaminant graphs identified elevated dissolved PCE and TCE concentrations from first water wells MW-9, MW-12 and MW-18 during the 3rd or 4th quarter groundwater monitoring episode. These three monitoring wells are located along the southern property boundary. Maximum concentrations of dissolved PCE and TCE in the upper A1 zone were detected as 347 µg/L and 240 µg/L, respectively in groundwater collected from MW-21 (See Figure 12). The lower A1 zone contained maximum concentrations of dissolved PCE as 263 µg/L and TCE as 74.5 µg/L from MW-24. Most wells in the A1 zone identified dissolved PCE at maximum concentrations during the second or third quarter groundwater monitoring episode (See Appendix D). No significant trends in dissolved TCE concentrations were identified in the A1 zone.

Dissolved concentrations of 1,1,1-TCA were identified in the first water zone at a maximum of 7,350 µg/L in MW-26 (See Figure 11). All other first water monitoring wells sampled contained dissolved 1,1,1-TCA at or below 170 µg/L. Contaminant graphs for the first water identified higher dissolved 1,1,1-TCA concentrations in most wells during the month of December. Lower concentrations of dissolved 1,1,1-TCA were detected in the A1 zone at a maximum of 186 µg/L in MW-21 (See Figure 12). Dissolved 1,1,1-TCA was also identified in MW-20 at 20.9 µg/L and in MW-15 at 7.7 µg/L. No significant concentrations of 1,1,1-TCA (above 2 µg/L) were detected in all other upper and lower A1 zone monitoring wells. Graphs of dissolved 1,1,1-TCA over time in the A1 zone identified elevated concentrations in wells MW-20 and MW-21.

Groundwater samples were also analyzed for 1,4-Dioxane, a preservative used in 1,1,1-TCA to prolong its shelf life. However, 1,4-Dioxane is more soluble in groundwater than 1,1,1-TCA and will often lead the dissolved 1,1,1-TCA plume. First water zone monitoring wells MW-9, MW-11, MW-12, MW-22 and MW-26 identified dissolved 1,4-Dioxane concentrations between 936 µg/L and <125 µg/L. Dissolved

concentrations in wells MW-16 and MW-9 have decreased over time while maximum concentrations were identified in wells MW-11, MW-22 and MW-26 during this quarter (See Appendix D). A1 zone monitoring wells MW-13, MW-14, MW-15, MW-17, MW-20, MW-21, MW-23, MW-24, and MW-25 identified dissolved 1,4-Dioxane concentrations between 314 µg/L and <3 µg/L. Contaminant graphs of dissolved 1,4-Dioxane over time identified maximum concentrations during the 2004 first quarter from MW-21, MW-15 and MW-14.

Concentrations of dissolved chlorinated VOC daughter products were relatively elevated compared to their respective parent VOCs identified above and also showed a trend of higher dissolved concentrations in the first water zone compared to the deeper A1 zone.

1,1-DCA is a daughter product from reductive dehalogenation of 1,1,1-TCA and from carbon-carbon double bond reduction of 1,1-DCE, another daughter product. Dissolved 1,1-DCA concentrations were identified between 52,700 µg/L and 485 µg/L in the first water zone (See Figure 11). The greatest dissolved 1,1-DCA concentration was observed in MW-11. Historic maximum concentrations were identified in MW-11, MW-22 and MW-26 during this quarter (See Appendix D). Dissolved 1,1-DCA concentrations in the upper A1 zone ranged between 2,240 µg/L and <1 µg/L (See Figure 12). Monitoring well MW-21 located along the southwest property boundary contained the highest dissolved 1,1-DCA concentrations from the upper A1 zone. The second highest dissolved 1,1-DCA concentration identified from MW-15 was only 674 µg/L. No detectable concentrations of dissolved 1,1-DCA were identified in the lower A1 zone. Most wells in the A1 zone identified dissolved 1,1-DCA at maximum concentrations during the month of December.

Dissolved 1,1-DCE, a daughter product of the dehydrohalogenation of 1,1,1-TCA and reductive dehalogenation of TCE, was identified at concentrations ranging from 7,740 µg/L to 7.3 µg/L in the first water zone (See Figure 11). The maximum dissolved 1,1-DCE concentration was observed in MW-26. The next largest dissolved 1,1-DCE concentration was identified as 1,260 µg/L in groundwater collected from MW-9. Historically, dissolved concentrations of 1,1-DCE fluctuate with no observable pattern (See Appendix D). Dissolved 1,1-DCE concentrations in the upper A1 zone ranged between 2,540 µg/L and 3.8 µg/L (See Figure 12). A1 zone monitoring well MW-21 located along the southwest property boundary contained the maximum dissolved 1,1-DCE concentration (2,540 µg/L). Concentrations of dissolved 1,1-DCE were identified at a maximum of 7.6 µg/L in the lower A1 zone from MW-24. Most wells in the A1 zone identified a decrease in dissolved 1,1-DCE over time except for MW-15 and MW-21 located on the south side of the ACC site, which contained maximum concentrations during this quarter.

Cis-1,2 DCE is also a daughter product of the dehydrohalogenation of 1,1,1-TCA and reductive dehalogenation of TCE. Concentrations of dissolved cis-1,2-DCE were

identified between 6,020 µg/L and 3.8 µg/L in the first water zone (See Figure 11). The greatest dissolved cis-1,2-DCE concentration was observed in MW-22 located along the southern boundary of the ACC site. Historically, dissolved concentrations of cis-1,2-DCE fluctuate with no observable pattern (See Appendix D). Dissolved cis-1,2-DCE concentrations in the upper A1 zone ranged between 2.2 µg/L and up to a maximum of 4,090 µg/L identified from MW-21 (See Figure 12). Upper A1 zone monitoring well MW-15 contained the second largest dissolved cis-1,2-DCE concentration of 2,890 µg/L. The lower A1 zone contained dissolved cis-1,2-DCE at a maximum of 11.7 µg/L from MW-24. Contaminant graphs from the A1 zone identified a general decrease in dissolved cis-1,2-DCE over time with the exception of MW-15 and MW-21.

Vinyl chloride (VC) is a by-product from the dehydrohalogenation and reductive dehalogenation of the chlorinated VOC daughter products mentioned above. Similar to the other VOCs, concentrations of dissolved VC were at lower concentrations in the deeper A1 zone than in the first water zone. Dissolved VC concentrations were identified between 1,190 µg/L and 8.5 µg/L in the first water zone (See Figure 11). Monitoring well MW-10 contained the largest dissolved VC concentration in the first water zone. In general, an increase in VC in the first water zone was observed over time (See Appendix D). Dissolved VC concentrations in the upper A1 zone ranged from 546 µg/L to <1 µg/L (See Figure 12). The maximum dissolved VC concentration was located along the southwest property line in monitoring well MW-15. No detectable concentrations of dissolved VC were identified in the lower A1 zone. The A1 zone wells observed maximum dissolved VC concentrations during the month of December. Monitoring wells MW-15 and MW-21 identified an increase in dissolved VC this quarter.

Dissolved methylene chloride (MC) concentrations were identified between 9,300 µg/L and <5 µg/L in the first water zone (See Figure 11). Monitoring well MW-26 located along the southwest boundary of the site contained the maximum dissolved methylene chloride concentration in the first water. Methylene chloride was <10 µg/L in MW-21 and <2 µg/L in the remaining upper and all lower A1 zone monitoring wells sampled (See Figure 12).

Maximum dissolved concentrations of acetone and MEK were identified in first water zone monitoring well MW-11 as 33,000 µg/L and 13,600 µg/L, respectively (See Figure 13). Groundwater collected from MW-26 also identified elevated concentrations of dissolved acetone as 10,200 µg/L and dissolved MEK as 6,050 µg/L. Historically, dissolved concentrations of acetone and MEK fluctuate with no observable pattern (See Appendix D). No detectable concentrations of acetone or MEK were identified above method detection limit from the 2004 first quarter groundwater monitoring episode in both the upper and lower A1 zone (See Figure 14).

Dissolved concentrations of MIBK were identified at a maximum of 6,600 µg/L from monitoring well MW-26 in the first water. No detectable concentrations of dissolved MIBK (<250 µg/L to <10 µg/L) were identified in the remaining first water

wells sampled this quarter (See Figure 13). No detectable concentrations (<25 μg/L to <5 μg/L) were identified in all upper and lower A1 zone monitoring wells (See Figure 14).

Most groundwater samples were also analyzed for biodegradation indicators (See Table 6 for laboratory results). Further comparative data needs to be acquired prior to evaluating biodegradation processes. Subsequent groundwater analysis will include these biodegradation indicators. All groundwater laboratory analytical reports for the 2004 1st quarter groundwater monitoring episode are included as Appendix C.

## 9.0) CONCLUSIONS

Based on groundwater elevation data, BEII concludes that seasonal changes affect both the first water and A1 zones. Both groundwater zones observed a period of discharge during winter and recharge during summer months.

Based on the recent groundwater sample results, BEII concludes that the site is impacted by LNAPL in the first water and dissolved VOCs in both the first water and A1 zones. LNAPL was identified in six first water monitoring wells (MW-6, MW-8, MW-10, MW-16, MW-18 and MW-19). Elevated dissolved phase VOCs were identified in first water monitoring wells MW-11 and MW-26. Dissolved VOC concentrations, however, were detected at higher concentrations in the first water zone compared to the A1 zone. A1 zone monitoring wells located along the southern property boundary (MW-15 and MW-21) contained the maximum dissolved VOC concentrations in that aquifer.

BEII also concludes that the recent groundwater sampling data provides preliminary support that the site has potential for intrinsic biodegradation. Dissolved parent VOC (PCE and TCE) concentrations were identified at concentrations < 4,200 μg/L. 1,1,1-TCA was the only parent VOC that was identified at greater than 7,000 μg/L exclusively in MW-26. Daughter VOC constituents such as 1,1-DCA, 1,1-DCE, cis-1,2-DCE, and VC identified dissolved concentrations of up to 52,700 μg/L. The low parent VOC concentration to high daughter VOC concentration ratio is a preliminary indicator of intrinsic biodegradation. However, further groundwater monitoring is needed to determine whether intrinsic biodegradation is occurring.

## 10.0) RECOMMENDATIONS

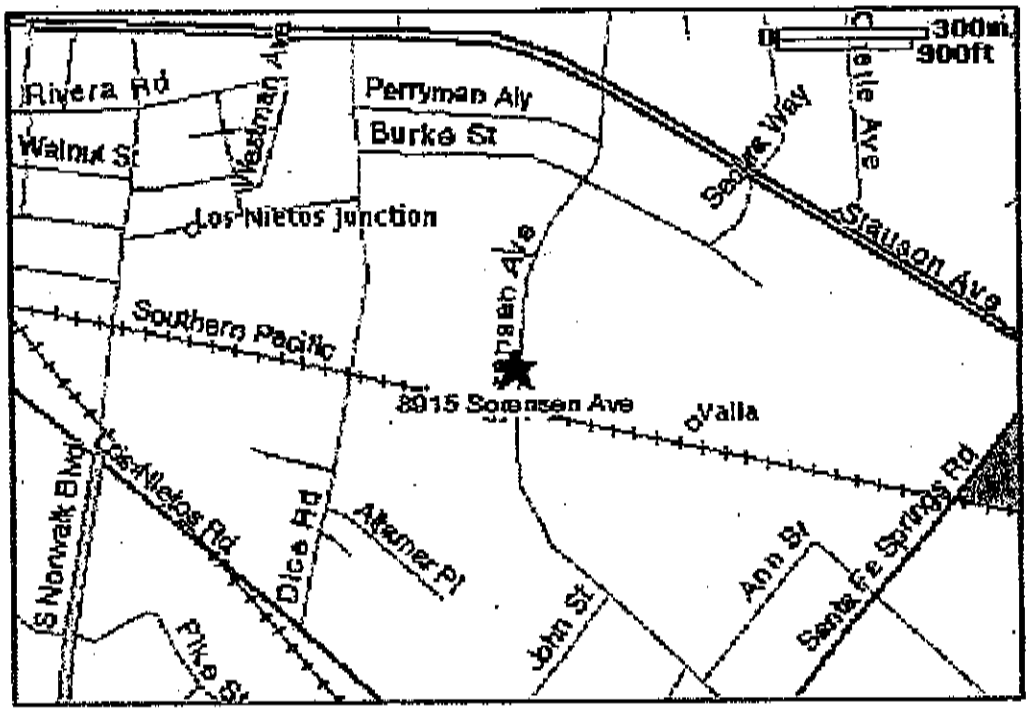
BEII recommends that quarterly groundwater monitoring for VOCs and TPH-gas be continued at the former ACC property. BEII further recommends that free product removal be performed on a monthly basis to reduce its mass. It is anticipated that an automated free product recovery system will be in place this summer provided that the on-site security is in place. BEII is currently developing the groundwater remedial investigation/feasibility study report.

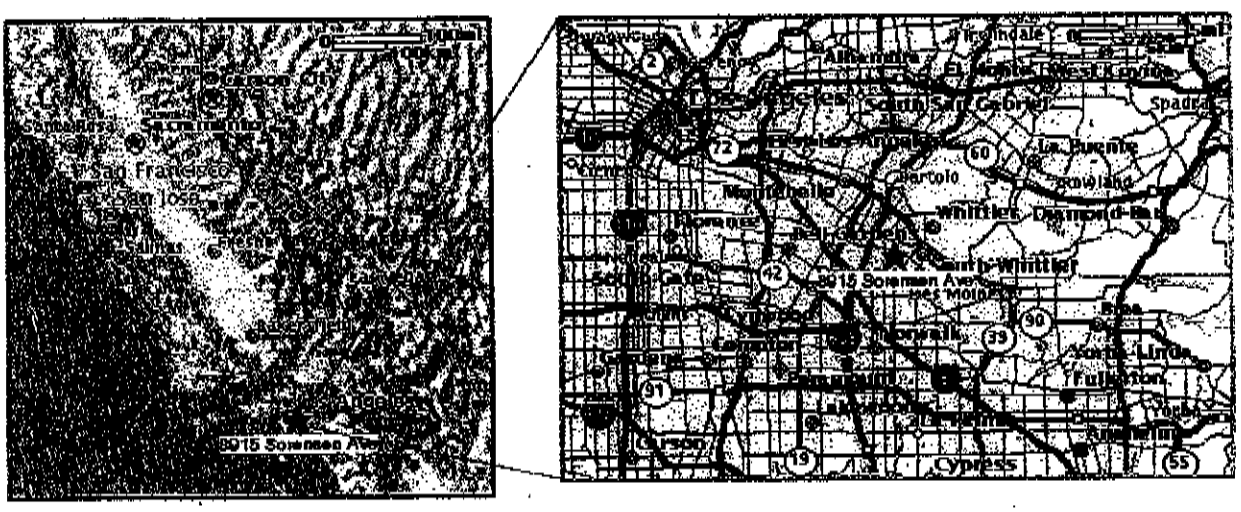
# FIGURES

ANCHEM0435

'ebs Co. 1-800-322-3022

Recycled Stock # Blakley-6-S



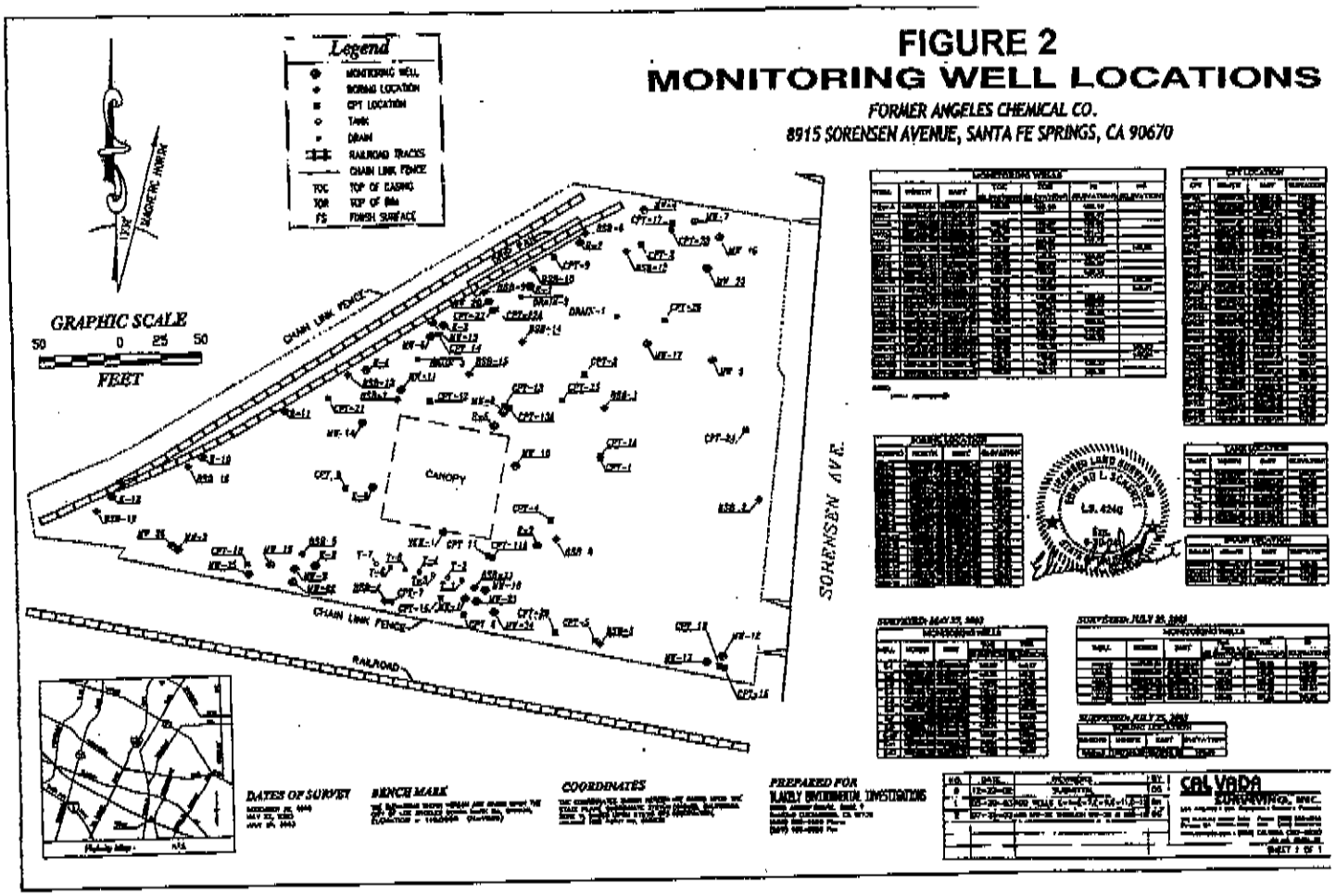




| Blakely Environmental Investigations, Inc.<br>4359 Phelan Road<br>Phelan, CA 92371 | Site Location Map<br>Former Angeles Chemical Company<br>8915 Sorensen Ave., Santa Fe Springs, CA 90670 | FIGURE<br>1 |
|---|---|---|

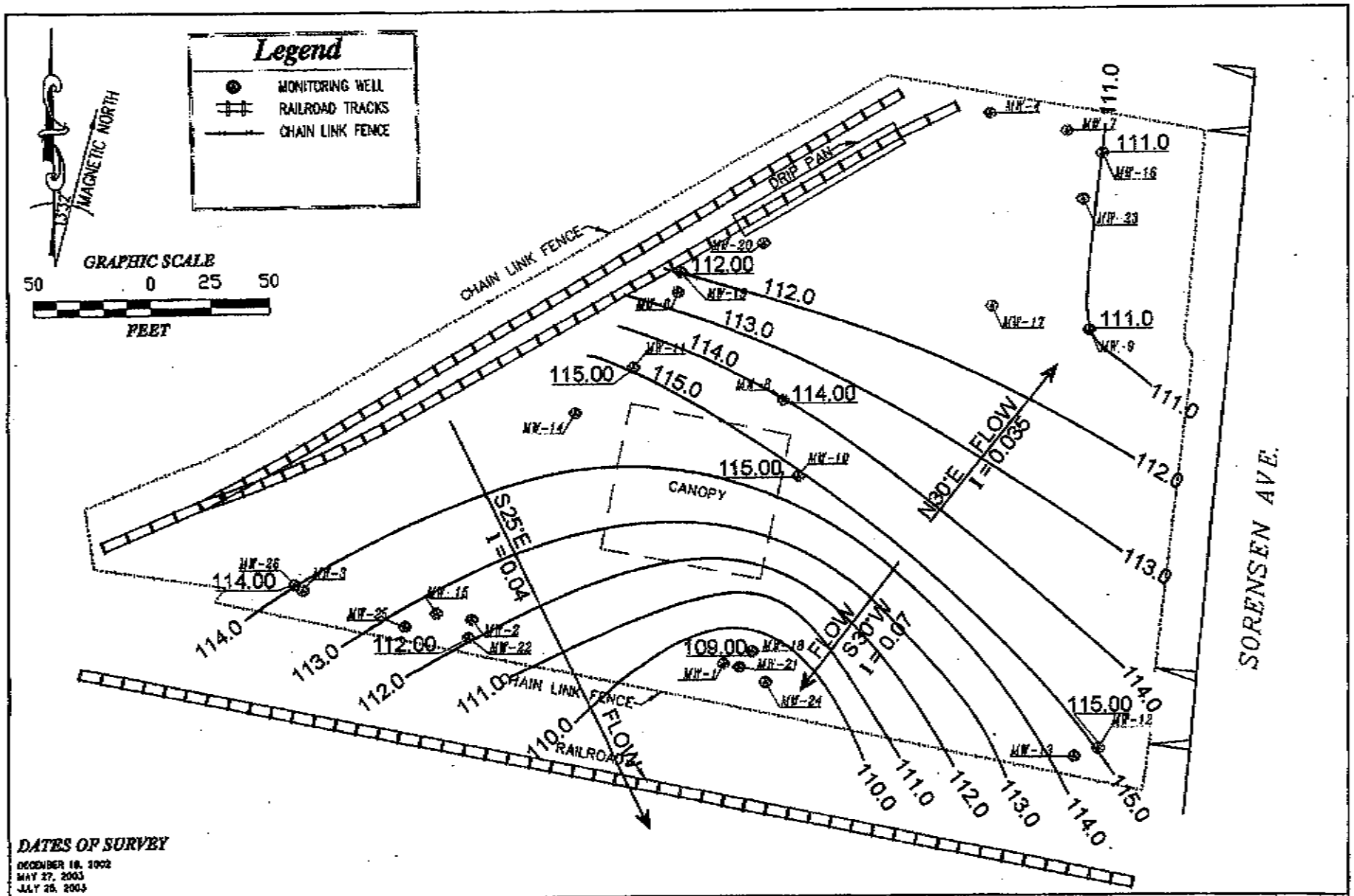
ANCHEM0436

# FIGURE 2
# MONITORING WELL LOCATIONS

*FORMER ANGELES CHEMICAL CO.*
*8915 SORENSEN AVENUE, SANTA FE SPRINGS, CA 90670*



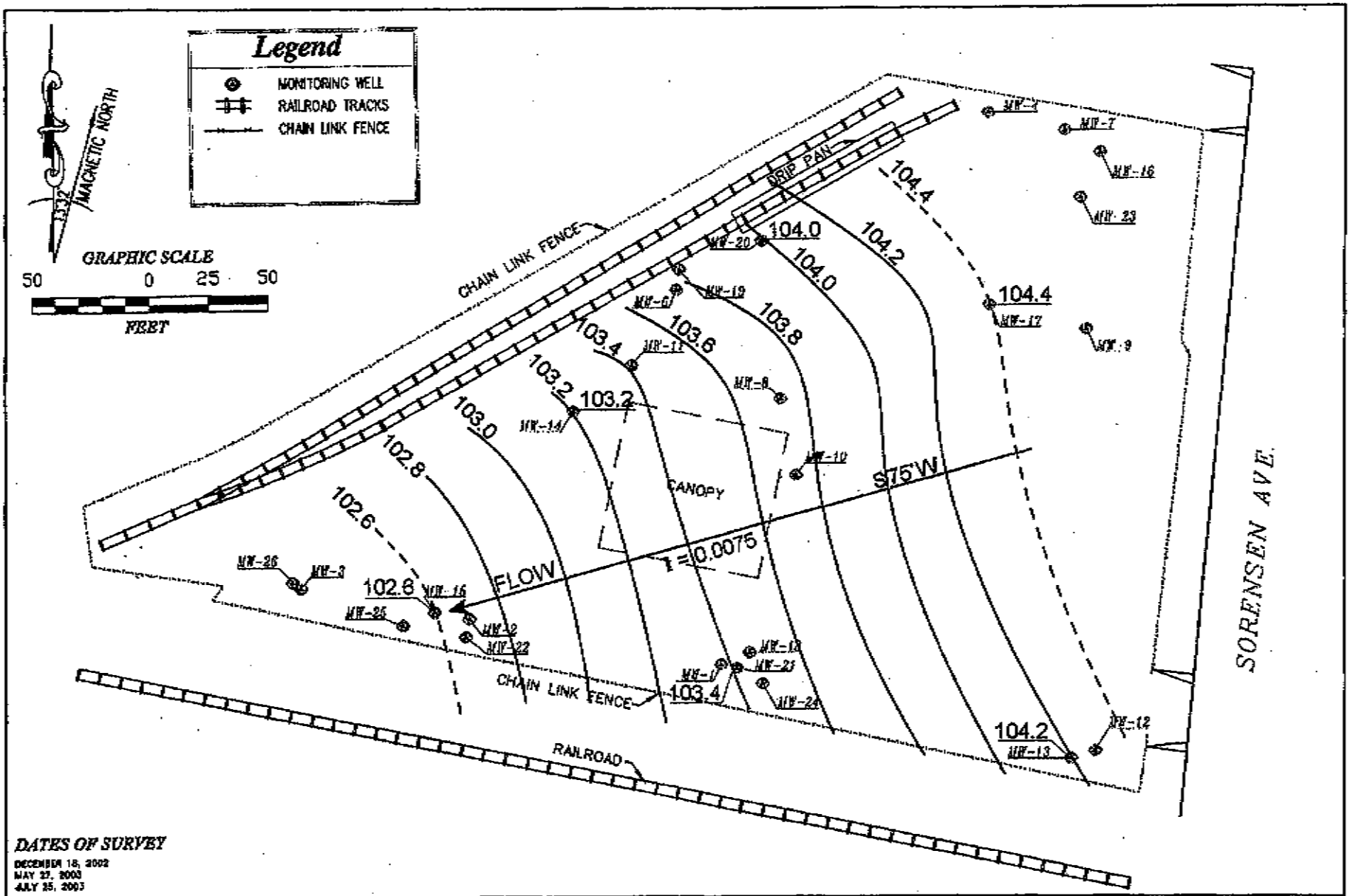

ANCHEM0437




DATES OF SURVEY
DECEMBER 18, 1992
MAY 27, 2003
JULY 25, 2003

| Prepared by: Blakely Environmental Investigations, Inc. 4359 Phelan Road, Phelan, CA 92371 | First Water Potentiometric Gradient<br>Former Angeles Chemical Company, 8915 Sorensen Ave., Santa Fe Springs, CA 90670 | FIGURE 3 |
|---|---|---|

ANCHEM0438

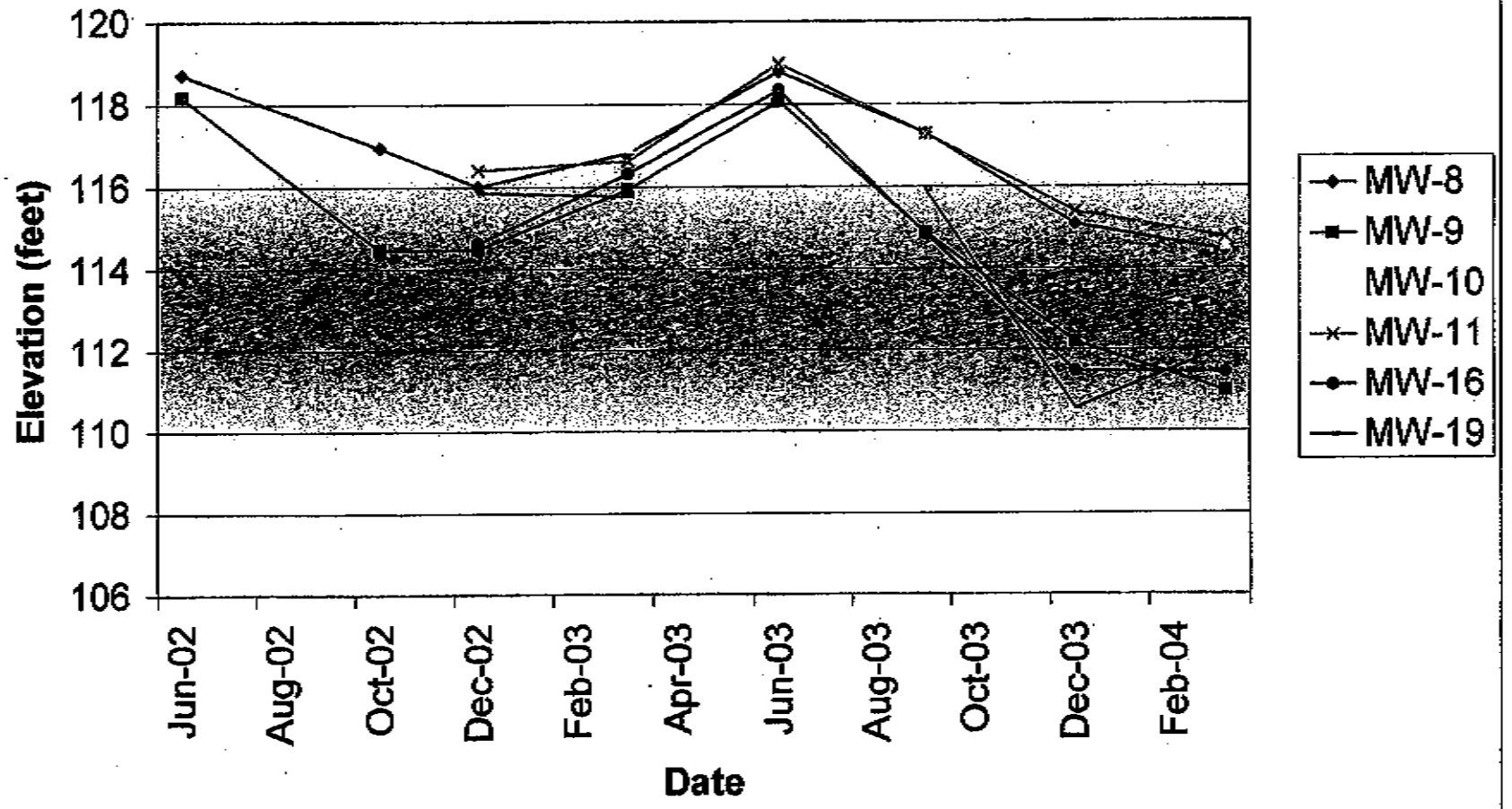



**DATES OF SURVEY**
DECEMBER 18, 2002
MAY 27, 2003
JULY 25, 2003

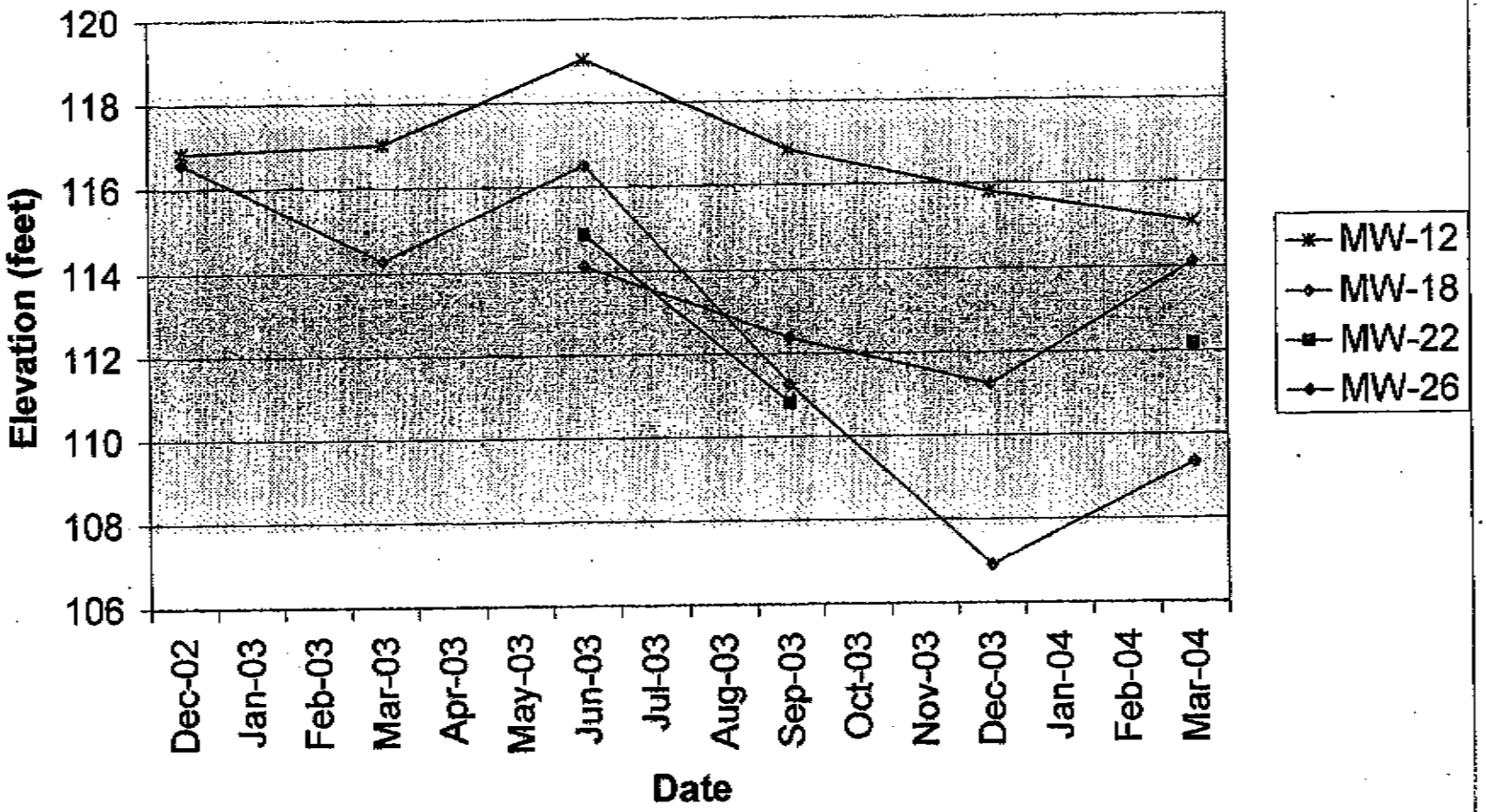
| Prepared by: Blakely Environmental Investigations, Inc. 4359 Phelan Road, Phelan, CA 92371 | A1 Zone Potentiometric Gradient<br>Former Angeles Chemical Company, 8915 Sorensen Ave., Santa Fe Springs, CA 90670 | FIGURE 4 |
|---|---|---|

ANCHEM04-39

## Figure 5: First Water Groundwater Elevations from Central and Northern Wells



## Figure 6: First Water Groundwater Elevations from Southern Wells



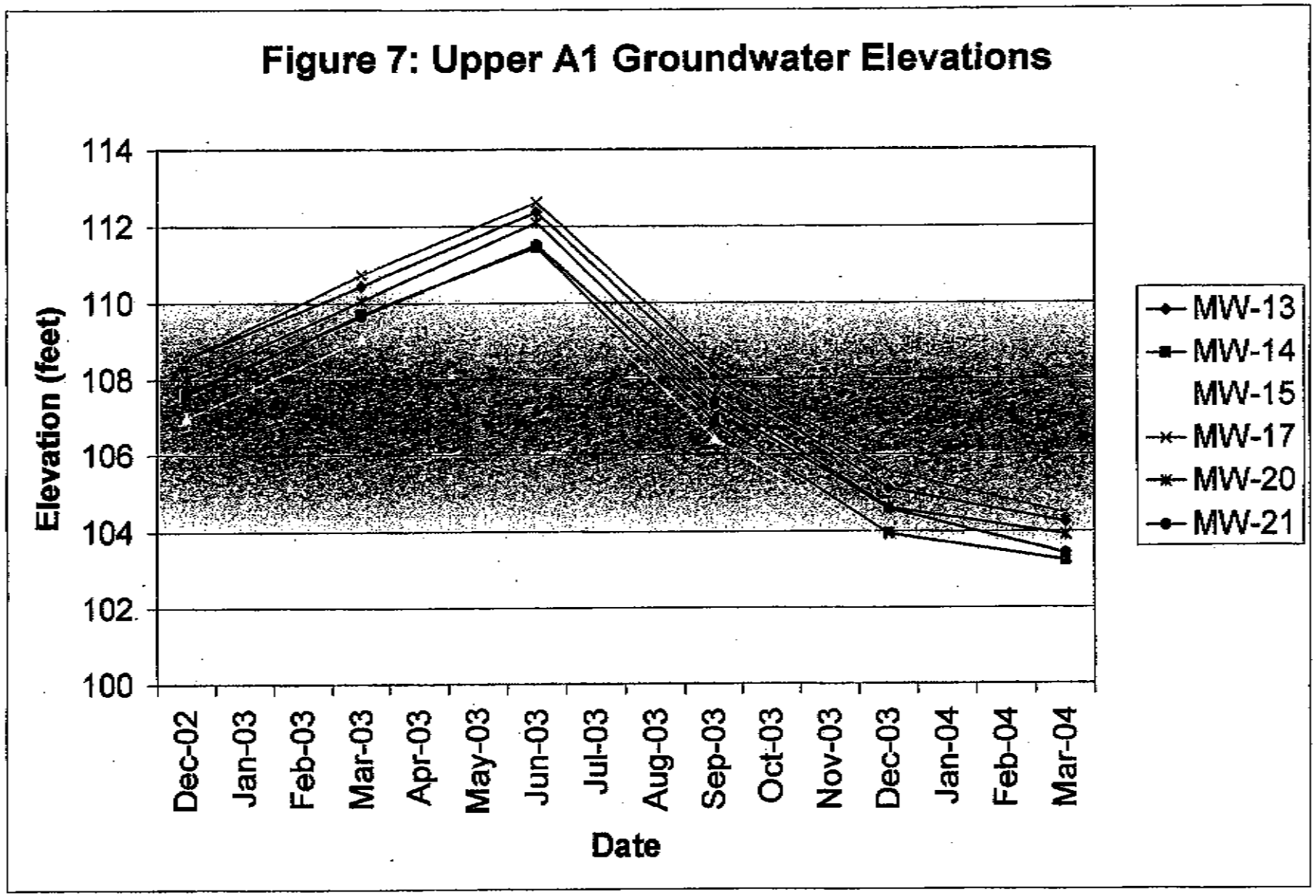


Figure 7: Upper A1 Groundwater Elevations
Elevation (feet)
114
112
110
108
106
104
102
100
Dec-02
Jan-03
Feb-03
Mar-03
Apr-03
May-03
Jun-03
Jul-03
Aug-03
Sep-03
Oct-03
Nov-03
Dec-03
Jan-04
Feb-04
Mar-04
Date
MW-13
MW-14
MW-15
MW-17
MW-20
MW-21

ANCHEM0442

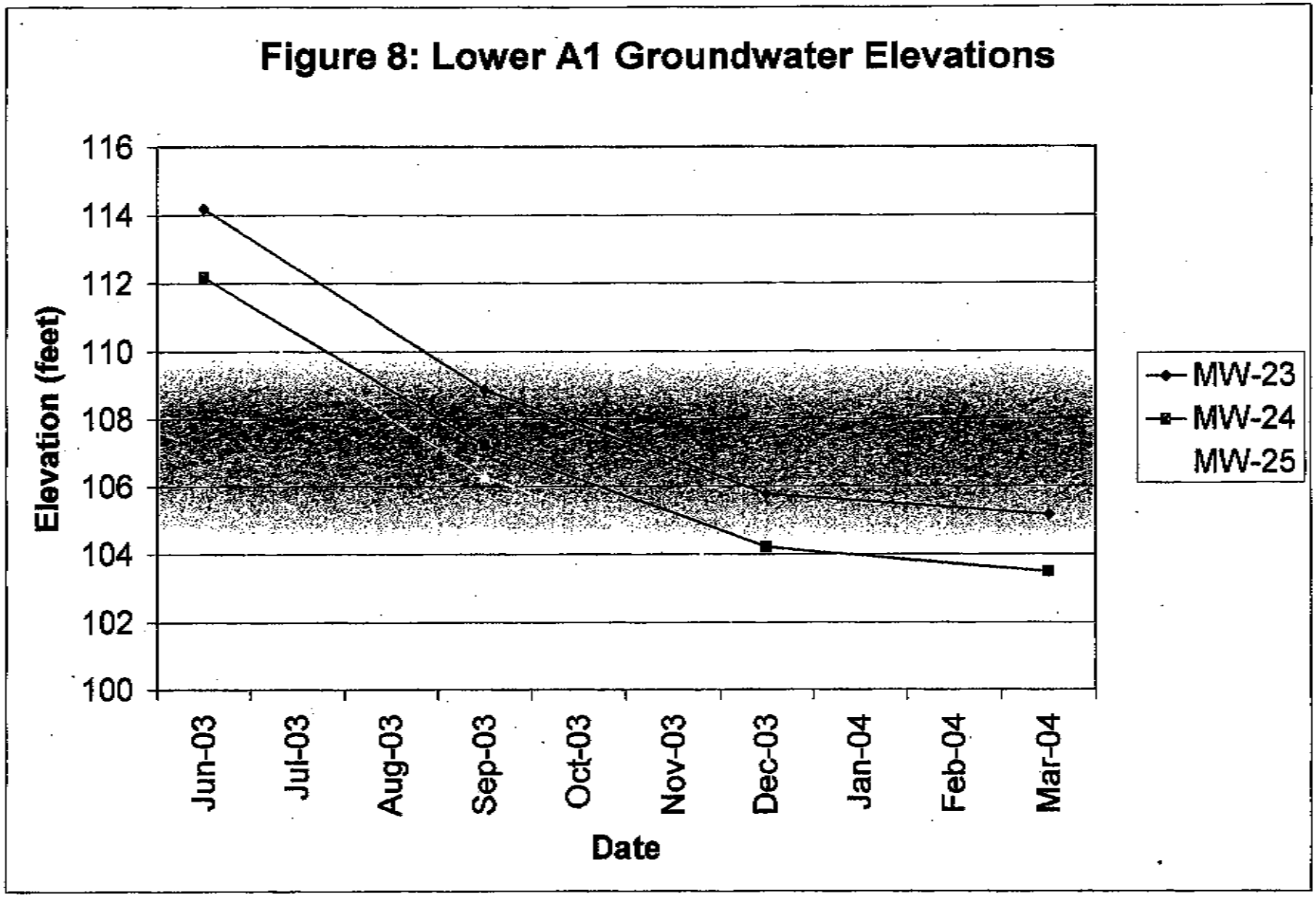
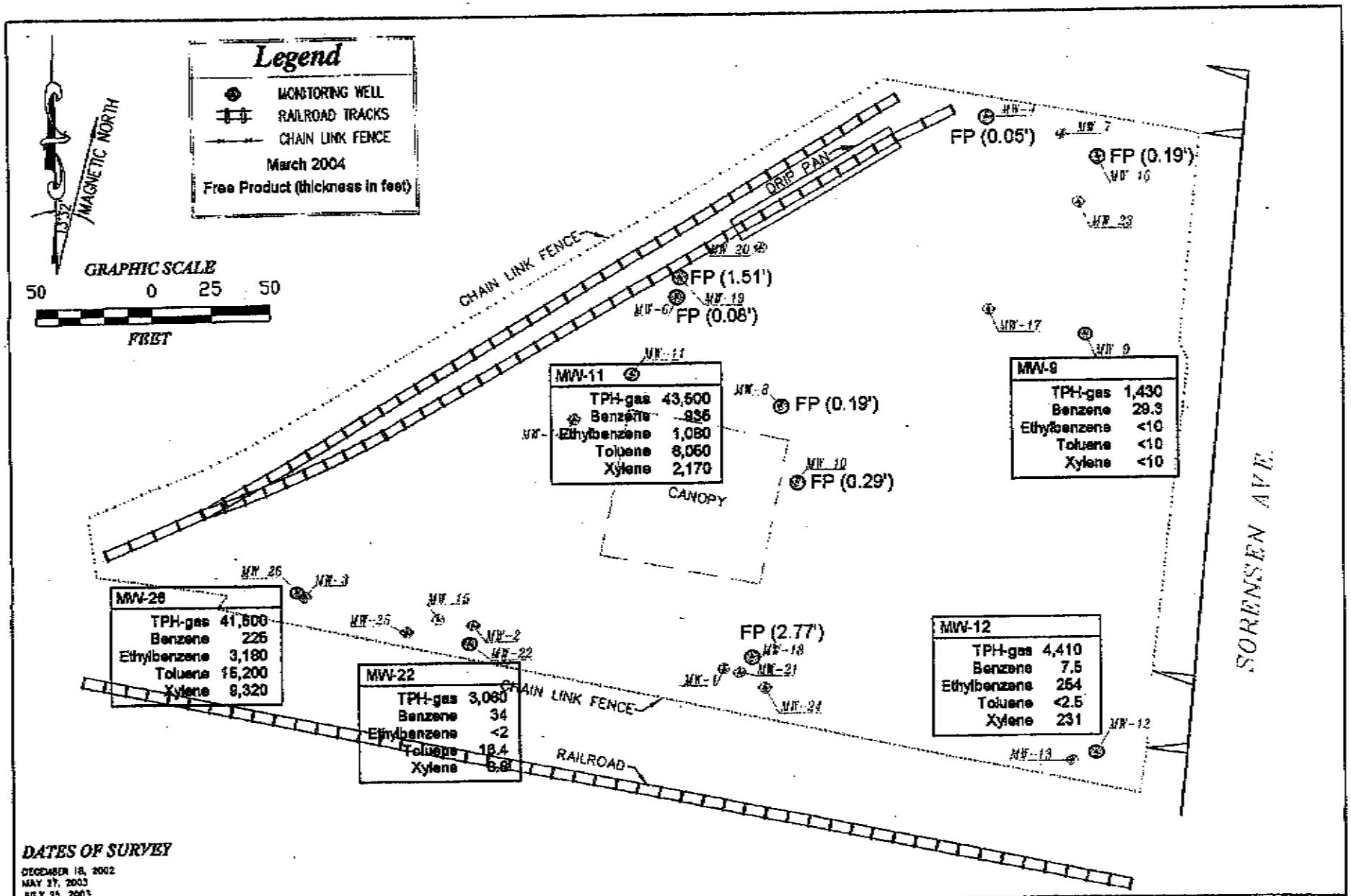


Figure 8: Lower A1 Groundwater Elevations
Elevation (feet)
116
114
112
110
108
106
104
102
100
Jun-03
Jul-03
Aug-03
Sep-03
Oct-03
Nov-03
Dec-03
Jan-04
Feb-04
Mar-04
Date
MW-23
MW-24
MW-25

ANCHEM0443




**DATES OF SURVEY**

DECEMBER 18, 2002
MAY 27, 2003
JULY 25, 2003

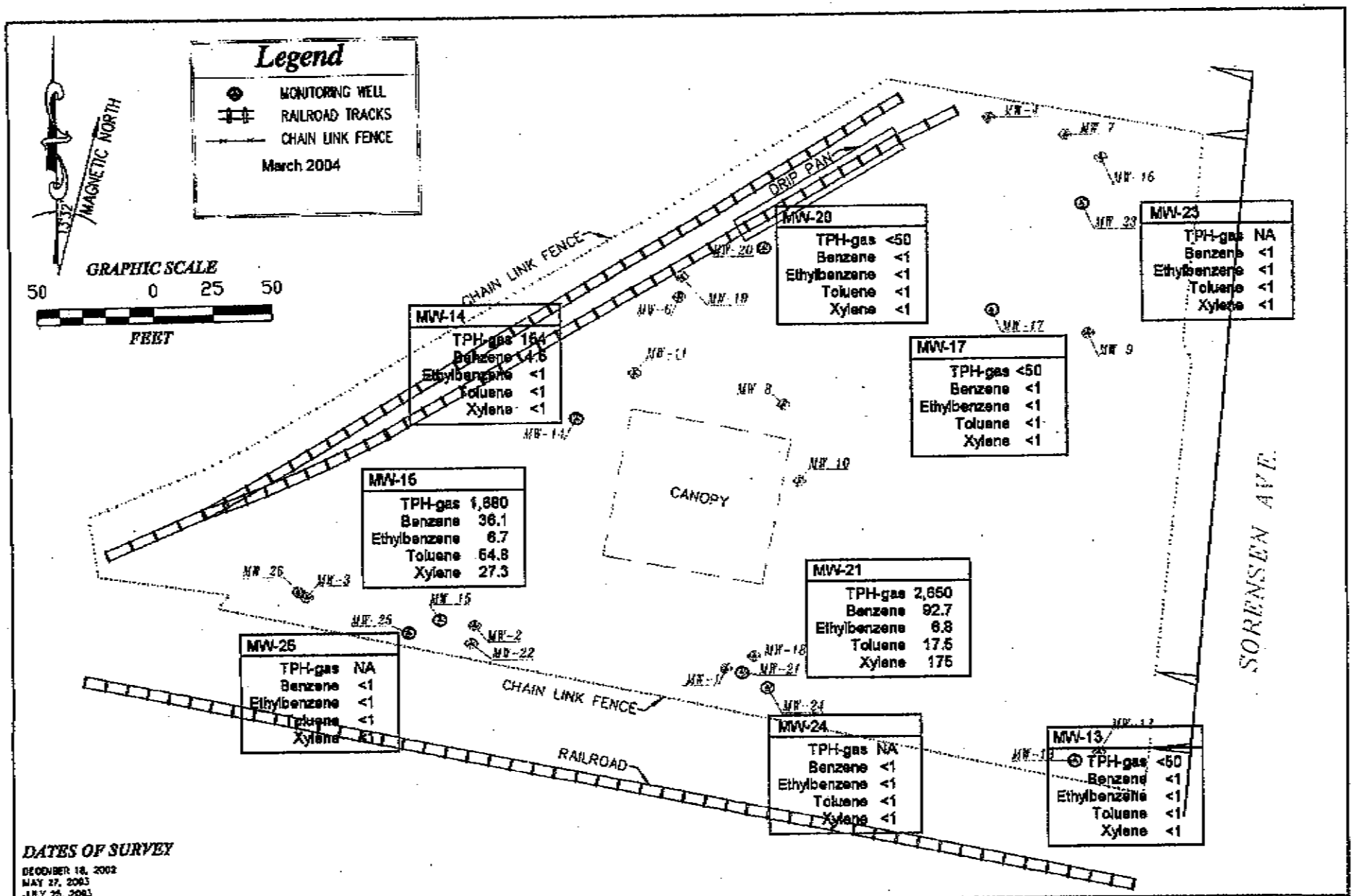
Prepared by:
Blakely Environmental Investigations, Inc.
4359 Phelan Road, Phelan, CA 92371

TPH-gas and BTEX Concentrations in First Water (µg/L)

Former Angeles Chemical Company, 8915 Sorensen Ave., Santa Fe Springs, CA 90670

FIGURE 9

ANCHEM0444



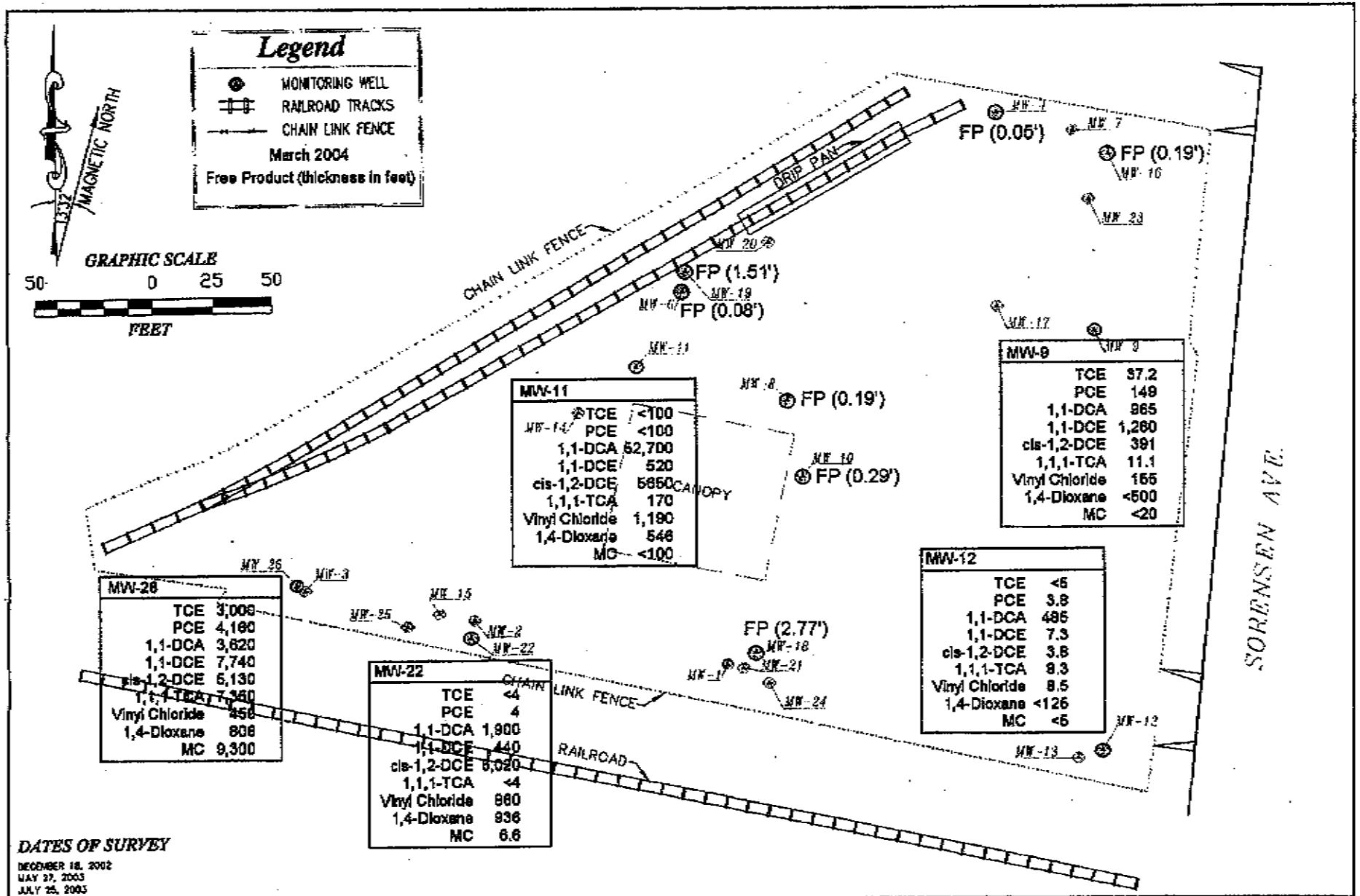

Prepared by:
Blakely Environmental Investigations, Inc.
4359 Phelan Road, Phelan, CA 92371

TPH-gas and BTEX Concentrations in Upper and Lower A1 Zones (µg/L)

Former Angeles Chemical Company, 8915 Sorensen Ave., Santa Fe Springs, CA 90670

FIGURE 10

ANCHEM0445



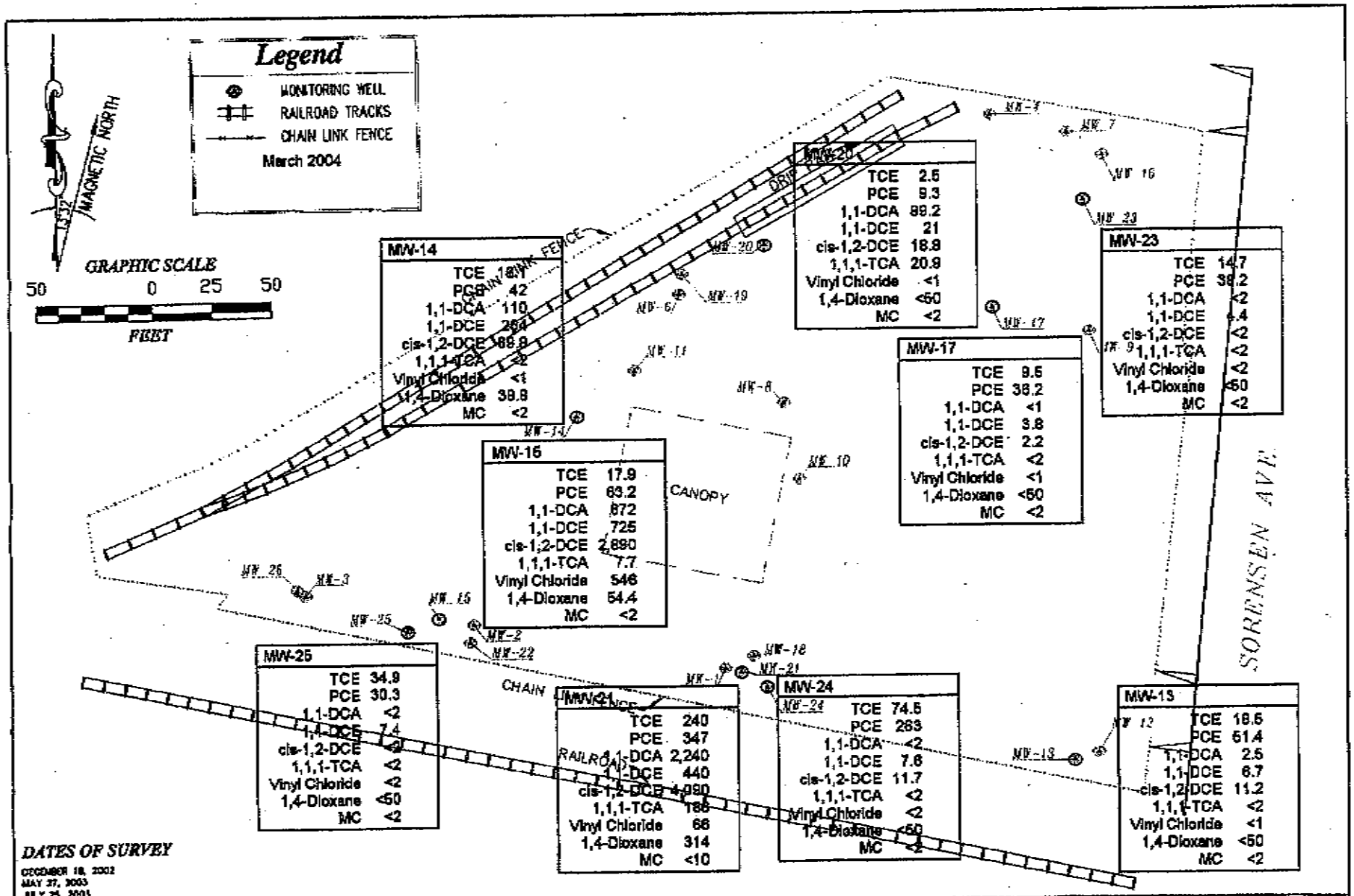

Prepared by:
Blakely Environmental Investigations, Inc.
4359 Phelan Road, Phelan, CA 92371

Chlorinated VOCs and 1,4-Dioxane Concentrations in First Water (µg/L)

Former Angeles Chemical Company, 8915 Sorensen Ave., Santa Fe Springs, CA 90670

FIGURE 11

ANCHEM0446



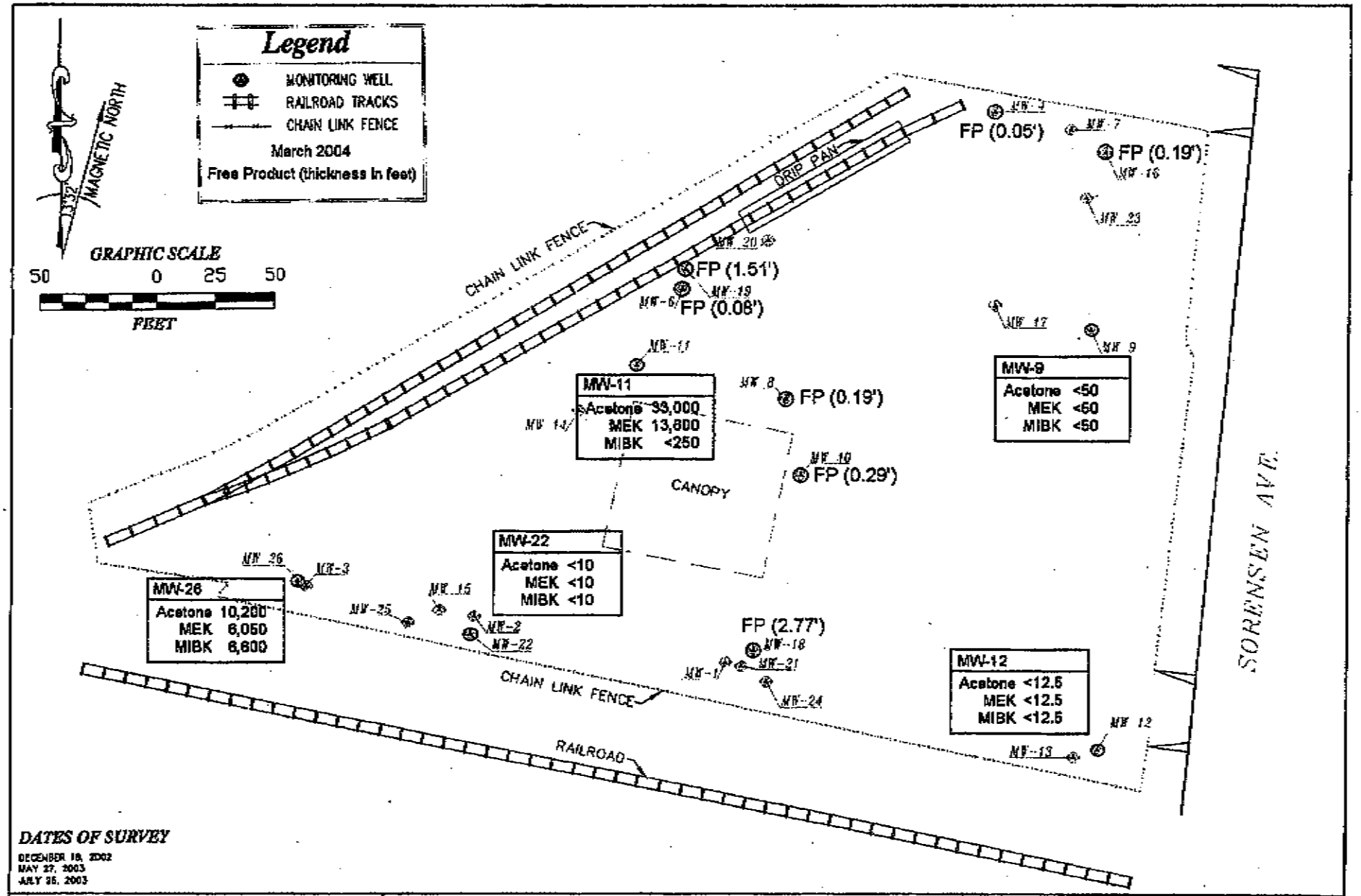

Prepared by:
Blakely Environmental Investigations, Inc.
4359 Phelan Road, Phelan, CA 92371

Chlorinated VOCs and 1,4-Dioxane Concentrations in Upper and Lower A1 Zones (µg/L)

Former Angeles Chemical Company, 8915 Sorensen Ave., Santa Fe Springs, CA 90670

FIGURE 12

ANCHEM0447



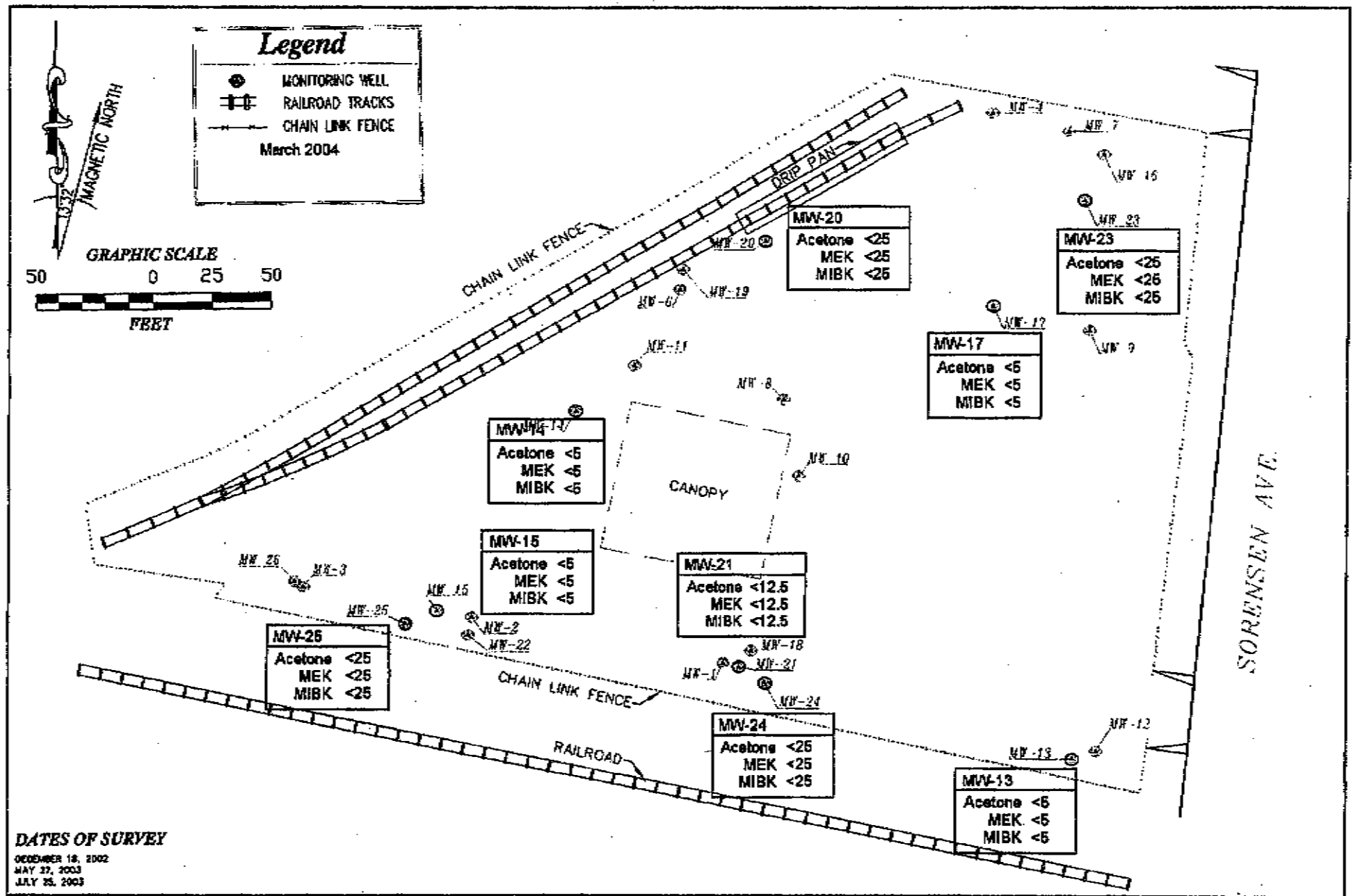

Prepared by:
Blakely Environmental Investigations, Inc.
4359 Phelan Road, Phelan, CA 92371

Acetone, MEK and MIBK Concentrations in First Water (µg/L)

Former Angeles Chemical Company, 8915 Sorensen Ave., Santa Fe Springs, CA 90670

FIGURE 13

ANCHEM0448




**DATES OF SURVEY**

DECEMBER 18, 2002
MAY 27, 2003
JULY 25, 2003

| Prepared by: Blakely Environmental Investigations, Inc. 4359 Phelan Road, Phelan, CA 92371 | Acetone, MEK and MIBK Concentrations in Upper and Lower A1 Zones (µg/L) | FIGURE 14 |
|---|---|---|
| | Former Angeles Chemical Company, 8915 Sorensen Ave., Santa Fe Springs, CA 90670 | |

ANCHEM0449

# TABLES

ANCHEM0450

00-322-3022

Recycled Stock # Blakley-6-S

Table 1: Well and Screen Elevations and Groundwater Depths to Water and Elevations (in feet)

| | Date | MW-1 | MW-2 | MW-3 | MW-4 | MW-5 | MW-7 | MW-8 | MW-9 | MW-10 | MW-11 | MW-12 | MW-13 | MW-14 | MW-15 | MW-16 | MW-17 | MW-18 | MW-19 | MW-20 | MW-21 | MW-22 | MW-23 | MW-24 | MW-25 | MW-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Well Elevation (TOC) | | NA | 150.42 | 150.79 | 149.27 | 149.39 | 148.52 | 149.63 | 149.16 | 149.41 | 149.12 | 150.09 | 150.22 | 150.98 | 150.8 | 149.32 | 149.03 | 149.83 | 149.2 | 149.14 | 150.02 | 150.67 | 149.42 | 149.8 | 150.84 | 150.83 |
| Screened Interval (bg) | | 40 - 60 | 30 - 50 | 29 - 49 | 17 - 37 | 28 - 38 | 34 - 65 | 30.5-40.5 | 30.5-40.5 | 25 - 40 | 30 - 40 | 30 - 40 | 32 - 62 | 55 - 65 | 34 - 64 | 29 - 46 | 56 - 66 | 21 - 46 | 30 - 45 | 57 - 67 | 53 - 63 | 30 - 40 | 71 - 81 | 67 - 77 | 71 - 81 | 30 - 40 |
| Screen Elevation | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Top | NA | 120.42 | 121.79 | 121.27 | 119.39 | 114.52 | 119.13 | 118.66 | 124.41 | 119.12 | 120.09 | 88.22 | 95.65 | 86.8 | 119.32 | 93.03 | 128.83 | 119.2 | 92.14 | 97.02 | 120.67 | 77.42 | 82.8 | 79.84 | 120.83 |
| | Bottom | NA | 100.42 | 101.79 | 101.27 | 109.39 | 93.52 | 109.13 | 103.66 | 109.41 | 109.12 | 110.09 | 98.22 | 85.65 | 86.8 | 102.32 | 83.03 | 103.83 | 104.2 | 82.14 | 87.02 | 110.67 | 67.42 | 72.9 | 69.84 | 110.83 |
| Depth to Water (bg) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Feb-94 | 30.06' | 28.5 | 29.7 | 23.36 | 24.86 | 24.31 | | | | | | | | | | | | | | | | | | | |
| | Nov-00 | 35.02' | 33.25 | 38.42 | 28.7 | 28.52 | 26.18 | | | | | | | | | | | | | | | | | | | |
| | Oct-01 | 37.41' | 37.91 | 39.19 | 30.55 | NA | 28.7 | | | | | | | | | | | | | | | | | | | |
| | Nov-01 | NA | NA | NA | 28.38 | 28.85 | NA | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | 38.2 | 38.38 | 37.39 | 28.44 | 30.33 | 28.21 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | 37.82' | 38.75 | 38.19 | 28.48 | NA | 30.07 | 30.91 | 30.98 | | | | | | | | | | | | | | | | | |
| | Oct-02 | 42.45' | 43.58 | 44.85 | 28.48 | 30.25 | 34.11 | 32.68 | 34.7 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | 43.19 | 44.22 | 28.28 | FP only | 34.08 | 33.52 | 34.87 | 32.83 | 32.71 | 33.28 | 41.85 | 43.08 | 43.83 | 33.94 | 40.44 | 33.08 | 33.33 | 41.11 | 42.34 | | | | | |
| | Mar-03 | NA | 41.07 | 41.35 | 28.36 | FP only | 33.15 | 32.61 | 33.22 | 32.44 | 32.40 | 33.07 | 38.77 | 40.85 | 41.53 | 32.01 | 38.28 | 32.36 | 32.42 | 39.08 | 40.38 | | | | | |
| | Jun-03 | NA | 38.98 | 39.93 | 28.35 | FP only | 30.44 | 30.93 | 31.1 | 30.41 | 30.18 | 31.03 | 37.85 | 39.2 | 38.82 | 29.99 | 36.41 | 31.13 | 30.3 | 37.05 | 38.8 | 35.8 | 34.23 | 37.73 | 39.22 | 36.7 |
| | Sep-03 | NA | NA | NA | 28.41 | FP only | NA | 32.34 | 34.38 | 31.88 | 31.84 | 33.38 | 43.18 | 43.78 | 44.19 | 33.45 | 40.85 | 38.37 | 33.59 | 41.57 | 42.68 | 38.87 | 38.55 | 42.69 | 44.35 | 38.45 |
| | Dec-03 | NA | NA | NA | 28.39 | FP only | NA | 34.56 | 36.95 | 33.74 | 33.73 | 34.3 | 46.13 | 46.72 | 46.84 | 36.85 | 43.47 | 42.73 | 36.85 | 44.53 | 45.44 | Dry | 42.85 | 45.69 | 47.15 | 38.6 |
| | Mar-04 | NA | NA | NA | 28.41 | FP only | NA | 33.3 | 36.19 | 34.83 | 34.39 | 36.02 | 46.08 | 47.41 | 47.92 | 36.88 | 44.36 | 40.28 | 37.13 | 45.22 | 45.59 | 38.81 | 43.35 | 48.41 | 48.03 | 38.7 |
| Water Elevation | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Feb-94 | NA | 121.92 | 121.09 | 124.92 | 124.54 | 124.21 | | | | | | | | | | | | | | | | | | | |
| | Nov-00 | NA | 115.17 | 114.37 | 122.07 | 120.87 | 120.43 | | | | | | | | | | | | | | | | | | | |
| | Oct-01 | NA | 112.51 | 111.6 | 121.32 | NA | 119.82 | | | | | | | | | | | | | | | | | | | |
| | Nov-01 | NA | NA | NA | 121.91 | 120.54 | NA | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | NA | 114.09 | 113.4 | 121.83 | 119.07 | 119.41 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | NA | 111.67 | 111.6 | 121.21 | NA | 118.65 | 118.72 | 118.15 | | | | | | | | | | | | | | | | | |
| | Oct-02 | NA | 106.76 | 106.13 | 121.79 | 119.11 | 114.51 | 116.95 | 114.46 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | 107.23 | 106.57 | 121.99 | NA | 114.59 | 116.01 | 114.49 | 116.78 | 116.41 | 116.83 | 106.57 | 107.8 | 106.97 | 114.63 | 108.59 | 116.57 | 115.87 | 108.03 | 107.68 | | | | | |
| | Mar-03 | NA | 109.35 | 108.44 | 121.91 | NA | 115.44 | 116.82 | 113.94 | 116.37 | 116.63 | 117.02 | 110.45 | 109.71 | 109.07 | 116.31 | 110.75 | 114.27 | 115.78 | 110.06 | 109.65 | | | | | |
| | Jun-03 | NA | 110.44 | 110.34 | 121.92 | NA | 115.16 | 116.78 | 116.05 | 119 | 116.97 | 118.04 | 112.37 | 111.45 | 110.98 | 116.33 | 112.42 | 116.5 | 110.9 | 112.08 | 111.52 | 114.87 | 114.19 | 112.17 | 111.42 | 114.13 |
| | Sep-03 | NA | NA | NA | 121.85 | NA | NA | 117.39 | 114.87 | 117.73 | 117.28 | 116.83 | 106.06 | 106.07 | 105.41 | 114.94 | 106.36 | 111.26 | 115.91 | 107.37 | 107.34 | 110.8 | 105.87 | 107.21 | 106.29 | 112.36 |
| | Dec-03 | NA | NA | NA | 121.86 | NA | NA | 115.08 | 112.2 | 115.7 | 115.39 | 116.75 | 105.1 | 105.94 | 103.78 | 111.47 | 106.56 | 106.9 | 110.55 | 104.51 | 104.58 | Dry | 105.77 | 104.21 | 108.29 | 111.23 |
| | Mar-04 | NA | NA | NA | 121.86 | NA | NA | 114.43 | 110.97 | 114.56 | 114.76 | 115.07 | 104.24 | 105.26 | 102.68 | 111.44 | 104.47 | 109.35 | 112.06 | 103.92 | 103.43 | 112.18 | 106.17 | 103.49 | 102.81 | 114.13 |

**Table 2: TPH-gas and VOCs from Free Prodcut Sample Results using EPA Methods 8015 and 8260 (µg/L)**

| | Date | MW-6 | MW-8 | MW-10 | MW-16 | MW-18 | MW-19 |
|---|---|---|---|---|---|---|---|
| Screened Interval (bg) | | 20'-30' | 30.5'-40.5' | 25'-40' | 29'-46' | 21'-46' | 30'-45' |
| | | | | | | | |
| TPH-gas | Jun-02 | 8.E+08 | 8.E+08 | NA | NA | NA | NA |
| | Dec-03 | NA | NA | NA | 4.55E+08 | NA | 4.25E+08 |
| | Mar-04 | NA | NA | 446000 | NA | NA | NA |
| | | | | | | | |
| **VOCs** | | | | | | | |
| Acetone | Oct-01 | <25,000* | NA | NA | NA | NA | NA |
| | Mar-04 | NA | NA | <1,250,000 | NA | <1,250,000 | <1,250,000 |
| | | | | | | | |
| Benzene | Oct-01 | 110,000* | NA | NA | NA | NA | NA |
| | Mar-04 | NA | NA | <250,000 | NA | <250,000 | 365,000 |
| | | | | | | | |
| 2-Butanone (MEK) | Oct-01 | <25,000* | NA | NA | NA | NA | NA |
| | Mar-04 | NA | NA | <1,250,000 | NA | <1,250,000 | <1,250,000 |
| | | | | | | | |
| Chloroethane | Mar-04 | NA | NA | <500,000 | NA | <500,000 | <500,000 |
| | | | | | | | |
| 1,1-Dichloroethane | Oct-01 | 592,000* | NA | NA | NA | NA | NA |
| | Mar-04 | NS-FP | NS-FP | 3,190,000 | NS-FP | 1,590,000 | 625,000 |
| | | | | | | | |
| 1,2-Dichloroethane | Oct-01 | <5,000* | | | | | |
| | Mar-04 | NS-FP | NS-FP | <500,000 | NS-FP | <500,000 | <500,000 |
| | | | | | | | |
| 1,1-Dichloroethene | Oct-01 | 417,000* | NA | NA | NA | NA | NA |
| | Mar-04 | NS-FP | NS-FP | 730,000 | NS-FP | 928,000 | 4,840,000 |
| | | | | | | | |
| cis 1,2-Dichloroethene | Oct-01 | 1,060,000* | NA | NA | NA | NA | NA |
| | Mar-04 | NS-FP | NS-FP | 1,530,000 | NS-FP | 1,620,000 | 1,630,000 |
| | | | | | | | |
| trans 1,2-Dichloroethene | Oct-01 | <5,000* | NA | NA | NA | NA | NA |
| | Mar-04 | NS-FP | NS-FP | <500,000 | NS-FP | <500,000 | <500,000 |
| | | | | | | | |
| 1,4 Dioxane | Mar-04 | NS-FP | NS-FP | <12,500,000 | NS-FP | <12,500,000 | <12,500,000 |
| | | | | | | | |
| Ethylbenzene | Oct-01 | 4,320,000* | NA | NA | NA | NA | NA |
| | Mar-04 | NS-FP | NS-FP | 5,330,000 | NS-FP | 7,080,000 | 6,960,000 |
| | | | | | | | |
| Methylene Chloride | Oct-01 | <5,000* | NA | NA | NA | NA | NA |
| | Mar-04 | NS-FP | NS-FP | <500,000 | NS-FP | <500,000 | <500,000 |
| | | | | | | | |
| 4-Methyl-2-pentanone | Oct-01 | <25,000* | NA | NA | NA | NA | NA |
| | Mar-04 | NS-FP | NS-FP | <1,250,000 | NS-FP | <1,250,000 | <1,250,000 |
| | | | | | | | |
| Naphthalene | Oct-01 | 1,680,000* | NA | NA | NA | NA | NA |
| | Mar-04 | NS-FP | NS-FP | 1,980,000 | NS-FP | 1,620,000 | 4,120,000 |
| | | | | | | | |

Table 3: Conductivity, pH, and TPH-gas Groundwater Sample Results using EPA Method 8015 (µg/L)

| | Date | *MW-1 | *MW-2 | *MW-3 | MW-4 | MW-6 | *MW-7 | MW-8 | MW-9 | MW-10 | MW-11 | MW-12 | MW-13 | MW-14 | MW-15 | MW-16 | MW-17 | MW-18 | MW-19 | MW-20 | MW-21 | MW-22 | MW-23 | MW-24 | MW-25 | MW-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Screened Interval (bg) | | 40'-60' | 30'-60' | 29'-49' | 17'-27' | 30'-50' | 34'-59' | 30.5'-40.5' | 30.5'-45.5' | 25'-40' | 30'-40' | 30'-40' | 52'-62' | 58'-63' | 54'-64' | 29'-49' | 58'-68' | 21'-36' | 30'-49' | 57'-67' | 53'-63' | 30'-40' | 71'-81' | 67'-77' | 71'-81' | 30'-40' |
| DTW (ft) | Feb-94 | 30.05' | 28.80' | 29.70' | 23.35' | 24.88' | 34.53' | | | | | | | | | | | | | | | | | | | |
| | Nov-00 | 38.62' | 37.28' | 38.42' | 26.30' | 28.52' | 28.19' | | | | | | | | | | | | | | | | | | | |
| | Oct-01 | 37.41' | 37.91' | 39.19' | 28.35' | NA | 28.70' | | | | | | | | | | | | | | | | | | | |
| | Nov-01 | NA | NA | NA | 28.38' | 28.53' | NA | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | 38.2' | 36.58' | 37.38' | 28.44' | 30.32' | 29.21' | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | 37.92' | 38.75' | 38.19' | 28.48' | NA | 30.07' | 30.91' | 30.96' | | | | | | | | | | | | | | | | | |
| | Oct-02 | 42.48' | 43.66' | 44.08' | 28.49' | 30.28' | 34.11' | 32.98' | 34.70' | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | 43.19' | 44.22' | 28.28' | FP only | 34.68' | 35.82' | 34.67' | 32.83' | 32.71' | 33.38' | 41.68' | 43.06' | 43.53' | 33.62' | 40.44' | 33.06' | 33.33' | 41.11' | 42.34' | | | | | |
| | Mar-03 | NA | 41.07' | 41.36' | 28.38' | FP only | 33.18' | 32.81' | 33.32' | 32.44' | 32.49' | 33.07' | 38.72' | 40.83' | 41.39' | 32.01' | 38.38' | 35.36' | 33.42' | 39.08' | 40.38' | | | | | |
| | Jun-03 | NA | 38.96' | 39.96' | 28.38' | FP only | 30.44' | 30.88' | 31.10' | 30.41' | 30.19' | 31.58' | 37.89' | 38.20' | 39.62' | 29.89' | 36.41' | 33.13' | 36.30' | 37.05' | 38.60' | 38.80' | 34.23' | 37.79' | 38.22' | 38.7' |
| | Sep-03 | NA | NA | NA | 28.41' | FP only | NA | 32.54' | 34.28' | 31.86' | 31.84' | 33.28' | 42.16' | 43.79' | 44.19' | 33.48' | 40.66' | 38.37' | 33.29' | 41.31' | 42.88' | 38.87' | 38.88' | 42.69' | 44.35' | 38.45' |
| | Dec-03 | NA | NA | NA | 28.30' | FP only | NA | 34.55' | 36.86' | 33.71' | 33.75' | 34.3' | 45.12' | 46.72' | 46.84' | 35.69' | 43.47' | 42.73' | 38.66' | 44.53' | 45.44' | Dry | 42.69' | 46.66' | 47.38' | 39.8' |
| | Mar-04 | NA | NA | NA | 28.41 | FP only | NA | 33.3 | 38.19 | 34.88 | 34.98 | 38.02 | 45.85 | 47.41 | 47.92 | 38.98 | 44.98 | 40.38 | 37.15 | 45.22 | 48.59 | 38.81 | 43.25 | 48.41 | 48.05 | 38.7 |
| Conductivity | Dec-02 | NA | 2011 | 2068 | NA | NA | 2710 | NA | 2331 | 2871 | 2858 | 1572 | 1374 | 1866 | 1821 | 2108 | 1888 | 2515 | 5877 | 1907 | 1740 | | | | | |
| | May-03 | NA | 2084 | 1974 | NA | NA | 2768 | NA | 2325 | 4362 | 3799 | 1462 | 1872 | 1913 | 1816 | 2011 | 1892 | 3843 | 3012 | 1923 | 1898 | | | | | |
| | Jun-03 | NA | 1763 | 1951 | NA | NA | 2882 | NA | 2406 | 4439 | 3248 | 1992 | 1833 | 1871 | 1851 | 1931 | 1913 | 3602 | 6017 | 1788 | 1790 | 2500 | 1200 | 1300 | 1300 | 3300 |
| | Sep-03 | NA | NA | NA | NA | NA | NA | NA | 2540 | 3878 | 3580 | 1313 | 1904 | 2100 | 1948 | 2218 | 2530 | 3026 | NS-FP | 1986 | 1910 | NS-NW | 2283 | 1799 | 1983 | NS-NW |
| | Dec-03 | NA | NA | NA | NA | NA | NA | NA | 2385 | 2830 | 3070 | 1367 | 1953 | 1994 | 1927 | NS-FP | 1961 | 2874 | NS-FP | 2192 | 1998 | NS-NW | NA | NA | NA | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 2853 | NS-FP | 2562 | 1313 | 2080 | 1999 | 2073 | NS-FP | 1934 | NS-FP | NS-FP | 2188 | 2080 | 1953 | NA | NA | NA | 2302 |
| pH | Dec-02 | NA | 6.83 | 6.92 | NA | NA | 6.75 | NA | 6.56 | 6.82 | 6.87 | 7.02 | 6.97 | 6.59 | 6.93 | 6.56 | 6.93 | 6.86 | 7.02 | 6.90 | 6.86 | | | | | |
| | Mar-03 | NA | 6.9 | 6.9 | NA | NA | 6.7 | NA | 7 | 6.7 | 6.6 | 7.1 | 7.5 | 7 | 7.6 | 6.8 | 7.2 | 6.8 | 6.9 | 7.3 | 7.5 | | | | | |
| | Jun-03 | NA | 6.9 | 6.7 | NA | NA | 6.8 | NA | 6.7 | 6.4 | 6.8 | 6.4 | 6.8 | 6.8 | 6.7 | 6.8 | 6.8 | 6.3 | 6.7 | 6.8 | 6.8 | NA | NA | NA | NA | NA |
| | Sep-03 | NA | NA | NA | NA | NA | NA | NA | 6.61 | 6.55 | 6.62 | 6.46 | 6.95 | 6.8 | 6.75 | 6.7 | 6.85 | 6.23 | NS-FP | 6.76 | 6.77 | NS-NW | 6.84 | 6.74 | 6.67 | NS-NW |
| | Dec-03 | NA | NA | NA | NA | NA | NA | NA | 6.9 | 6.8 | 6.7 | 7.4 | 6.5 | 7.1 | 7 | NS-FP | 7.1 | 6.4 | NS-FP | 7 | 6.8 | NS-NW | NA | NA | NA | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 6.7 | NA | 7 | 7 | 6.8 | 6.8 | 6.7 | NS-FP | 6.7 | NS-FP | NS-FP | 6.7 | 6.8 | 6.4 | NA | NA | NA | 7 |
| TPH-gas | Feb-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| | Nov-00 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| | Oct-01 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| | Feb-02 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| | Jun-02 | 724000 | 14900 | 22500 | NS-FP | Table 2 | 8530 | Table 2 | 22700 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| | Oct-02 | 32300 | 7370 | 21900 | NS-FP | NS-FP | 5350 | 52300 | 1730 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | | | | | |
| | Dec-02 | NA | 9930 | 11400 | NS-FP | NS-FP | 6350 | NS-FP | 1830 | 95300 | 22800 | 9420 | 98 | 7130 | 338 | 3250 | 77 | 41700 | 107000 | 91 | 405 | | | | | |
| | Mar-03 | NA | 15600 | 12200 | NS-FP | NS-FP | 3470 | NS-FP | 2600 | 85100 | 24700 | 1755 | <50 | 1480 | 270 | 3850 | <50 | 63900 | 177000 | 92 | 745 | | | | | |
| | Jun-03 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 2600 | <50 | <50 | <50 | 26400 |
| | Sep-03 | NA | NA | NA | NA | NA | NA | NA | 1280 | 69800 | 30200 | 1300 | 100 | 68 | 226 | 1480 | <50 | 44950 | NA | <50 | 608 | NS-NW | <50 | <50 | <50 | 89200 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 1260 | 77200 | 51500 | 5360 | 64 | 521 | 790 | Table 2 | <50 | 40600 | Table 2 | 1080 | 2140 | NS-NW | NA | NA | NA | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 1,430 | Table 2 | 43,500 | 4,410 | <50 | 154 | 1,660 | NS-FP | <50 | NS-FP | NS-FP | <50 | 2,660 | 3,080 | NA | NA | NA | 41,600 |

DTW= Depth to Water (below top of well casing).

NA= Not Analyzed.

NS-FP= Not Sampled Free Product present.

NS-NW= Not Sampled Not Enough Water present.

*= Abandoned Well.

Table 4: Detected VOCs (from Groundwater Sample Results using EPA method 8260 (µg/L)

| | Date | MW-1 | MW-2 | MW-3 | MW-4 | MW-5 | MW-7 | MW-8 | MW-9 | MW-10 | MW-11 | MW-12 | MW-13 | MW-14 | MW-15 | MW-16 | MW-17 | MW-18 | MW-19 | MW-20 | MW-21 | MW-22 | MW-23 | MW-24 | MW-25 | MW-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Screened Interval (bgs) | | 40-50' | 30-50' | 35-50' | 17-37' | 37-57' | 34-50' | 30.7-45.7 | 30.7-45.7 | 25-45' | 32-42' | 35-45' | 32-42' | 25-45' | 35-45' | 25-45' | 35-45' | 21-46' | 20-45' | 35-50' | 37-57' | 35-45' | 77-97' | 67-87' | 77-97' | 35-45' |
| DTW (Depth to Water) | Feb-94 | 30.59' | 28.90' | 29.70' | 23.35' | 24.99' | 24.89' | | | | | | | | | | | | | | | | | | | |
| | Nov-99 | 35.65' | 33.29' | 36.42' | 28.70' | 28.57' | 28.18' | | | | | | | | | | | | | | | | | | | |
| | Dec-01 | 37.31' | 37.81' | 28.18' | 28.35' | NA | 28.70' | | | | | | | | | | | | | | | | | | | |
| | Nov-01 | NA | NA | NA | 28.59' | 28.59' | NA | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | 36.3' | 36.38' | 37.39' | 28.44' | 30.32' | 28.21' | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | 37.82' | 36.79' | 39.19' | 28.49' | NA | 30.07' | 30.91' | 30.69' | | | | | | | | | | | | | | | | | |
| | Oct-02 | 42.49' | 43.99' | 44.99' | 28.28' | 30.60' | 34.11' | 32.98' | 34.70' | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | 43.13' | 44.32' | 28.33' | FP only | 34.02' | 33.67' | 34.67' | 32.83' | 32.71' | 29.39' | 41.65' | 43.05' | 33.53' | 33.89' | 40.44' | 31.09' | 33.53' | 41.11' | 42.34' | | | | | |
| | Mar-03 | NA | 41.87' | 41.99' | 28.39' | FP only | 33.18' | 32.61' | 33.72' | 32.44' | 32.49' | 33.67' | 38.77' | 30.98' | 31.07' | 33.01' | 36.29' | 30.88' | 32.42' | 35.05' | 40.38' | | | | | |
| | Jun-03 | NA | 39.88' | 39.98' | 28.35' | FP only | 30.44' | 30.88' | 31.10' | 30.21' | 30.13' | 31.08' | 37.89' | 28.32' | 28.88' | 30.00' | 36.41' | 33.13' | 38.29' | 37.02' | 38.37' | 35.00' | 34.29' | 37.73' | 38.22' | 36.7' |
| | Sep-03 | NA | NA | NA | 28.41' | FP only | NA | 32.34' | 34.29' | 31.69' | 31.84' | 35.28' | 42.16' | 43.78' | 44.19' | 33.48' | 40.60' | 34.17' | 33.28' | 41.37' | 42.86' | 39.87' | 39.98' | 42.69' | 44.88' | 38.49' |
| | Dec-03 | NA | NA | NA | 28.50' | FP only | NA | 34.58' | 36.98' | 33.71' | 33.73' | 34.3' | 45.12' | 46.72' | 46.84' | 39.65' | 43.47' | 42.79' | 36.89' | 44.57' | 45.44' | Dry | 42.60' | 43.60' | 47.39' | 38.6' |
| | Mar-04 | NA | NA | NA | 28.41' | FP only | NA | 34.3 | 36.18 | 34.86 | 34.98 | 36.02 | 46.98 | 47.41 | 47.92 | 36.98 | 44.58 | 40.28 | 37.15 | 45.22 | 46.88 | 38.51 | 43.25 | 46.41 | 48.03 | 36.7 |
| VOCs Acetone | Oct-01 | <1,250 | <350 | <625 | NS-NW | Table 2 | 1,190 | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | <625 | <62.5 | 2,130 | NS-FP | NS-FP | 749 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | <1,250 | <2,500 | <625 | NS-FP | NS-FP | <125 | NS-FP | <500 | | | | | | | | | | | | | | | | | |
| | Oct-02 | <2,500 | <250 | <250 | NS-FP | NS-FP | <1,250 | NS-FP | <125 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | <1,250 | <1,250 | NS-FP | NS-FP | <625 | NS-FP | <125 | 25,000 | 522 | <125 | <25 | <625 | <250 | <1,250 | <25 | 25,000 | 70,000 | <25 | <125 | | | | | |
| | Mar-03 | NA | <2,000 | <2,000 | NS-FP | NS-FP | <625 | NS-FP | <125 | 35,000 | 5,780 | <250 | <25 | <625 | <250 | <625 | <25 | 30,700 | 70,200 | <25 | <125 | | | | | |
| | Jun-03 | NA | <500 | <1,000 | NS-FP | NS-FP | <125 | NS-FP | <50 | 48,400 | 13,000 | <125 | <25 | <25 | <62.5 | <125 | <25 | 62,700 | 108,000 | <62.5 | <5 | <250 | <25 | <25 | <25 | 34,100 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | <50 | 70,000 | 8,000 | 212.5 | <5 | <5 | <10 | <125 | <5 | 44,200 | NS-FP | <5 | <25 | NS-NW | <5 | <5 | <5 | 24,500 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <5 | 18,200 | 3,240 | <12.5 | <5 | <10 | <12.5 | NS-FP | <5 | 33,400 | NS-FP | <5 | <100 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <50 | Table 2 | 33,000 | <12.5 | <5 | <5 | <5 | NS-FP | <5 | Table 2 | Table 2 | <5 | <12.5 | <10 | Table 5 | Table 5 | Table 5 | 10,200 |
| Benzene | Feb-94 | 184 | <100 | 53 | 111 | 786 | 48 | | | | | | | | | | | | | | | | | | | |
| | Nov-99 | <2,500 | 61 | 73 | NS-FP | NS-FP | 65 | | | | | | | | | | | | | | | | | | | |
| | Oct-01 | 125 | 108 | 110 | NS-NW | Table 2 | 33 | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | 231 | 204 | 108 | NS-FP | NS-FP | 63.2 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | 300 | 222 | 128 | NS-FP | NS-FP | <5 | NS-FP | 90.8 | | | | | | | | | | | | | | | | | |
| | Oct-02 | 248 | 177 | 98.2 | NS-FP | NS-FP | 121 | NS-FP | 552 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | 180 | 137 | NS-FP | NS-FP | <25 | NS-FP | 65.2 | <500 | 431 | 18.5 | 1 | <25 | <10 | 78 | <1 | 910 | 1,180 | <1 | 7.9 | | | | | |
| | Mar-03 | NA | 172 | 137 | NS-FP | NS-FP | 62.6 | NS-FP | 54 | 932 | 974 | 13.3 | <1 | <25 | <10 | 63.3 | <1 | <500 | 1,100 | <1 | 8 | | | | | |
| | Jun-03 | NA | <100 | <200 | NS-FP | NS-FP | 61 | NS-FP | 84.4 | 265 | 520 | <5 | <1 | <1 | 5.7 | 97.6 | <1 | 992 | 1,380 | <2.5 | 18 | 13.5 | <1 | <1 | <1 | 125 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | 78 | 340 | 775 | 3.4 | <1 | 5.6 | 8.6 | 73 | <1 | 580 | NS-FP | <1 | 53 | NS-NW | <1 | <1 | <1 | 270 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 2.1 | 282 | 786 | 9.1 | <1 | 14.8 | 12.8 | NS-FP | <1 | 415 | NS-FP | 1.3 | 54 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 26.3 | Table 2 | 995 | 7.5 | <1 | 4.8 | 35.1 | NS-FP | <1 | Table 2 | Table 2 | <1 | 82.7 | 34 | Table 5 | Table 5 | Table 5 | 226 |
| 2-Butanone (MEK) | Feb-94 | NA | NA | NA | NA | NA | NA | | | | | | | | | | | | | | | | | | | |
| | Nov-99 | 3,100 | <10,000 | <10,000 | NS-FP | NS-FP | 1,400 | | | | | | | | | | | | | | | | | | | |
| | Oct-01 | <1,250 | <250 | 500 | NS-NW | Table 2 | 900 | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | <625 | <62.5 | <900 | NS-FP | NS-FP | <50 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | <1,250 | <2,500 | <625 | NS-FP | NS-FP | <125 | NS-FP | <500 | | | | | | | | | | | | | | | | | |
| | Oct-02 | <2,500 | <250 | <250 | NS-FP | NS-FP | <1,250 | NS-FP | <125 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | <1,250 | <1,250 | NS-FP | NS-FP | <625 | NS-FP | <125 | 19,200 | 1,180 | <125 | <25 | <625 | <250 | <1,250 | <25 | 8,300 | 18,500 | <25 | <125 | | | | | |
| | Mar-03 | NA | <6,000 | <2,500 | NS-FP | NS-FP | <625 | NS-FP | <125 | 21,100 | 15,600 | <250 | <25 | <625 | <250 | <625 | <25 | 35,600 | 36,900 | <25 | <125 | | | | | |
| | Jun-03 | NA | <500 | <1,000 | NS-FP | NS-FP | <125 | NS-FP | <50 | 20,200 | 5,880 | <125 | <25 | <25 | <62.5 | <125 | <25 | 28,800 | 43,500 | <62.5 | <5 | <250 | <25 | <25 | <25 | 11,300 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | <50 | 54,000 | 3,380 | <12.5 | <5 | <5 | <10 | <125 | <5 | 32,000 | NS-FP | <5 | <25 | NS-NW | <5 | <5 | <5 | 11,000 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <5 | 4,080 | 1,000 | <12.5 | <5 | <10 | <12.5 | NS-FP | <5 | 33,700 | NS-FP | <5 | <100 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <50 | Table 2 | 13,600 | <12.5 | <5 | <5 | <5 | NS-FP | <5 | Table 2 | Table 2 | <5 | <12.5 | <10 | Table 5 | Table 5 | Table 5 | 5,030 |

ANCHEM0454

Table 4 (cont.): Detected VOCs from Groundwater Sample Results using EPA Method 8260 (µg/L)

| VOCs | Date | MW-1* | MW-2* | MW-3* | MW-4 | MW-6 | MW-7* | MW-8 | MW-9 | MW-10 | MW-11 | MW-12 | MW-13 | MW-14 | MW-15 | MW-16 | MW-17 | MW-18 | MW-19 | MW-20 | MW-21 | MW-22 | MW-23 | MW-24 | MW-25 | MW-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chloroethane | Feb-01 | <125 | 119 | <100 | NS-FP | NS-FP | 17 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | <250 | <500 | <125 | NS-FP | NS-FP | <25 | NS-FP | <100 | | | | | | | | | | | | | | | | | |
| | Oct-02 | <500 | <50 | <50 | NS-FP | NS-FP | <250 | NS-FP | <25 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | <250 | <250 | NS-FP | NS-FP | <125 | NS-FP | <25 | <2,500 | <125 | <25 | <5 | <125 | <50 | <250 | <5 | <500 | <2,500 | <5 | <25 | | | | | |
| | Mar-03 | NA | <1,000 | <500 | NS-FP | NS-FP | 348 | NS-FP | <25 | <1,000 | 699 | <50 | <5 | <125 | <50 | <125 | <5 | <3,000 | <3,000 | <5 | <25 | | | | | |
| | Jun-03 | NA | 4,500 | 11,000 | NS-FP | NS-FP | 311 | NS-FP | <50 | 5,000 | 760 | <10 | <5 | <5 | <5 | <50 | <5 | 1,170 | 2,000 | <5 | <5 | <50 | <5 | <5 | <5 | <100 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | <50 | 940 | 1,700 | <5 | <5 | <5 | <5 | <50 | <5 | 480 | NS-FP | <5 | <10 | NS-NW | <5 | <5 | <5 | <100 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <5 | 898 | 1,300 | <5 | <5 | <5 | <5 | NS-FP | <5 | <200 | NS-FP | <5 | <40 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <50 | Table 2 | 4,870 | <5 | <5 | <5 | 48.4 | NS-FP | <5 | Table 2 | Table 2 | <5 | <5 | 164 | Table 5 | Table 5 | Table 5 | 2,000 |
| 1,1-Dichloroethylene | Feb-01 | 849 | 1,130 | 66 | 1410 | 2,260 | 2,130 | | | | | | | | | | | | | | | | | | | |
| | Nov-00 | 17,000 | 1,800 | 800 | NS-FP | NS-FP | 2,600 | | | | | | | | | | | | | | | | | | | |
| | Oct-01 | 8,190 | 1,500 | 1,030 | NS-NW | Table 2 | 2,870 | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | 20,000 | 2,310 | 1,300 | NS-FP | NS-FP | 5,480 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | 16,000 | 2,700 | 1,340 | NS-FP | NS-FP | 4,150 | NS-FP | 1,210 | | | | | | | | | | | | | | | | | |
| | Oct-02 | 10,400 | 2,350 | 1,750 | NS-FP | NS-FP | 3,590 | NS-FP | 1,290 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | 1,520 | 1,190 | NS-FP | NS-FP | 3,830 | NS-FP | 1,100 | 42,400 | 19,400 | 3,850 | 17.3 | 171 | 79.6 | 2,830 | 13 | 4,300 | 3,130 | 18.2 | 141 | | | | | |
| | Mar-03 | NA | 2,190 | 1,710 | NS-FP | NS-FP | 3,760 | NS-FP | 1,020 | 41,000 | 48,400 | 1,000 | 6.4 | 160 | 117 | 3,130 | 2.5 | 5,700 | 5,110 | 14 | 278 | | | | | |
| | Jun-03 | NA | 1,140 | 1,000 | NS-FP | NS-FP | 3,470 | NS-FP | 1,480 | 51,700 | 37,900 | 354 | 11.8 | <2 | 107 | 3,330 | <2 | 9,830 | 6,840 | 47.8 | 535 | 1,200 | <2 | <2 | <2 | 931 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | 1,890 | 47,400 | 43,000 | 322 | <2 | 101 | 98 | 4,190 | <2 | 7,640 | NS-FP | 28.0 | 1,370 | NS-NW | 2.1 | <2 | 5 | 1,870 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 50 | 55,500 | 40,200 | 758 | 2.2 | 218 | 292 | NS-FP | <2 | 5,440 | NS-FP | 72.9 | 2,800 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 965 | Table 2 | 52,700 | 480 | 2.6 | 118 | 672 | NS-FP | <1 | Table 2 | Table 2 | 80.3 | 3,240 | 1,900 | Table 5 | Table 5 | Table 5 | 3,920 |
| 1,2-Dichloroethylene | Feb-01 | <100 | <100 | <50 | <100 | 1140 | 31 | | | | | | | | | | | | | | | | | | | |
| | Nov-00 | <2,500 | <500 | <500 | NS-FP | NS-FP | <500 | | | | | | | | | | | | | | | | | | | |
| | Oct-01 | <250 | <50 | <125 | NS-NW | Table 2 | <25 | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | <125 | <12.5 | <100 | NS-FP | NS-FP | 43.4 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | <250 | <500 | <125 | NS-FP | NS-FP | <25 | NS-FP | <100 | | | | | | | | | | | | | | | | | |
| | Oct-02 | <500 | <50 | <50 | NS-FP | NS-FP | <250 | NS-FP | <25 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | <250 | <250 | NS-FP | NS-FP | <125 | NS-FP | <25 | <2,500 | <125 | <25 | <5 | <125 | <50 | 39 | <5 | <500 | <2,500 | <5 | <25 | | | | | |
| | Mar-03 | NA | <1,000 | <500 | NS-FP | NS-FP | <125 | NS-FP | 11.5 | <1,000 | 228 | <50 | <5 | <125 | <50 | 57.6 | <5 | <3,000 | <2,500 | <5 | <25 | | | | | |
| | Jun-03 | NA | <500 | <500 | NS-FP | NS-FP | <50 | NS-FP | <50 | <400 | <400 | <10 | <2 | <2 | <5 | <50 | <2 | <400 | <1,000 | <5 | <2 | <50 | <2 | <2 | <2 | <100 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | <50 | <400 | 103 | <5 | <2 | <2 | <4 | <50 | <2 | <200 | NS-FP | <5 | <10 | NS-NW | <2 | <2 | <2 | <100 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <2 | <400 | <400 | <5 | <2 | 3.2 | <5 | NS-FP | <2 | <200 | NS-FP | <5 | <40 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <50 | Table 2 | 130 | <5 | <2 | 5 | 2.1 | NS-FP | <2 | Table 2 | Table 2 | <5 | 17.5 | 11.7 | Table 5 | Table 5 | Table 5 | <100 |
| 1,1-Dichloroethane | Feb-01 | 2,210 | 2,490 | 2,900 | 908 | 1,240 | 181 | | | | | | | | | | | | | | | | | | | |
| | Nov-00 | 3,000 | <500 | 2,900 | NS-FP | NS-FP | 500 | | | | | | | | | | | | | | | | | | | |
| | Oct-01 | 1,300 | 1,130 | 4,000 | NS-NW | Table 2 | 368 | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | 4,000 | 1,480 | 3,900 | NS-FP | NS-FP | 772 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | 4,900 | 2,000 | 2,000 | NS-FP | NS-FP | 429 | NS-FP | 1,640 | | | | | | | | | | | | | | | | | |
| | Oct-02 | 3,400 | 2,700 | 178 | NS-FP | NS-FP | 847 | NS-FP | 1,600 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | 2,230 | 198 | NS-FP | NS-FP | 636 | NS-FP | 1,490 | 2,640 | 2,450 | 164 | 38.5 | 142 | 39.4 | 1,590 | 18.6 | 6,860 | 17,700 | 25.6 | 267 | | | | | |
| | Mar-03 | NA | 2,490 | 1,415 | NS-FP | NS-FP | 233 | NS-FP | 1,100 | 2,600 | 2,040 | 16.8 | 16.9 | 129 | 60.8 | 2,470 | 17.1 | 6,290 | 16,600 | 18.5 | 290 | | | | | |
| | Jun-03 | NA | 1,480 | 2,370 | NS-FP | NS-FP | 350 | NS-FP | 1,290 | 3,370 | 1,480 | 29.2 | 44.2 | 28.6 | 134 | 2,900 | 18 | 4,810 | 34,300 | 346 | 766 | 185 | 2 | <2 | 12 | 2,340 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | 1,020 | 1,760 | 1,060 | 14.2 | 27.2 | 274 | 96 | 2,470 | 14.2 | 4,960 | NS-FP | 48.7 | 1,200 | NS-NW | <2 | <2 | <2 | 5,600 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 48.5 | 2,750 | 1,610 | 7.9 | 10.8 | 675 | 234 | NS-FP | 7.8 | 4,170 | NS-FP | 43.6 | 1,960 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 1,350 | Table 2 | 320 | 7.3 | 6.7 | 264 | 79.6 | NS-FP | 3.8 | Table 2 | Table 2 | 21 | 2,540 | 440 | Table 5 | Table 5 | Table 5 | 7,740 |

Table 4 (cont.): Detected VOCs from Groundwater Sample Results using EPA Method 8260 (µg/L)

| VOCs | Date | MW-1[1] | MW-2[1] | MW-3[1] | MW-4 | MW-6 | MW-7[1] | MW-8 | MW-9 | MW-10 | MW-11 | MW-12 | MW-13 | MW-14 | MW-15 | MW-16 | MW-17 | MW-18 | MW-19 | MW-20 | MW-21 | MW-22 | MW-23 | MW-24 | MW-25 | MW-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| cis 1,2-Dichloroethene | Feb-94 | NA | NA | NA | NA | NA | NA | | | | | | | | | | | | | | | | | | | |
| | Nov-00 | 20,000 | 9,500 | 5,700 | NS-FP | NS-FP | 210 | | | | | | | | | | | | | | | | | | | |
| | Oct-01 | 18,300 | 8,130 | 7,000 | NS-NW | Table 2 | 184 | | | | | | | | | | | | | | | | | | | |
| | Feb-03 | 28,100 | 11,100 | 7,900 | NS-FP | NS-FP | 256 | | | | | | | | | | | | | | | | | | | |
| | Jun-03 | 31,100 | 14,800 | 8,600 | NS-FP | NS-FP | 286 | NS-FP | 512 | | | | | | | | | | | | | | | | | |
| | Oct-03 | 26,700 | 10,400 | 213 | NS-FP | NS-FP | 311 | NS-FP | 756 | | | | | | | | | | | | | | | | | |
| | Dec-03 | NA | 11,900 | 895 | NS-FP | NS-FP | 268 | NS-FP | 600 | 28,300 | 8,700 | 190 | 45.5 | 884 | 592 | 975 | 39 | 18,100 | 11,800 | 9.3 | 334 | | | | | |
| | Mar-03 | NA | 11,500 | 2,080 | NS-FP | NS-FP | 225 | NS-FP | 488 | 20,900 | 10,100 | 16.8 | 17.2 | 263 | 400 | 1,150 | 7.1 | 21,200 | 11,100 | 6.8 | 542 | | | | | |
| | Jun-03 | NA | 2,270 | 5,225 | NS-FP | NS-FP | 214 | NS-FP | 662 | 24,600 | 8,740 | 24.5 | 40 | 8.6 | 917 | 1,940 | 3.2 | 23,600 | 12,000 | 7 | 1,000 | 3,860 | <2 | <2 | <2 | 986 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | 849 | 9,300 | 5,890 | 8 | 25.2 | 49 | 436 | 986 | <2 | 13,000 | NS-FP | 4.6 | 2,420 | NS-NW | 8.7 | <2 | 3.4 | 2,130 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 21.3 | 17,200 | 1,630 | 3.1 | 10.5 | 11.3 | 1,870 | NS-FP | <2 | 14,600 | NS-FP | 26.7 | 4,400 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 391 | Table 2 | 6,860 | 9.6 | 11.2 | 56.8 | 2,660 | NS-FP | 3.2 | Table 2 | Table 2 | 18.8 | 4,000 | 4,020 | Table 5 | Table 5 | Table 5 | 5,130 |
| trans 1,2-Dichloroethene | Feb-94 | NA | NA | NA | NA | NA | NA | | | | | | | | | | | | | | | | | | | |
| | Nov-00 | <2,500 | <500 | <500 | NS-FP | NS-FP | <500 | | | | | | | | | | | | | | | | | | | |
| | Oct-01 | <250 | <250 | <125 | NS-NW | Table 2 | <25 | | | | | | | | | | | | | | | | | | | |
| | Feb-03 | <125 | <12.6 | <100 | NS-FP | NS-FP | <10 | | | | | | | | | | | | | | | | | | | |
| | Jun-03 | <250 | <500 | <125 | NS-FP | NS-FP | <25 | NS-FP | <100 | | * | | | | | | | | | | | | | | | |
| | Oct-03 | <500 | <50 | <50 | NS-FP | NS-FP | <250 | NS-FP | <25 | | | | | | | | | | | | | | | | | |
| | Dec-03 | NA | <250 | <250 | NS-FP | NS-FP | <125 | NS-FP | <25 | <2,500 | <125 | <25 | <5 | <125 | <50 | <500 | <5 | <500 | <2,500 | <5 | <25 | | | | | |
| | Mar-03 | NA | <1,000 | <500 | NS-FP | NS-FP | <125 | NS-FP | <25 | <1,000 | <500 | <50 | <5 | <125 | <50 | <125 | <5 | <2,400 | <3,500 | <5 | <25 | | | | | |
| | Jun-03 | NA | <200 | <400 | NS-FP | NS-FP | <50 | NS-FP | <50 | <400 | <400 | <10 | <2 | <2 | <2 | <50 | <2 | <800 | <1,000 | <2 | <2 | <25 | <2 | <2 | <2 | <100 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | <50 | <400 | <50 | <2 | <2 | <2 | <4 | <50 | <2 | <800 | NS-FP | <2 | 12 | NS-NW | <2 | <2 | <2 | 120 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <2 | <400 | <400 | 5 | <2 | <4 | <5 | NS-FP | <2 | <800 | NS-FP | <2 | <40 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <50 | Table 2 | <100 | <5 | <2 | <2 | 28.4 | NS-FP | <2 | Table 2 | Table 2 | <2 | 14.9 | 32.5 | Table 5 | Table 5 | Table 5 | <100 |
| 1,4 Dioxane | Oct-03 | | | | NS-FP | NS-FP | | NS-FP | | | | | | | | | | | | | | | | | | |
| | Dec-03 | NA | <5,000 | <5,000 | NS-FP | NS-FP | 11,500 | NS-FP | 8,580 | <50,000 | <2,500 | <500 | <100 | <2,500 | <1,000 | 15,500 | <100 | <10,000 | <50,000 | 176 | <500 | | | | | |
| (* = Analyzed using | Mar-03 | NA | <10,000 | <5,000 | NS-FP | NS-FP | 21,000 | NS-FP | 7,900 | <10,000 | <5,000 | <250 | 39 | <625 | <250 | 6,900 | <25 | <25,000 | <21,000 | 112 | <125 | | | | | |
| EPA Method 8270) | Jun-03 | NA | <5,000 | <10,000 | NS-FP | NS-FP | 22,300 | NS-FP | 12,500 | <10,000 | <10,000 | <250 | <50 | <50 | <125 | 13,000 | <50 | <10,000 | <25,000 | <125 | <50 | <400 | <50 | <50 | <50 | <2,500 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | 7,130 | <10,000 | <1,250 | <125 | <50 | <50 | <100 | <1,250 | <50 | <5,000 | NS-FP | 56 | <250 | NS-NW | <50 | <50 | <50 | <2,500 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 290 | <10,000 | <10,000 | <125 | <50 | <100 | <125 | NS-FP | <50 | <5,000 | NS-FP | <50 | <1,000 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <900 | Table 2 | 840* | <125 | <50 | 58.8* | 54.4* | NS-FP | <50 | Table 2 | Table 2 | <50 | 314* | 830* | Table 5 | Table 5 | Table 5 | 516* |
| Ethylbenzene | Feb-94 | 289 | 1,720 | 115 | 1,180 | 1,910 | 44 | | | | | | | | | | | | | | | | | | | |
| | Nov-00 | 950 | 150 | 1,000 | NS-FP | NS-FP | 82 | | | | | | | | | | | | | | | | | | | |
| | Oct-01 | 805 | 197 | 1,860 | NS-NW | Table 2 | 107 | | | | | | | | | | | | | | | | | | | |
| | Feb-03 | 875 | 115 | 1,390 | NS-FP | NS-FP | 84.4 | | | | | | | | | | | | | | | | | | | |
| | Jun-03 | 1,400 | 147 | 1,470 | NS-FP | NS-FP | 124 | NS-FP | <1 | | | | | | | | | | | | | | | | | |
| | Oct-03 | 834 | 468 | 845 | NS-FP | NS-FP | 218 | NS-FP | <1 | | | | | | | | | | | | | | | | | |
| | Dec-03 | NA | 560 | 1,180 | NS-FP | NS-FP | 50 | NS-FP | <5 | 1,480 | 967 | 210 | <1 | 354 | <10 | <50 | <1 | 420 | 1,710 | <1 | <5 | | | | | |
| | Mar-03 | NA | 814 | 883 | NS-FP | NS-FP | 100 | NS-FP | <5 | 1,280 | 1,860 | 200 | <1 | 26.3 | <10 | <50 | <1 | 1,060 | 2,270 | <1 | <5 | | | | | |
| | Jun-03 | NA | <100 | 722 | NS-FP | NS-FP | 85.3 | NS-FP | <10 | 1,400 | 940 | 11.1 | <1 | <1 | <2.5 | <50 | <1 | 1,010 | 2,860 | <2.5 | 31 | 410 | <1 | <1 | <1 | 1,630 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | <10 | 1,300 | 1,010 | <2.5 | 2 | <1 | <2 | <50 | <1 | 740 | NS-FP | <1 | 5.5 | NS-NW | <1 | <1 | <1 | 2,600 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <1 | 1,490 | 1,140 | 157 | <1 | <2 | <2.5 | NS-FP | <1 | 990 | NS-FP | <1 | <1 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <10 | Table 2 | 1,580 | 354 | <1 | <1 | 8.7 | NS-FP | <1 | Table 2 | Table 2 | <1 | 6.8 | <2 | Table 5 | Table 5 | Table 5 | 3,180 |

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Table 4 (cont.): Detected VOCs from Groundwater Sample Results using EPA Method #260 (µg/L)

| VOCs | Date | MW-1 | MW-3 | MW-5 | MW-6 | MW-9 | MW-7 | MW-8 | MW-9 | MW-10 | MW-11 | MW-12 | MW-13 | MW-14 | MW-15 | MW-16 | MW-17 | MW-18 | MW-19 | MW-20 | MW-21 | MW-22 | MW-23 | MW-24 | MW-25 | MW-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | Feb-84 | 1,250 | 2,900 | 6,630 | 4,700 | 21,400 | <50 | | | | | | | | | | | | | | | | | | | |
| | Nov-00 | 1,100 | 190 | 5,600 | NS-FP | NS-FP | 180 | | | | | | | | | | | | | | | | | | | |
| | Oct-01 | <1,250 | <250 | <625 | NS-NW | Table 2 | <125 | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | <250 | 18.5 | 3,950 | NS-FP | NS-FP | <20 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | <250 | <500 | <125 | NS-FP | NS-FP | <25 | NS-FP | <100 | | | | | | | | | | | | | | | | | |
| | Oct-02 | <500 | <50 | <50 | NS-FP | NS-FP | <200 | NS-FP | <25 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | <250 | <250 | NS-FP | NS-FP | <125 | NS-FP | <25 | <2,500 | <125 | <25 | <5 | <125 | <50 | <250 | <5 | <500 | <2,500 | <5 | <25 | | | | | |
| | Mar-03 | NA | <1,000 | 1,600 | NS-FP | NS-FP | <125 | NS-FP | <25 | <1,000 | <500 | <50 | <5 | <125 | <50 | <125 | <5 | <2,500 | 12,500 | <5 | <25 | | | | | |
| | Jun-03 | NA | <500 | <400 | NS-FP | NS-FP | <50 | NS-FP | <25 | <400 | <400 | <10 | <2 | <2 | <5 | <50 | <2 | <400 | 12,000 | <5 | <2 | 113 | <2 | <2 | <2 | 10,800 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | <20 | <400 | <50 | <5 | <2 | <2 | <4 | <50 | <2 | <200 | NS-FP | <4 | <10 | NS-NW | <2 | <2 | <2 | 14,600 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <2 | <400 | <400 | <5 | <2 | <4 | <5 | NS-FP | <2 | <200 | NS-FP | <2 | <20 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <20 | Table 2 | <100 | <5 | <2 | <2 | <2 | NS-FP | <2 | Table 2 | Table 2 | <2 | <10 | 6.8 | Table 5 | Table 5 | Table 5 | 8,300 |
| 4-Methyl-2-pentanone (MIBK) | Oct-01 | <1,250 | <250 | 4,130 | NS-NW | Table 2 | 625 | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | <625 | <62.5 | 3,470 | NS-FP | NS-FP | 375 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | <1,250 | <2,500 | 2,850 | NS-FP | NS-FP | 388 | NS-FP | <500 | | | | | | | | | | | | | | | | | |
| | Oct-02 | <2,500 | <500 | 1,410 | NS-FP | NS-FP | 276 | NS-FP | <125 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | <1,250 | <1,250 | NS-FP | NS-FP | <625 | NS-FP | <125 | <12,500 | 3,540 | <125 | <25 | <625 | <250 | <1,250 | <25 | <2,500 | <12,500 | <25 | <125 | | | | | |
| | Mar-03 | NA | <5,000 | <2,500 | NS-FP | NS-FP | <625 | NS-FP | <125 | 6,160 | 3,680 | <250 | <25 | <625 | <250 | <625 | <25 | 7,400 | 10,100 | <25 | <125 | | | | | |
| | Jun-03 | NA | <500 | <1,000 | NS-FP | NS-FP | <125 | NS-FP | <50 | 5,000 | 3,340 | <125 | <2 | <25 | <62.5 | <125 | <2 | 12,000 | 14,400 | <62.5 | <5 | <250 | <2 | <25 | <25 | 6,250 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | <50 | 10,900 | 1,370 | <12.5 | <5 | <5 | <10 | <125 | <5 | 4,100 | NS-FP | <5 | <50 | NS-NW | <2 | <2 | <2 | 7,300 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <2 | 3,120 | <1,000 | <12.5 | <2 | <10 | <12.5 | NS-FP | <5 | 1,320 | NS-FP | <5 | <100 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <50 | Table 2 | <250 | <12.5 | <5 | <5 | <5 | NS-FP | <5 | Table 2 | Table 2 | <5 | <12.5 | <10 | Table 5 | Table 5 | Table 5 | 5,600 |
| Naphthalene | Oct-01 | 195 | 76 | <125 | NS-NW | Table 2 | 65 | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | 195 | 64 | 123 | NS-FP | NS-FP | 74.8 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | <250 | 89.4 | 175 | NS-FP | NS-FP | 116 | NS-FP | <100 | | | | | | | | | | | | | | | | | |
| | Oct-02 | <500 | 92.2 | 38.3 | NS-FP | NS-FP | <250 | NS-FP | <25 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | <250 | <250 | NS-FP | NS-FP | <125 | NS-FP | <25 | <2,500 | <125 | 87 | <5 | <125 | <50 | <250 | <5 | <500 | <2,500 | <5 | <25 | | | | | |
| | Mar-03 | NA | <1,000 | 206 | NS-FP | NS-FP | 110 | NS-FP | <25 | 568 | 222 | 134 | 89.4 | <125 | 37.5 | 96.3 | 119 | 1,120 | 1,810 | <5 | <25 | | | | | |
| | Jun-03 | NA | <250 | <400 | NS-FP | NS-FP | 80.3 | NS-FP | <20 | 400 | <400 | <10 | <2 | <2 | <5 | <50 | <2 | 376 | 2,280 | <5 | <2 | <20 | <2 | <2 | <2 | 135 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | <50 | <400 | <50 | 32 | <2 | <2 | <2 | <50 | <2 | <200 | NS-FP | <2 | <10 | NS-NW | <2 | <2 | <2 | 135 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <20 | <400 | <400 | 113 | <2 | <2 | <4 | NS-FP | <2 | <200 | NS-FP | <2 | 20 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <20 | Table 2 | <100 | 153 | <2 | <2 | <2 | NS-FP | <2 | Table 2 | Table 2 | <2 | 53.5 | 6.8 | Table 5 | Table 5 | Table 5 | <100 |
| n-Propylbenzene | Jan-02 | <250 | 28.6 | <125 | NS-FP | NS-FP | <25 | NS-FP | <100 | | | | | | | | | | | | | | | | | |
| | Oct-02 | <500 | 44.3 | <50 | NS-FP | NS-FP | <250 | NS-FP | <25 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | <250 | <250 | NS-FP | NS-FP | <125 | NS-FP | <25 | <2,500 | 256 | 58.5 | <5 | <125 | <50 | <250 | <5 | <500 | <2,500 | <5 | <25 | | | | | |
| | Mar-03 | NA | <1,000 | <500 | NS-FP | NS-FP | <125 | NS-FP | <25 | <1,000 | 492 | 191 | <5 | <125 | <50 | <125 | <5 | <2,500 | <2,500 | <5 | <25 | | | | | |
| | Jun-03 | NA | <250 | <400 | NS-FP | NS-FP | <50 | NS-FP | <20 | <400 | <400 | <10 | <2 | <2 | <5 | <50 | <2 | <400 | <1,000 | <5 | <2 | <20 | <2 | <2 | <2 | <100 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | <20 | <400 | 303 | 45 | <2 | <2 | <4 | <50 | <2 | <200 | NS-FP | <2 | 10.5 | NS-NW | <2 | <2 | <2 | <100 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <20 | <400 | <400 | 123 | <2 | <4 | <5 | NS-FP | <2 | 200 | NS-FP | 22.6 | 40 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <20 | Table 2 | 355 | 237 | <2 | <2 | <2 | NS-FP | <2 | Table 2 | Table 2 | <2 | 14.8 | <4 | Table 5 | Table 5 | Table 5 | <100 |

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Table 4 (cont.): Detected VOCs from Groundwater Sample Results using EPA Method 8260 (µg/L)

| VOCs | Date | MW-1 | MW-2 | MW-3 | MW-4 | MW-5 | MW-7 | MW-8 | MW-9 | MW-10 | MW-11 | MW-12 | MW-13 | MW-14 | MW-15 | MW-16 | MW-17 | MW-18 | MW-19 | MW-20 | MW-21 | MW-22 | MW-23 | MW-24 | MW-25 | MW-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tetrachloroethene | Feb-94 | 582 | 2,150 | 8,370 | 3,350 | 2,150 | 194 | | | | | | | | | | | | | | | | | | | |
| | Nov-00 | <2,600 | <850 | 130 | NS-FP | NS-FP | <800 | | | | | | | | | | | | | | | | | | | |
| | Oct-01 | <100 | <20 | 130 | NS-NW | Table 2 | 100 | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | 20 | 3.3 | 302 | NS-FP | NS-FP | 8.2 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | 24.8 | <500 | 135 | NS-FP | NS-FP | <25 | NS-FP | 122 | | | | | | | | | | | | | | | | | |
| | Oct-02 | <300 | <20 | 38.3 | NS-FP | NS-FP | <100 | NS-FP | 186 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | <100 | <100 | NS-FP | NS-FP | <50 | NS-FP | 204 | <1,000 | <50 | <10 | 97.1 | <50 | <20 | 208 | 6.1 | 334 | 1,540 | 9.7 | 33.1 | | | | | |
| | Mar-03 | NA | <400 | 411 | NS-FP | NS-FP | <50 | NS-FP | 136 | <400 | <200 | <20 | 11 | <50 | <20 | 320 | 25 | <1,000 | 1,480 | 3.3 | 17.8 | | | | | |
| | Jun-03 | NA | 258 | 318 | NS-FP | NS-FP | <20 | NS-FP | 182 | <400 | <400 | <10 | 181 | 21.9 | 29.9 | 485 | 35.9 | <400 | 1,490 | 48.6 | <2 | <20 | 4 | 4.1 | 12.3 | 1,350 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | 131 | <400 | <20 | 12.6 | 148 | 28.3 | 55 | 276 | 18.1 | <200 | NS-FP | 18.3 | 282 | NS-NW | 4.1 | 10.7 | 31 | 3,990 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 4.6 | <400 | <400 | 2.8 | 38.3 | 42.4 | 12.1 | NS-FP | 18 | <200 | NS-FP | 3.4 | 133 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 148 | Table 2 | <100 | 2.5 | 61.4 | 42 | 83.2 | NS-FP | 36.2 | Table 2 | Table 2 | 9.3 | 327 | 2 | Table 5 | Table 5 | Table 5 | 5,160 |
| 1,1,1-Trichloroethane | Feb-94 | 9,370 | 3,370 | 441 | 38,200 | 114,000 | 90 | | | | | | | | | | | | | | | | | | | |
| | Nov-00 | <2,300 | <300 | 70 | NS-FP | NS-FP | <800 | | | | | | | | | | | | | | | | | | | |
| | Oct-01 | <280 | <40 | <120 | NS-NW | Table 2 | <25 | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | <125 | <12.5 | <100 | NS-FP | NS-FP | <10 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | <250 | <800 | <120 | NS-FP | NS-FP | <25 | NS-FP | <100 | | | | | | | | | | | | | | | | | |
| | Oct-02 | <300 | <30 | <80 | NS-FP | NS-FP | <200 | NS-FP | 92 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | <280 | <280 | NS-FP | NS-FP | <125 | NS-FP | 30.3 | 13,600 | 52.8 | 21 | 48 | 230 | <50 | <250 | 6 | 1,100 | 21,500 | 48 | <20 | | | | | |
| | Mar-03 | NA | <1,000 | <300 | NS-FP | NS-FP | <120 | NS-FP | 36 | 12,300 | <300 | 14 | 1.4 | 77.8 | <20 | 33.8 | 9.5 | 883 | 37,600 | <2 | 14 | | | | | |
| | Jun-03 | NA | 180 | <400 | NS-FP | NS-FP | <50 | NS-FP | 18.8 | 8,480 | <400 | 13 | <2 | 3.4 | 10.7 | 42.5 | <2 | 260 | 61,200 | 28 | 70 | <20 | <2 | <2 | <2 | 1,200 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | <20 | 4,610 | <80 | 6.7 | <2 | 2.9 | 8.4 | <50 | 8 | <20 | NS-FP | 8.6 | 158 | NS-NW | <2 | <2 | <2 | 1,760 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <2 | 7,400 | 362 | 10.7 | <2 | <4 | <6 | NS-FP | 2.2 | 1,190 | NS-FP | 61.7 | 152 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 11.1 | Table 2 | 170 | 6.3 | <2 | <2 | 7.7 | NS-FP | <2 | Table 2 | Table 2 | 20.8 | 188 | <4 | Table 5 | Table 5 | Table 5 | 7,390 |
| Trichloroethene | Feb-94 | 7,160 | 3,040 | 1,730 | 14,300 | 1,320 | 45 | | | | | | | | | | | | | | | | | | | |
| | Nov-00 | <2,300 | <300 | 1,800 | NS-FP | NS-FP | <800 | | | | | | | | | | | | | | | | | | | |
| | Oct-01 | <100 | <20 | 100 | NS-NW | Table 2 | <10 | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | 20 | 2.6 | 200 | NS-FP | NS-FP | 8.8 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | <250 | <500 | 134 | NS-FP | NS-FP | <25 | NS-FP | <100 | | | | | | | | | | | | | | | | | |
| | Oct-02 | <200 | <20 | 28 | NS-FP | NS-FP | <100 | NS-FP | 58.8 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | <100 | <100 | NS-FP | NS-FP | <50 | NS-FP | 50.4 | <1,000 | <50 | <10 | 77.2 | <50 | <20 | 274 | 3 | 949 | 1,740 | 2.8 | 44.7 | | | | | |
| | Mar-03 | NA | <400 | 1,930 | NS-FP | NS-FP | <50 | NS-FP | 39 | <400 | <200 | <20 | 28.8 | <50 | 134 | 400 | 7.4 | 810 | 2,380 | 1.5 | 31.7 | | | | | |
| | Jun-03 | NA | 182 | 608 | NS-FP | NS-FP | <20 | NS-FP | 41.8 | <400 | <400 | <10 | 72.7 | 4 | 18.8 | 438 | 8.5 | 178 | 3,850 | 10 | 98 | <20 | 2.3 | 2.3 | 20.4 | 1,330 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | 47 | <400 | <40 | 7.3 | 85.2 | 12.1 | 16 | 2,630 | 3.8 | <200 | NS-FP | 8.2 | 190 | NS-NW | <2 | 11.8 | 25 | 2,100 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 1.7 | <400 | <400 | <5 | 47 | 22.8 | 9.3 | NS-FP | 7.3 | 180 | NS-FP | 4.4 | 140 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 37.2 | Table 2 | <100 | <5 | 16.5 | 18.1 | 17.8 | NS-FP | 8.5 | Table 2 | Table 2 | 2.5 | 240 | <4 | Table 5 | Table 5 | Table 5 | 3,000 |
| 1,2,4-Trimethylbenzene | Oct-01 | 1,580 | 13.8 | 345 | NS-NW | Table 2 | 200 | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | 2,830 | 221 | 458 | NS-FP | NS-FP | 224 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | 3,950 | <800 | 618 | NS-FP | NS-FP | 238 | NS-FP | <100 | | | | | | | | | | | | | | | | | |
| | Oct-02 | 2,120 | 110 | 280 | NS-FP | NS-FP | 227 | NS-FP | <25 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | 282 | 598 | NS-FP | NS-FP | 472 | NS-FP | <25 | <3,500 | 2,120 | 1,640 | 46 | 270 | <35 | <260 | <5 | 1,890 | 2,500 | 45 | 28 | | | | | |
| | Mar-03 | NA | 380 | 441 | NS-FP | NS-FP | 225 | NS-FP | <25 | 1,880 | 2,050 | 703 | 45 | 30 | <50 | 238 | 258 | 2,490 | 4,880 | 48 | 28 | | | | | |
| | Jun-03 | NA | <200 | 376 | NS-FP | NS-FP | 192 | NS-FP | <20 | 1,740 | 1,460 | 20 | <2 | <2 | <5 | <80 | <2 | 2,070 | 6,080 | 19.5 | 18.5 | <20 | <2 | <2 | <2 | <100 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | <20 | 1,490 | 1,630 | 110 | <2 | <2 | <4 | <50 | <2 | 1,880 | NS-FP | <2 | 20.8 | NS-NW | <2 | <2 | <2 | 885 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <20 | 1,840 | 1,882 | 488 | <2 | <4 | <6 | NS-FP | <2 | 1,810 | NS-FP | 33.1 | 140 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <20 | Table 2 | 2,060 | 1,200 | <2 | <2 | 15 | NS-FP | <2 | Table 2 | Table 2 | <2 | 30 | 5.6 | Table 5 | Table 5 | Table 5 | 1,140 |

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Table 4 (cont.): Detected VOCs from Groundwater Sample Results using EPA Method 8260 (µg/L)

| VOCs | Date | MW-1 | MW-2 | MW-3 | MW-4 | MW-5 | MW-7 | MW-8 | MW-9 | MW-10 | MW-11 | MW-12 | MW-13 | MW-14 | MW-15 | MW-16 | MW-17 | MW-18 | MW-19 | MW-20 | MW-21 | MW-22 | MW-23 | MW-24 | MW-25 | MW-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | Oct-01 | 470 | 62.6 | 142 | NS-NW | Table 2 | 25 | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | 955 | 57.8 | 128 | NS-FP | NS-FP | 43.6 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | 1,170 | 57.5 | <100 | NS-FP | NS-FP | <25 | NS-FP | <100 | | | | | | | | | | | | | | | | | |
| | Oct-02 | 974 | 67.8 | 67.8 | NS-FP | NS-FP | <250 | NS-FP | <25 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | <250 | <250 | NS-FP | NS-FP | <125 | NS-FP | <25 | <2,500 | 573 | 765 | <5 | 106 | <50 | <250 | <5 | 626 | <2,500 | <5 | <25 | | | | | |
| | Mar-03 | NA | <1,000 | <2000 | NS-FP | NS-FP | 50 | NS-FP | <25 | 404 | 905 | 411 | <5 | <125 | <50 | <125 | <5 | 635 | 945 | <5 | <25 | | | | | |
| | Jun-03 | NA | <200 | <400 | NS-FP | NS-FP | <50 | NS-FP | <20 | 395 | 440 | 19 | <5 | <2 | <5 | <20 | <5 | 396 | 1,600 | <5 | <5 | <50 | <5 | <5 | <5 | <100 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | <20 | 320 | 370 | 92 | <5 | <2 | <4 | <20 | <5 | 400 | NS-FP | <5 | <10 | NS-NW | <5 | <5 | <5 | 170 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <20 | 412 | 608 | 294 | <5 | <4 | <5 | NS-FP | <5 | 466 | NS-FP | 13.6 | <40 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <20 | Table 2 | 378 | 919 | <5 | <5 | 9.4 | NS-FP | <5 | Table 2 | Table 2 | <5 | 5.9 | 44 | Table 5 | Table 5 | Table 5 | 300 |
| Toluene | Feb-01 | 590 | 7,300 | 578 | 12,700 | 18,300 | 398 | | | | | | | | | | | | | | | | | | | |
| | Nov-00 | 4,000 | 67 | 3,700 | NS-FP | NS-FP | 800 | | | | | | | | | | | | | | | | | | | |
| | Oct-01 | 5,470 | 26 | 6,160 | NS-NW | Table 2 | 975 | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | 4,980 | 28.2 | 4,525 | NS-FP | NS-FP | 1,250 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | 6,100 | 102 | 5,780 | NS-FP | NS-FP | 1,200 | NS-FP | <20 | | | | | | | | | | | | | | | | | |
| | Oct-02 | 5,380 | 58 | 4,810 | NS-FP | NS-FP | 2,200 | NS-FP | <5 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | 158 | 5,770 | NS-FP | NS-FP | 541 | NS-FP | <5 | 18,600 | 1,230 | 28.5 | 1.2 | 2,840 | 14.4 | <50 | <1 | 1,730 | 13,600 | 2.3 | 67 | | | | | |
| | Mar-03 | NA | <200 | 2,310 | NS-FP | NS-FP | 896 | NS-FP | <5 | 12,000 | 3,830 | 19.3 | <1 | 290 | <10 | <25 | <1 | 4,970 | 11,600 | <1 | <5 | | | | | |
| | Jun-03 | NA | <100 | 2,080 | NS-FP | NS-FP | 724 | NS-FP | <10 | 10,600 | 4,620 | 48 | <1 | <1 | <2.5 | <25 | <1 | 3,310 | 13,600 | 7.3 | <1 | <10 | <1 | <1 | <1 | <50 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | <10 | 13,800 | 4,000 | <2.3 | <1 | <1 | 2 | <25 | <1 | 3,700 | NS-FP | <1 | 10 | NS-NW | <1 | <1 | <1 | 10,500 |
| | Dec-03 | NA | NA | 90 | NS-FP | NS-FP | NA | NS-FP | <1 | 13,900 | 6,570 | 9.7 | <1 | <2 | 3.3 | NS-FP | <1 | 3,980 | NS-FP | 14.6 | <1 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <10 | Table 2 | 6,050 | <2.3 | <1 | <1 | 21.8 | NS-FP | <1 | Table 2 | Table 2 | <1 | 17.5 | 18.4 | Table 5 | Table 5 | Table 5 | 16,250 |
| Vinyl Chloride | Oct-01 | 1,230 | 75 | <5 | NS-NW | Table 2 | 186 | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | 1,080 | 107 | 898 | NS-FP | NS-FP | 817 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | <100 | <200 | <50 | NS-FP | NS-FP | <10 | NS-FP | <40 | | | | | | | | | | | | | | | | | |
| | Oct-02 | 2,860 | 3,710 | 12,200 | NS-FP | NS-FP | 884 | NS-FP | 123 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | 2,730 | 12,700 | NS-FP | NS-FP | 422 | NS-FP | 107 | 4,100 | 106 | 1,100 | 6.2 | <50 | 58.1 | 665 | <2 | <200 | <1,000 | <2 | 28.1 | | | | | |
| | Mar-03 | NA | 1,040 | 7,870 | NS-FP | NS-FP | 300 | NS-FP | 92 | 5,690 | 1,160 | 66.6 | 2.9 | <50 | 77.6 | 587 | <2 | <1,000 | 630 | <2 | 23.6 | | | | | |
| | Jun-03 | NA | 4,600 | 2,380 | NS-FP | NS-FP | 860 | NS-FP | 173 | 3,410 | 1,895 | 35 | 3.5 | <2 | 48 | 395 | <2 | 2,400 | <1,000 | <5 | <2 | 88.9 | <2 | <2 | <2 | <100 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | 206 | 4,610 | 1,310 | 38 | <2 | 5.2 | 51 | 556 | <2 | 800 | NS-FP | <2 | 31.5 | NS-NW | <2 | <2 | <2 | <100 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 6.2 | 3,700 | 1,855 | 13.1 | <2 | 5.1 | 134 | NS-FP | <2 | <200 | NS-FP | <2 | 47.3 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | 185 | Table 2 | 1,190 | 6.6 | <1 | <1 | 840 | NS-FP | <1 | Table 2 | Table 2 | <1 | 55 | 480 | Table 5 | Table 5 | Table 5 | 450 |
| Xylenes | Feb-01 | 2,192 | 1,780 | 1,014 | 4,300 | 4,710 | 198 | | | | | | | | | | | | | | | | | | | |
| | Nov-00 | 3,400 | <500 | 2,600 | NS-FP | NS-FP | 247 | | | | | | | | | | | | | | | | | | | |
| | Oct-01 | 2,770 | <2 | 8,730 | NS-NW | Table 2 | 301 | | | | | | | | | | | | | | | | | | | |
| | Feb-02 | 2,700 | 14.6 | 9,070 | NS-FP | NS-FP | 200 | | | | | | | | | | | | | | | | | | | |
| | Jun-02 | 5,240 | 162 | 3,080 | NS-FP | NS-FP | 324 | NS-FP | <25 | | | | | | | | | | | | | | | | | |
| | Oct-02 | 3,370 | 73 | 2,870 | NS-FP | NS-FP | 676 | NS-FP | <5 | | | | | | | | | | | | | | | | | |
| | Dec-02 | NA | 325 | 2,900 | NS-FP | NS-FP | 121 | NS-FP | <5 | 4,680 | 746 | 242 | <1 | 1,790 | <10 | <50 | <1 | 2,890 | 3,940 | <1 | <5 | | | | | |
| | Mar-03 | NA | 918 | 2,100 | NS-FP | NS-FP | 318 | NS-FP | <10 | 3,230 | 1,820 | 28.1 | <2 | 100 | <50 | <50 | <2 | 4,200 | 4,660 | <2 | 6.4 | | | | | |
| | Jun-03 | NA | 170 | 1,760 | NS-FP | NS-FP | 238 | NS-FP | <10 | 4,690 | 1,650 | <5 | <1 | <1 | <2.5 | <25 | <1 | 3,650 | 5,040 | 5.9 | <1 | <10 | <1 | <1 | <1 | 1,050 |
| | Sep-03 | NA | NA | NA | NS-NW | NS-FP | NA | NS-FP | <10 | 4,460 | 1,330 | 9 | <1 | <1 | <2 | <25 | <1 | 2,620 | NS-FP | <1 | 65 | NS-NW | <1 | <1 | <1 | 8,870 |
| | Dec-03 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <1 | 4,900 | 2,020 | 167 | <1 | <2 | <2.5 | NS-FP | <1 | 3,010 | NS-FP | 72 | 91.9 | NS-NW | Table 5 | Table 5 | Table 5 | NS-NW |
| | Mar-04 | NA | NA | NA | NS-FP | NS-FP | NA | NS-FP | <10 | Table 2 | 3,170 | 231 | <1 | <1 | 27.3 | NS-FP | <1 | Table 2 | Table 2 | <1 | 175 | 8.8 | Table 5 | Table 5 | Table 5 | 9,920 |

NA= Not Analyzed. ' = Abandoned Well.

NS-FP= Not Sampled Free Product present. NS-NW= Not Sampled Not Enough Water present.

Bold= Chemicals stored on-site. Italic= Transformation compounds.

ANCHEM0459

| Table 5: Detected VOCs from Diffusion Bag Groundwater Samples using EPA Method 8260 (µg/L) | | | | | |
|---|---|---|---|---|---|
| | Date | Depth | MW-23 | MW-24 | MW-25 |
| Screened Interval (bg) | | | 71'-81' | 67'-77' | 71'-81' |
| | | | | | |
| DTW (ft) | 15-Dec-03 | | 42.65 | 45.69 | 47.35 |
| | 30-Mar-04 | | 43.25 | 46.41 | 48.03 |
| | | | | | |
| **VOCs** | | | | | |
| Acetone | 15-Dec-03 | 1.5' | <25 | <25 | <25 |
| | 15-Dec-03 | 7.5' | <25 | <25 | <25 |
| | 30-Mar-04 | 2.5' | <25 | <25 | <25 |
| | 30-Mar-04 | 7.5' | <25 | <25 | <25 |
| | | | | | |
| Benzene | 15-Dec-03 | 1.5' | <1 | <1 | <1 |
| | 15-Dec-03 | 7.5' | <1 | <1 | <1 |
| | 30-Mar-04 | 2.5' | <1 | <1 | <1 |
| | 30-Mar-04 | 7.5' | <1 | <1 | <1 |
| | | | | | |
| 2-Butanone (MEK) | 15-Dec-03 | 1.5' | <25 | <25 | <25 |
| | 15-Dec-03 | 7.5' | <25 | <25 | <25 |
| | 30-Mar-04 | 2.5' | <25 | <25 | <25 |
| | 30-Mar-04 | 7.5' | <25 | <25 | <25 |
| | | | | | |
| Chloroethane | 15-Dec-03 | 1.5' | <2 | <2 | <2 |
| | 15-Dec-03 | 7.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 2.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 7.5' | <2 | <2 | <2 |
| | | | | | |
| 1,1-Dichloroethane | 15-Dec-03 | 1.5' | <2 | <2 | <2 |
| | 15-Dec-03 | 7.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 2.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 7.5' | <2 | <2 | <2 |
| | | | | | |
| 1,2-Dichloroethane | 15-Dec-03 | 1.5' | <2 | <2 | <2 |
| | 15-Dec-03 | 7.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 2.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 7.5' | <2 | <2 | <2 |
| | | | | | |
| 1,1-Dichloroethene | 15-Dec-03 | 1.5' | 6 | 14.6 | 7.4 |
| | 15-Dec-03 | 7.5' | 6.1 | <2 | 6.2 |
| | 30-Mar-04 | 2.5' | 4.4 | 7.6 | 7.4 |
| | 30-Mar-04 | 7.5' | 4.2 | 6.6 | 6.2 |
| | | | | | |
| cis 1,2-Dichloroethene | 15-Dec-03 | 1.5' | 2.4 | 8.8 | 3.4 |
| | 15-Dec-03 | 7.5' | <2 | 5.7 | <2 |
| | 30-Mar-04 | 2.5' | <2 | 11.7 | <2 |
| | 30-Mar-04 | 7.5' | <2 | 11.3 | <2 |

| Table 5: Detected VOCs from Diffusion Bag Groundwater Samples using EPA Method 8260 (µg/L) | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| VOCs | Date | Depth | MW-23 | MW-24 | MW-25 |
| trans 1,2-Dichloroethene | 15-Dec-03 | 1.5' | <2 | <2 | <2 |
| | 15-Dec-03 | 7.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 2.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 7.5' | <2 | <2 | <2 |
| | | | | | |
| 1,4 Dioxane | 15-Dec-03 | 1.5' | <50 | <50 | <50 |
| | 15-Dec-03 | 7.5' | <50 | <50 | <50 |
| | 30-Mar-04 | 2.5' | <50 | <50 | <50 |
| | 30-Mar-04 | 7.5' | <50 | <50 | <50 |
| | | | | | |
| Ethylbenzene | 15-Dec-03 | 1.5' | <1 | <1 | <1 |
| | 15-Dec-03 | 7.5' | <1 | <1 | <1 |
| | 30-Mar-04 | 2.5' | <1 | <1 | <1 |
| | 30-Mar-04 | 7.5' | <1 | <1 | <1 |
| | | | | | |
| Methylene Chloride | 15-Dec-03 | 1.5' | <2 | <2 | <2 |
| | 15-Dec-03 | 7.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 2.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 7.5' | <2 | <2 | <2 |
| | | | | | |
| 4-Methyl-2-pentanone | 15-Dec-03 | 1.5' | <25 | <25 | <25 |
| | 15-Dec-03 | 7.5' | <25 | <25 | <25 |
| | 30-Mar-04 | 2.5' | <25 | <25 | <25 |
| | 30-Mar-04 | 7.5' | <25 | <25 | <25 |
| | | | | | |
| Naphthalene | 15-Dec-03 | 1.5' | <2 | <2 | <2 |
| | 15-Dec-03 | 7.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 2.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 7.5' | <2 | <2 | <2 |
| | | | | | |
| n-Propylbenzene | 15-Dec-03 | 1.5' | <2 | <2 | <2 |
| | 15-Dec-03 | 7.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 2.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 7.5' | <2 | <2 | <2 |
| | | | | | |
| Tetrachloroethene | 15-Dec-03 | 1.5' | 30.6 | 75.4 | 37.1 |
| | 15-Dec-03 | 7.5' | 14.8 | 24.3 | 37.2 |
| | 30-Mar-04 | 2.5' | 38.2 | 225 | 30.3 |
| | 30-Mar-04 | 7.5' | 37.7 | 263 | 24.9 |
| | | | | | |

| Table 5: Detected VOCs from Diffusion Bag Groundwater Samples using EPA Method 8260 (µg/L) | | | | | |
|---|---|---|---|---|---|
| | | | | | |
| VOCs | Date | Depth | MW-23 | MW-24 | MW-25 |
| 1,1,1-Trichloroethane | 15-Dec-03 | 1.5' | 3.2 | 2.3 | <2 |
| | 15-Dec-03 | 7.5' | 2.6 | <2 | <2 |
| | 30-Mar-04 | 2.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 7.5' | <2 | <2 | <2 |
| | | | | | |
| Trichloroethene | 15-Dec-03 | 1.5' | 11.3 | 51.4 | 38.5 |
| | 15-Dec-03 | 7.5' | 7.9 | 49.3 | 39.4 |
| | 30-Mar-04 | 2.5' | 14.2 | 74.5 | 34.9 |
| | 30-Mar-04 | 7.5' | 14.7 | 67.1 | 18.6 |
| | | | | | |
| 1,2,4-Trimethylbenzene | 15-Dec-03 | 1.5' | <2 | <2 | <2 |
| | 15-Dec-03 | 7.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 2.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 7.5' | <2 | <2 | <2 |
| | | | | | |
| 1,3,5-Trimethylbenzene | 15-Dec-03 | 1.5' | <2 | <2 | <2 |
| | 15-Dec-03 | 7.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 2.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 7.5' | <2 | <2 | <2 |
| | | | | | |
| Toluene | 15-Dec-03 | 1.5' | <1 | <1 | <1 |
| | 15-Dec-03 | 7.5' | <1 | <1 | <1 |
| | 30-Mar-04 | 2.5' | <1 | <1 | <1 |
| | 30-Mar-04 | 7.5' | <1 | <1 | <1 |
| | | | | | |
| Vinyl Chloride | 15-Dec-03 | 1.5' | <2 | <2 | <2 |
| | 15-Dec-03 | 7.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 2.5' | <2 | <2 | <2 |
| | 30-Mar-04 | 7.5' | <2 | <2 | <2 |
| | | | | | |
| Xylenes | 15-Dec-03 | 1.5' | <1 | <1 | <1 |
| | 15-Dec-03 | 7.5' | <1 | <1 | <1 |
| | 30-Mar-04 | 2.5' | <1 | <1 | <1 |
| | 30-Mar-04 | 7.5' | <1 | <1 | <1 |
| | | | | | |
| | | | | | |
| DTW= Depth to Water. | | | | | |
| Depth= Depth above well bottom. | | | | | |
| Blue= Chemicals stored on-site. | | | | | |
| Red= Transformation compounds. | | | | | |

Table 6. Results for EPA Methods 376.1, 325.3, 310.1, 352.1, 375.4, 7380, 7460, 160.1, Colorimetry and Standard Method 4500 (mg/L)

| Compound | Date | MW-2 | MW-3 | MW-7 | MW-9 | MW-10 | MW-11 | MW-12 | MW-13 | MW-14 | MW-15 | MW-16 | MW-17 | MW-18 | MW-19 | MW-20 | MW-21 | MW-22 | MW-23 | MW-24 | MW-25 | MW-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dissolved Organic Carbon | Dec-03 | NA | NA | NA | 12 | 196 | 100 | 3 | 1.6 | 2.6 | 2.4 | NA | 0.9 | 100 | NA | 2.2 | 3.4 | | NA | NA | NA | NA |
| | Mar-04 | NA | NA | NA | 8.6 | NA | 240 | 3.1 | 1.3 | 2.4 | 6.6 | NA | 0.8 | NA | NA | 1 | 3.3 | 10 | NA | NA | NA | 50 |
| Total Organic Carbon | Dec-03 | NA | NA | NA | 13 | 225 | 105 | 3.7 | 1.9 | 3.1 | 2.6 | NA | 1.2 | 110 | NA | 2.6 | 3.7 | | NA | NA | NA | NA |
| | Mar-04 | NA | NA | NA | 9.6 | NA | 270 | 3.4 | 1.5 | 3.1 | 6.5 | NA | 1 | NA | NA | 1.1 | 3.7 | 11 | NA | NA | NA | 60 |
| TDS | Jun-03 | 1,180 | 1,220 | 1,350 | 1,640 | 1,970 | 2,250 | 630 | 1,200 | 1,450 | 1,830 | 1,090 | 1,400 | 1,720 | 4,500 | 1,280 | 1,250 | | | | | |
| | Sep-03 | NA | NA | NA | 1,600 | 2,330 | 1,935 | 732 | 1,165 | 1,205 | 1,195 | 1,030 | 1,675 | 1,665 | NA | 1,235 | 1,298 | | 630 | 773 | 870 | 1,460 |
| | Dec-03 | NA | NA | NA | 1,250 | 1,840 | 1,890 | 730 | 1,190 | 1,140 | 1,390 | NA | 1,170 | 1,520 | NA | 1,200 | 1,110 | | NA | NA | NA | NA |
| | Mar-04 | NA | NA | NA | 2,820 | NA | 1,860 | 1,570 | 1,210 | 835 | 873 | NA | 1,310 | NA | NA | 2,020 | 1,050 | 643 | NA | NA | NA | 956 |
| Total Alkalinity | Jun-03 | 460 | 540 | 598 | 535 | 835 | 950 | 290 | 450 | 438 | 455 | 605 | 460 | 1,025 | 1,425 | 425 | 472 | | | | | |
| | Sep-03 | NA | NA | NA | 543 | 880 | 955 | 408 | 475 | 375 | 448 | 800 | 475 | 985 | NA | 433 | 460 | | 235 | 253 | 350 | 670 |
| | Dec-03 | NA | NA | NA | 540 | 889 | 912 | 340 | 435 | 350 | 465 | NA | 430 | 930 | NA | 479 | 530 | | NA | NA | NA | NA |
| | Mar-04 | NA | NA | NA | 485 | NA | 766 | 455 | 452 | 298 | 456 | NA | 407 | NA | NA | 449 | 542 | 593 | NA | NA | NA | 563 |
| Carbonate/bicarbonate | Jun-03 | 552 | 756 | 1,060 | 812 | 1,122 | 1,152 | 348 | 518 | 519 | 546 | 726 | 552 | 1,230 | 1,710 | 510 | 567 | | | | | |
| | Sep-03 | NA | NA | NA | 654 | 804 | 1,176 | 489 | 507 | 444 | 507 | 720 | 570 | 1,146 | NA | 519 | 552 | | 282 | 308 | 420 | 804 |
| | Dec-03 | NA | NA | NA | 324 | 573 | 647 | 204 | 261 | 210 | 279 | NA | 258 | 552 | NA | 287 | 318 | | NA | NA | NA | NA |
| | Mar-04 | NA | NA | NA | 582 | NA | 919 | 588 | 542 | 351 | 550 | NA | 488 | NA | NA | 539 | 650 | 712 | NA | NA | NA | 713 |
| Chloride | Jun-03 | 98.3 | 227 | 258 | 241 | 383 | 425 | 70.9 | 101 | 92.2 | 96 | 227 | 96.4 | 284 | 1,190 | 87.9 | 87.9 | | | | | |
| | Sep-03 | NA | NA | NA | 241 | 510 | 385 | 57 | 99 | 143 | 108 | 289 | 170 | 298 | NA | 92 | 142 | | 71 | 74 | 85 | 326 |
| | Dec-03 | NA | NA | NA | 258 | 382 | 344 | 74.4 | 106 | 160 | 113 | NA | 106 | 90.3 | NA | 99.3 | 135 | | NA | NA | NA | NA |
| | Mar-04 | NA | NA | NA | 221 | NA | 441 | 79.2 | 92.8 | 92.8 | 104 | NA | 95.3 | NA | NA | 128 | 156 | 126 | NA | NA | NA | 287 |
| Sulfide | Jun-03 | <0.02 | 1.6 | 0.64 | <0.02 | 0.8 | 3.68 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | 0.48 | 1.52 | <0.02 | <0.02 | | | | | |
| | Sep-03 | NA | NA | NA | <0.05 | 5.12 | 2.36 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 1.93 | NA | <0.05 | <0.05 | | <0.05 | <0.05 | <0.05 | 16.8 |
| | Dec-03 | NA | NA | NA | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | NA | <0.05 | <0.05 | NA | <0.05 | <0.05 | | NA | NA | NA | NA |
| | Mar-04 | NA | NA | NA | <0.02 | NA | <0.02 | <0.02 | <0.02 | <0.02 | <0.02 | NA | <0.02 | NA | NA | <0.02 | <0.02 | <0.02 | NA | NA | NA | <0.02 |
| Sulfate | Jun-03 | 61.2 | 32.6 | 15 | 264 | 0.87 | 7.9 | 108 | 214 | 182 | 279 | 104 | 266 | 28.3 | 5.74 | 176 | 162 | | | | | |
| | Sep-03 | NA | NA | NA | 250 | 98 | 26 | 85 | 230 | 224 | 286 | 70 | 215 | 85 | NA | 215 | 230 | | 118 | 154 | 210 | 60 |
| | Dec-03 | NA | NA | NA | 783 | 19.9 | 16 | 47 | 533 | 399 | 287 | NA | 387 | 62.9 | NA | 501 | 287 | | NA | NA | NA | NA |
| | Mar-04 | NA | NA | NA | 506 | NA | <1 | 27.9 | 362 | <1 | <1 | NA | 326 | NA | NA | 280 | <1 | <1 | NA | NA | NA | <1 |
| Nitrate | Jun-03 | 22.6 | <0.01 | 1.18 | 18.4 | 1.96 | 6.81 | <0.01 | 27.8 | 25.1 | 29.7 | 2.57 | 27.8 | 2.62 | 0.77 | 24.2 | 29.8 | | | | | |
| | Sep-03 | NA | NA | NA | 0.138 | <0.01 | <0.01 | <0.01 | 0.027 | <0.012 | 0.028 | <0.01 | <0.01 | <0.01 | NA | 0.17 | 0.019 | | 0.177 | <0.01 | <0.01 | <0.01 |
| | Dec-03 | NA | NA | NA | 28.5 | 5.21 | 3.98 | 1.16 | 17.4 | 20.9 | 25.2 | NA | 20.1 | 1.14 | NA | 21.4 | 22.5 | | NA | NA | NA | NA |
| | Mar-04 | NA | NA | NA | 22.5 | NA | 12.7 | 0.46 | 19.6 | 24.1 | 17.1 | NA | 18 | NA | NA | 28.7 | 20 | 7.3 | NA | NA | NA | <0.01 |

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Table 6. (Continued) Results for EPA Methods 376.1, 325.3, 310.1, 352.1, 375.4, 7380, 7460, 160.1, Colorimetry and Standard Method 4500 (mg/L)

| Compound | Date | MW-2 | MW-3 | MW-7 | MW-8 | MW-10 | MW-11 | MW-12 | MW-13 | MW-14 | MW-15 | MW-16 | MW-17 | MW-18 | MW-19 | MW-20 | MW-21 | MW-22 | MW-23 | MW-24 | MW-25 | MW-26 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Iron | Jun-03 | <0.1 | 0.2 | 1 | <0.1 | 0.2 | 10.7 | 0.16 | 0.14 | <0.1 | 0.2 | <0.1 | 0.45 | 0.9 | 0.8 | 0.22 | <0.1 | | | | | |
| | Sep-03 | NA | NA | NA | <0.05 | 52.3 | 16.7 | 0.41 | <0.05 | <0.05 | <0.05 | <0.05 | 0.26 | 14.4 | NA | <0.05 | <0.05 | | <0.05 | 0.1 | <0.05 | 0.44 |
| | Dec-03 | NA | NA | NA | 0.36 | 31.7 | 30.8 | 3.66 | 0.19 | 0.14 | 0.36 | NA | 0.36 | 63.1 | NA | 0.24 | 1.2 | | NA | NA | NA | NA |
| | Mar-04 | NA | NA | NA | 0.15 | NA | 10.5 | 4.14 | <0.1 | <0.1 | <0.1 | NA | <0.1 | NA | NA | 0.82 | <0.1 | <0.1 | NA | NA | NA | <0.1 |
| Ferrous Iron | Jun-03 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.49 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | | | | | |
| | Sep-03 | NA | NA | NA | <0.05 | 3.2 | 0.98 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 4.33 | FP | <0.05 | <0.05 | | <0.05 | <0.05 | <0.05 | <0.05 |
| | Dec-03 | NA | NA | NA | 0.16 | 1.42 | 2.32 | 0.73 | 0.18 | 0.21 | 0.21 | NA | 0.42 | 1.69 | NA | 0.14 | 0.17 | | NA | NA | NA | NA |
| | Mar-04 | NA | NA | NA | <0.05 | NA | 2.82 | 2.23 | <0.05 | 0.21 | 0.57 | NA | <0.05 | NA | NA | 0.1 | 0.86 | 0.4 | NA | NA | NA | 0.6 |
| Manganese | Jun-03 | <0.1 | 2.1 | 0.87 | <0.1 | 1.49 | 6.7 | 1.8 | <0.1 | <0.1 | 0.4 | 0.8 | <0.1 | 0.92 | 1.77 | <0.1 | 0.43 | | | | | |
| | Sep-03 | NA | NA | NA | 0.07 | 5.24 | 12.3 | 2.48 | 0.66 | 0.42 | 0.4 | 1.09 | <0.05 | 7 | NA | 0.12 | 0.84 | | <0.05 | 0.07 | 0.59 | 5.21 |
| | Dec-03 | NA | NA | NA | 0.15 | 5.1 | 13.5 | 1.47 | 0.22 | 1.02 | 1.14 | NA | 0.23 | 6.94 | NA | 0.12 | 1.96 | | NA | NA | NA | NA |
| | Mar-04 | NA | NA | NA | 0.11 | NA | 4.71 | 1.12 | 0.13 | 0.18 | 1.11 | NA | 0.09 | NA | NA | 0.14 | 1.78 | 0.92 | NA | NA | NA | 3 |
| Ethane | Mar-04 | NA | NA | NA | 22.7 | NA | 1,001 | 176 | <5 | 255 | <5 | NA | <5 | NA | NA | <5 | 1,880 | 645 | NA | NA | NA | <5 |

ANCHEM0464

# APPENDICES

ANCHEM0465

s Co. 1-800-322-3022

Recycled Stock # Blakley-6-S

# Appendix A

# WELL GAUGING DATA

Project # 040318-MP-1 Date 3-18-04 Client Blakely Env.

Site Angeles Chem Co. 8915 Sorensen Ave. - Santa Fe Springs

| Well ID | Well Size (in.) | Sheen / Odor | Depth to Immiscible Liquid (ft.) | Thickness of Immiscible Liquid (ft.) | Volume of Immiscibles Removed (ml) | Depth to water (ft.) | Depth to well bottom (ft.) | Survey Point: TOB or TOC | |
|---|---|---|---|---|---|---|---|---|---|
| MW-4 | 4 | | 26.36 | 0.05 | | 26.41 | 26.60 | TOC | |
| MW-6 | 4 | | 30.20 | 0.08 | | | 30.29 | | |
| MW-8 | 4 | | 35.01 | 0.19 | | 35.20 | | | |
| MW-9 | 4 | | | | | 38.19 | 45.85 | | |
| MW-10 | 4 | | 34.56 | 0.29 | | 34.85 | | | |
| MW-11 | 2 | | | | | 34.36 | 39.85 | | |
| MW-12 | 2 | | | | | 35.02 | 46.05 | | |
| MW-13 | 2 | | | | | 45.98 | 62.53 | | |
| MW-14 | 2 | | | | | 47.41 | 63.53 | | |
| MW-15 | 2 | | | | | 47.92 | 64.70 | | |
| MW-16 | 2 | | 36.69 | 0.19 | | 36.88 | | | |
| MW-17 | 2 | | | | | 44.56 | 66.42 | | |
| MW-18 | 2 | | 37.51 | 2.77 | | 40.28 | | | |
| MW-19 | 2 | | 35.64 | 1.51 | | 37.15 | | | |
| MW-20 | 2 | | | | | 45.22 | 67.93 | | |
| MW-21 | 2 | | | | | 46.39 | 63.25 | | |
| MW-22 | 2 | | | | | 38.51 | 40.18 | | |

# WELL GAUGING DATA

Project # 040318-MP-1 Date 3-18-94 Client Blakely Env.

Site Angeles Chem Co. 8915 Sorensen Ave. - Santa Fe Springs

| Well ID | Well Size (in.) | Sheen / Odor | Depth to Immiscible Liquid (ft.) | Thickness of Immiscible Liquid (ft.) | Volume of Immiscibles Removed (ml) | Depth to water (ft.) | Depth to well bottom (ft.) | Survey Point: TOB or TOC | |
|---|---|---|---|---|---|---|---|---|---|
| MW-23 | 4 | Diffusion Bag in well | | | | 43.25 | | TOC | |
| MW-24 | 4 | " | | | " | 46.41 | | | |
| MW-25 | 4 | " | | | " | 48.03 | | | |
| MW-26 | 2 | | positive pressure | | | 36.70 | 39.75 | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| 3/19 | | | | | | | | | |
| MW-10 | 4 | | 34.55 | | | 34.85 | | | |
| MW-18 | 2 | | 38.58 | | | 39.63 | | | |
| MW-19 | 2 | | 35.98 | | | 36.40 | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 040318·mp·1 | Client: Blakely Env. |
| Sampler: mp | Date: 3·18·04 |
| Well I.D.: mw-4 | Well Diameter: 2 3 ④ 6 8 ____ |
| Total Well Depth (TD): 26.60 | Depth to Water (DTW): 26.41 |
| Depth to Free Product: 26.36 | Thickness of Free Product (feet): 0.05 |
| Referenced to: PVC Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: | |

Purge Method: Bailer, ~~Disposable Bailer~~, ~~Positive Air Displacement~~, ~~Electric Submersible~~, ~~Water~~, Peristaltic, ~~Extraction Pump~~, Other ____

Sampling Method: Bailer, ~~Disposable Bailer~~, Extraction Port, ~~Dedicated Tubing~~, Other: ____

____ (Gals.) X ____ = ____ Gals.
1 Case Volume — Specified Volumes — Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F or °C) | pH | Cond. (mS or µS) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | * SPH Found in well, no sample taken * | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory:

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 040318-MP-1 | Client: Blakely Env. |
| Sampler: MP | Date: 3-18-04 |
| Well I.D.: MW-6 | Well Diameter: 2 3 (4) 6 8 ___ |
| Total Well Depth (TD): 30.28 | Depth to Water (DTW): |
| Depth to Free Product: 30.20 | Thickness of Free Product (feet): 0.08 |
| Referenced to: PVC Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: | |

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other:

_____ (Gals.) X _____ = _____ Gals.
1 Case Volume Specified Volumes Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F or °C) | pH | Cond. (mS or µS) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | * SPH found in well, no sample taken * | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory:

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 040318-MR1 | Client: Blakely Env |
| Sampler: MP | Date: 3-18-04 |
| Well I.D.: MW-8 | Well Diameter: 2 3 (4) 6 8 ___ |
| Total Well Depth (TD): | Depth to Water (DTW): 35.20 |
| Depth to Free Product: 35.01 | Thickness of Free Product (feet): 0.19 |
| Referenced to: PVC Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: | |

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other ____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: ____

| ____ (Gals.) X | ____ = | ____ Gals. |
|---|---|---|
| 1 Case Volume | Specified Volumes | Calculated Volume |

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F or °C) | pH | Cond. (mS or µS) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | * SPH found in well, no sample taken * | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes / No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory:

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 040318-MP-1 | Client: Blakely Env |
| Sampler: MP | Date: 3-18-04 |
| Well I.D.: MW-9 | Well Diameter: 2 3 (4) 6 8 ___ |
| Total Well Depth (TD): 45.85 | Depth to Water (DTW): 38.19 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): (YSI) HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 39.72 | |

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / *Other Z-Redi-Flo

Sampling Method: Bailer / *Disposable Bailer / Extraction Port / Dedicated Tubing / Other:

Started @ 1341 1 g.p.m

4.9 (Gals.) X 3 = 14.9 Gals.
1 Case Volume / Specified Volumes / Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F or °C) | pH | Cond. (mS or µS) | Turbidity (NTUs) | Gals. Removed | Observations DO | ORP |
|---|---|---|---|---|---|---|---|
| 1346 | 23.48 | 6.7 | 2655 | 28 | 5 | 0.05 | 12.3 |
| 1351 | 23.77 | 6.7 | 2682 | 171 | 10 | 0.06 | 4.5 |
| 1356 | 23.83 | 6.7 | 2653 | 36 | 15 | 0.05 | 0.3 |
| | | | | | | | |
| | | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 15

Sampling Date: 3-18-04 Sampling Time: 1610 Depth to Water: 40.98

Sample I.D.: MW-9 Laboratory:

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable): MW-1

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 040318-MP-1 | Client: Blakely Env. |
| Sampler: MP | Date: 3-18-04 |
| Well I.D.: MW-10 | Well Diameter: 2 3 (4) 6 8 ____ |
| Total Well Depth (TD): | Depth to Water (DTW): 34.85 |
| Depth to Free Product: 34.56 | Thickness of Free Product (feet): 0.29 |
| Referenced to: (TOC) Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: | |

Purge Method: Bailer / ~~Disposable Bailer~~ / ~~Positive Air Displacement~~ / ~~Electric Submersible~~ / ~~Waterra~~ / ~~Peristaltic~~ / ~~Extraction Pump~~ / ~~Other~~ ____

Sampling Method: Bailer / * Disposable Bailer / Extraction Port / Dedicated Tubing / Other: ____

____ (Gals.) X ____ = ____ Gals.
1 Case Volume — Specified Volumes — Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F or °C) | pH | Cond. (mS or µS) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| | | | | | | |
| | * SPH found in well, 1 use of SPH Taken * | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory:

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 040318-MP-2 | Client: Blakley Env |
| Sampler: MP | Date: 3-19-04 |
| Well I.D.: MW-11 | Well Diameter: (2) 3 4 6 8 ___ |
| Total Well Depth (TD): 39.85 | Depth to Water (DTW): 34.36 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): (YSI) HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 35.45 | |

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, *Other 2" redi flo

Sampling Method: Bailer, *Disposable Bailer, Extraction Port, Dedicated Tubing, Other: ___

0.8 (Gals.) X 3 = 2.6 Gals.
1 Case Volume — Specified Volumes — Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F or °C) | pH | Cond. (mS or µS) | Turbidity (NTUs) | Gals. Removed | ORP Observations |
|---|---|---|---|---|---|---|
| 1110 | 76.6 | 7.0 | 2582 | 103 | | -218 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: 3-19-04 Sampling Time: 1110 Depth to Water:

Sample I.D.: MW-11 Laboratory: STS

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 040318-MP-1 | Client: Blakely Emy |
| Sampler: MP | Date: 3-18-04 |
| Well I.D.: MW-12 | Well Diameter: ⊘ 3 4 6 8 ___ |
| Total Well Depth (TD): 46.05 | Depth to Water (DTW): 35.02 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 37.22 | |

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, * Other 2 redi flo

Sampling Method: Bailer, * Disposable Bailer, Extraction Port, Dedicated Tubing, Other: ___

Started @ 1157 1 g.p.m

1.7 (Gals.) X 3 = 5.2 Gals.
1 Case Volume — Specified Volumes — Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F or °C) | pH | Cond. (mS or µS) | Turbidity (NTUs) | Gals. Removed | D.O. Observations | ORP |
|---|---|---|---|---|---|---|---|
| 1159 | 23.79 | 7.0 | 1333 | 60 | 2 | .07 | -165.1 |
| 1201 | 23.97 | 7.0 | 1313 | 23 | 4 | .05 | -174.4 |
| 1203 | 23.93 | 7.0 | 1313 | 103 | 6 | .04 | -179.9 |
| | | | | | | | |
| | | | | | | | |

Did well dewater? Yes No — Gallons actually evacuated: 6

Sampling Date: 3-18-04 Sampling Time: 1215 Depth to Water: 35.25

Sample I.D.: MW-12 Laboratory: STS

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 040318-MP-1 | Client: Blakely Env |
| Sampler: MP | Date: 3.18.04 |
| Well I.D.: MW-13 | Well Diameter: 2 3 4 6 8 |
| Total Well Depth (TD): 62.53 | Depth to Water (DTW): 45.98 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 49.29 | |

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, *Other 2 rediflo

Sampling Method: Bailer, *Disposable Bailer, Extraction Port, Dedicated Tubing, Other:

Started @ 1300 1 g.p.m

2.6 (Gals.) X 3 = 7.9 Gals.
Case Volume Specified Volumes Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F or °C) | pH | Cond. (mS or µS) | Turbidity (NTUs) | Gals. Removed | DO Observations | ORP |
|---|---|---|---|---|---|---|---|
| 1303 | 23.67 | 6.8 | 2057 | >1000 | 3 | 3.24 | 16.5 |
| 1306 | 23.49 | 6.8 | 2056 | >1000 | 6 | 3.23 | 26.6 |
| 1309 | 23.68 | 6.8 | 2060 | >1000 | 9 | 3.16 | 31.0 |
| | | | | | | | |
| | | | | | | | |

Did well dewater? Yes No Gallons actually evacuated: 9

Sampling Date: 3.18.04 Sampling Time: 1320 Depth to Water: 45.91

Sample I.D.: MW-13 Laboratory: STL

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): Equipment Blank @ 12:40 Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 040318·mp·1 | Client: Blakely Env |
| Sampler: mp | Date: 3·19·04 |
| Well I.D.: mw-14 | Well Diameter: 2 3 4 6 8 ____ |
| Total Well Depth (TD): 63.53 | Depth to Water (DTW): 47.41 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 50.63 | |

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, * Other 2 redi-flo

Sampling Method: Bailer, * Disposable Bailer, Extraction Port, Dedicated Tubing, Other: ____

Started @ 0858 1 g.p.m.

2.5 (Gals.) X 3 = 7.7 Gals.
1 Case Volume — Specified Volumes — Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F or °C) | pH | Cond. (mS or µS) | Turbidity (NTUs) | Gals. Removed | DO Observations | ORP |
|---|---|---|---|---|---|---|---|
| 0901 | 22.87 | 7.1 | 1872 | >1000 | 3 | 3.03 | -24.7 |
| 0904 | 22.92 | 6.9 | 1965 | 475 | 6 | 3.66 | -3.6 |
| 0907 | 23.07 | 6.8 | 1993 | 90 | 9 | 3.64 | 3.0 |
| 0910 | 23.04 | 6.8 | 1999 | 292 | 12 | 3.60 | 7.1 |
| | | | | | | | |

Did well dewater? Yes No — Gallons actually evacuated: 12

Sampling Date: 3·19·04 — Sampling Time: 0920 — Depth to Water: 47.50

Sample I.D.: mw-14 — Laboratory: STS

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time — Duplicate I.D. (if applicable): mw-2

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

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# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 040318-MP-1 | Client: Blakely Env. |
| Sampler: MP | Date: 3.19.04 |
| Well I.D.: MW-15 | Well Diameter: (2) 3 4 6 8 ____ |
| Total Well Depth (TD): 64.70 | Depth to Water (DTW): 47.92 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC Grade | D.O. Meter (if req'd): (Y)S HACH |

DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 51.27

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / *Other 2 radios

Sampling Method: Bailer / *Disposable Bailer / Extraction Port / Dedicated Tubing / Other:

Started @ 0808 1 g.p.m

2.6 (Gals.) X 3 = 8.0 Gals.
1 Case Volume / Specified Volumes / Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F or (C)) | pH | Cond. (mS or µS) | Turbidity (NTUs) | Gals. Removed | Observations DO | Observations ORP |
|---|---|---|---|---|---|---|---|
| 0811 | 22.96 | 6.7 | 2088 | 467 | 3 | 0.16 | -182.8 |
| 0814 | 22.98 | 6.7 | 2065 | 115 | 6 | 0.26 | -146.8 |
| 0817 | 22.13 | 6.7 | 2071 | 42 | 9 | 0.41 | -130.0 |
| 0820 | 23.13 | 6.7 | 2076 | 28 | 12 | 0.47 | -129.3 |
| 0823 | 23.13 | 6.7 | 2073 | 63 | 15 | 0.51 | -119.7 |

Did well dewater? Yes (N)o Gallons actually evacuated: 15

Sampling Date: 3.19.04 Sampling Time: 0835 Depth to Water: 48.59

Sample I.D.: MW-15 Laboratory: STS

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 040318-MP-1 | Client: Blakely Env |
| Sampler: MP | Date: 3-18-04 |
| Well I.D.: MW-L6 | Well Diameter: (2) 3 4 6 8 ___ |
| Total Well Depth (TD): | Depth to Water (DTW): 36.88 |
| Depth to Free Product: 36.69 | Thickness of Free Product (feet): 0.19 |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: | |

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: _____

_____(Gals.) X _____ = _____ Gals.
1 Case Volume Specified Volumes Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F or °C) | pH | Cond. (mS or µS) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | * SPH found in well, no sample taken * | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| | | | |
|---|---|---|---|
| Did well dewater? Yes No | | Gallons actually evacuated: | |
| Sampling Date: | Sampling Time: | Depth to Water: | |
| Sample I.D.: | | Laboratory: | |
| Analyzed for: TPH-G BTEX MTBE TPH-D | | Oxygenates (5) Other: | |
| EB I.D. (if applicable): | @ Time | Duplicate I.D. (if applicable): | |
| Analyzed for: TPH-G BTEX MTBE TPH-D | | Oxygenates (5) Other: | |
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: mV |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 040318-MP-1 | Client: Blakely Env. |
| Sampler: MP | Date: 3-18-04 |
| Well I.D.: MW-17 | Well Diameter: (2) 3 4 6 8 ___ |
| Total Well Depth (TD): 66.42 | Depth to Water (DTW): 44.56 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): (YSI) HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 48.93 | |

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, *Other 2 red. flo

Sampling Method: Bailer, *Disposable Bailer, Extraction Port, Dedicated Tubing, Other: ___

Started @ 1113 1 g.p.m

3.4 (Gals.) X 3 = 10.4 Gals.
1 Case Volume — Specified Volumes — Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F or °C) | pH | Cond. (mS or (µS)) | Turbidity (NTUs) | Gals. Removed | D.O. | Observations ORP |
|---|---|---|---|---|---|---|---|
| 1117 | 23.80 | 6.8 | 1947 | >1000 | 4 | 3.77 | 30.2 |
| 1121 | 23.55 | 6.7 | 1958 | >1000 | 8 | 3.61 | 31.2 |
| 1125 | 23.24 | 6.7 | 1954 | >1000 | 12 | 3.50 | 32.1 |
| | | | | | | | |
| | | | | | | | |

Did well dewater? Yes (No) Gallons actually evacuated: 12

Sampling Date: 3-18-04 Sampling Time: 1135 Depth to Water: 47.25

Sample I.D.: MW-17 Laboratory: STS

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 040318-MP-1 | Client: Blakley Eng |
| Sampler: MP | Date: 3.18.04 |
| Well I.D.: MW-18 | Well Diameter: (2) 3 4 6 8 ___ |
| Total Well Depth (TD): | Depth to Water (DTW): 40.28 |
| Depth to Free Product: 37.51 | Thickness of Free Product (feet): 2.77 |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: | |

Purge Method: Bailer / Disposable Bailer / Positive Air Displacement / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other _____

Sampling Method: Bailer / Disposable Bailer / Extraction Port / Dedicated Tubing / Other: _____

_____ (Gals.) X _____ = _____ Gals.
1 Case Volume — Specified Volumes — Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F or °C) | pH | Cond. (mS or µS) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | * SPH Found in well | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory:

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 040318-MP-1 | Client: Blakley Env. |
| Sampler: MP | Date: 3-18-04 |
| Well I.D.: MW-19 | Well Diameter: ∅ 3 4 6 8 ____ |
| Total Well Depth (TD): | Depth to Water (DTW): 37.15 |
| Depth to Free Product: 35.64 | Thickness of Free Product (feet): 1.51 |
| Referenced to: PVC Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: | |

Purge Method: Bailer / ~~Disposable Bailer~~ / ~~Positive Air Displacement~~ / ~~Electric Submersible~~ / ~~Waterra~~ / ~~Peristaltic~~ / ~~Extraction Pump~~ / Other _____

Sampling Method: Bailer / ~~Disposable Bailer~~ / ~~Extraction Port~~ / ~~Dedicated Tubing~~ / Other: _____

_____ (Gals.) X _____ = _____ Gals.
1 Case Volume Specified Volumes Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F or °C) | pH | Cond. (mS or µS) | Turbidity (NTUs) | Gals. Removed | Observations |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | * SPH found in well. no sample taken * | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory:

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 040318-MP-1 | Client: Blakely Env. |
| Sampler: MP | Date: 3·18·04 |
| Well I.D.: MW-20 | Well Diameter: (2) 3 4 6 8 ___ |
| Total Well Depth (TD): 67.53 | Depth to Water (DTW): 45.22 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): (YSI) HACH |

DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 49.68

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, *Other 2 rediflo

Sampling Method: Bailer, *Disposable Bailer, Extraction Port, Dedicated Tubing, Other: _____

Started @ 1016 1 g.p.m

3.5 (Gals.) X 3 = 10.7 Gals.
1 Case Volume — Specified Volumes — Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F or °C) | pH | Cond. (mS or µS) | Turbidity (NTUs) | Gals. Removed | D.O Observations | ORP |
|---|---|---|---|---|---|---|---|
| 1020 | 23.74 | 6.8 | 2163 | 796 | 4 | 2.83 | 166.3 |
| 1024 | 23.57 | 6.7 | 2177 | >1000 | 8 | 3.30 | 111.2 |
| 1028 | 23.46 | 6.7 | 2172 | 372 | 12 | 3.36 | 89.10 |
| 1032 | 23.48 | 6.7 | 2169 | 157 | 16 | 3.40 | 77.0 |
| 1036 | 23.35 | 6.7 | 2166 | 135 | 20 | 3.45 | 67.6 |

Did well dewater? Yes (No) Gallons actually evacuated: 20

Sampling Date: 3·18·04 Sampling Time: 1050 Depth to Water: 45.35

Sample I.D.: MW-20 Laboratory: STS

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

ANCHEM0483

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 040318mp-1 | Client: Blakley Env. |
| Sampler: mp | Date: 3.19.04 |
| Well I.D.: MW-21 | Well Diameter: 2 3 4 6 8 ___ |
| Total Well Depth (TD): 63.25 | Depth to Water (DTW): 46.59 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: PVC Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 49.92 | |

Purge Method: Bailer, Disposable Bailer, Positive Air Displacement, Electric Submersible, Waterra, Peristaltic, Extraction Pump, * Other 2 redi flo

Sampling Method: Bailer, * Disposable Bailer, Extraction Port, Dedicated Tubing, Other: ___

Started @ 1135 1 g.p.m

2.6 (Gals.) X 3 = 7.9 Gals.
1 Case Volume — Specified Volumes — Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F or °C) | pH | Cond. (mS or µS) | Turbidity (NTUs) | Gals. Removed | DO Observations | ORP |
|---|---|---|---|---|---|---|---|
| 1138 | 23.11 | 6.8 | 2087 | >1000 | 3 | 1.21 | 5.9 |
| 1141 | 23.04 | 6.8 | 2078 | 188 | 6 | 1.76 | 5.1 |
| 1144 | 23.03 | 6.8 | 2087 | 46 | 9 | 1.99 | 1.2 |
| 1147 | 22.96 | 6.8 | 2083 | 18 | 12 | 2.32 | 3.2 |
| 1150 | 22.96 | 6.8 | 2080 | 14 | 15 | 2.57 | 3.2 |

Did well dewater? Yes No — Gallons actually evacuated: 15

Sampling Date: 3.19.04 — Sampling Time: 1200 — Depth to Water: 47.43

Sample I.D.: MW-21 — Laboratory: STS

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time — Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

ANCHEM0484

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 040318-MP-1 | Client: Blakley Eng |
| Sampler: MP | Date: 3.19.04 |
| Well I.D.: MW-22 | Well Diameter: (2) 3 4 6 8 ____ |
| Total Well Depth (TD): | Depth to Water (DTW): |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: | |

Purge Method: Bailer / ~~Disposable Bailer~~ / ~~Positive Air Displacement~~ / ~~Electric Submersible~~ / ~~Waterra~~ / ~~Peristaltic~~ / ~~Extraction Pump~~ / ~~Other~~ ____

Sampling Method: Bailer / (X) Disposable Bailer / Extraction Port / Dedicated Tubing / Other: ____

____ (Gals.) X ____ = ____ Gals.
1 Case Volume — Specified Volumes — Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F or °C) | pH | Cond. (mS or µS) | Turbidity (NTUs) | Gals. Removed | O&P Observations |
|---|---|---|---|---|---|---|
| 1010 | 72.8 | 6.4 | 16663 | 775 | — | 60 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: 3.19.04 Sampling Time: 1010 Depth to Water:

Sample I.D.: MW-22 Laboratory: STS

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): Equipment Blank @ 0950 Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 040318-MP-1 | Client: Blakley Env. |
| Sampler: MP | Date: 3-19-04 |
| Well I.D.: MW-26 | Well Diameter: (2) 3 4 6 8 ____ |
| Total Well Depth (TD): 39.75 | Depth to Water (DTW): 36.70 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: (PVC) Grade | D.O. Meter (if req'd): YSI HACH |
| DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: | |

Purge Method: Bailer / ~~Disposable Bailer~~ / ~~Positive Air Displacement~~ / ~~Electric Submersible~~ / ~~Waterra~~ / ~~Peristaltic~~ / ~~Extraction Pump~~ / Other ____

Sampling Method: Bailer / (X) Disposable Bailer / Extraction Port / Dedicated Tubing / Other: ____

____ (Gals.) X ____ = ____ Gals.
1 Case Volume Specified Volumes Calculated Volume

| Well Diameter | Multiplier | Well Diameter | Multiplier |
|---|---|---|---|
| 1" | 0.04 | 4" | 0.65 |
| 2" | 0.16 | 6" | 1.47 |
| 3" | 0.37 | Other | radius² * 0.163 |

| Time | Temp (°F or °C) | pH | Cond. (mS or µS) | Turbidity (NTUs) | Gals. Removed | ORP Observations |
|---|---|---|---|---|---|---|
| 1220 | 74.7 | 7.0 | 2302 | 281 | — | 12 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: 3-19-04 Sampling Time: 1220 Depth to Water:

Sample I.D.: MW-26 Laboratory: STS

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

| | | | | |
|---|---|---|---|---|
| D.O. (if req'd): | Pre-purge: | mg/L | Post-purge: | mg/L |
| O.R.P. (if req'd): | Pre-purge: | mV | Post-purge: | mV |

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

# Appendix B

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

**See Instructions on back of page 6.**

Department of Toxic Substances Control
Sacramento, California

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD068808520 Manifest Document No. 2913912

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Angeles Chemical Company, 2915 Sorensen Ave., Santa Fe Springs Ca 90670

4. Generator's Phone: 310 1753-5770

A. State Manifest Document Number: 23589392

B. State Generator's ID

5. Transporter 1 Company Name: ASBURY ENVIRONMENTAL SERVICES

6. US EPA ID Number: F A P P R B R P P B 6

C. State Transporter's ID [Reserved.]

D. Transporter's Phone: (800)974-4495

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID [Reserved.]

F. Transporter's Phone

9. Designated Facility Name and Site Address: DEMENNO / KERDOON, 2000 NORTH ALAMEDA STREET, COMPTON CA 90222

10. US EPA ID Number: C A F D 8 0 0 1 5 8 5 2

G. State Facility's ID

H. Facility's Phone: (310)537-7100

| 11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) | 12. Containers No. | 12. Containers Type | 13. Total Quantity | 14. Unit Wt/Vol | I. Waste Number |
|---|---|---|---|---|---|
| a. NON-RCRA HAZARDOUS WASTE, LIQUID (OILY WATER) | 001 | TT | 2V000 | G | State 135; EPA/Other NONE |
| b. | | | | | State; EPA/Other |
| c. | | | | | State; EPA/Other |
| d. | | | | | State; EPA/Other |

J. Additional Descriptions for Materials Listed Above
11A OILY WATER

K. Handling Codes for Wastes Listed Above: a. b. c. d.

15. Special Handling Instructions and Additional Information
EMERGENCY CONTACT, CHEMTREC 1-800-424-9300, PJT#_____ PO#_____ CEASER F RAMIREZ
NAERG#171

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: x Joseph Kennedy — Signature — Month Day Year: 03 29 04

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Devin Rodriguez — Signature — Month Day Year: 03 29 04

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space

ANCHEM0488

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

GENERATOR

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802. REPORT SPILLS ON INTERSTATE HIGHWAYS, CALL 1-800-352-7275

DO NOT WRITE BELOW THIS LINE.

DTSC 8022A (1/99)
EPA 8700—22

Yellow: GENERATOR RETAINS

# Appendix C

# SOUTHLAND TECHNICAL SERVICES, INC.

## CHAIN OF CUSTODY RECORD



Lab Job Number BL 403124

Client: Blakely Env. Inv., Inc.

Address: 4359 Phelan Rd Phelan CA 92371

Report Attention: Hiram Garcia | Phone: (760)868-8572 | Fax: (760)868-8573 | Sampled by:

Project Name/No.: | Project Site: Angeles Chemical Co.

T.A.T. Requested: ☐ Rush 8 12 24 hours ☐ 2-3 days ☒ Normal

Sample Condition: ☐ Chilled ☐ Intact ☐ Sample seals

| Client Sample ID | Lab Sample ID | Sample Collect Date | Sample Collect Time | Matrix Type | Sample Preserve | No., type* & size of container | 602/8021 (BTEX,MTBE) | 8015M (Gasoline) | 8015M (Diesel) | 8260B (VOCs) | 8260B (Oxygenates, BTEX) | 8260B (MTBE Confirm.) | DOC, TOC, TDS | Chloride, Sulfate, Sulfide | Nitrate, Alkalinity | Ferrous Iron, Total Iron | Carbonates, Bicarbonates | Manganese, Ethene | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-20 | BL 403124-7 | 3/18/04 | 10:50 | Water | HCl $HNO_3$ | 4-VOAs 1-500 ml poly | | X | | X | | | X | X | X | X | X | X | |
| MW-17 | -6 | " | 11:35 | " | " | " | | X | | X | | | X | X | X | X | X | X | |
| MW-12 | -4 | " | 12:15 | " | " | " | | X | | X | | | X | X | X | X | X | X | |
| Equipment Blank | -9 | " | 12:40 | " | HCl | 4 VOAs | | | | X | | | | | | | | | Before MW-13 |
| MW-13 | -5 | " | 13:20 | " | HCl $H_2NO_3$ | 4-VOAs 1-500 ml poly | | X | | X | | | X | X | X | X | X | X | |
| MW-9 | -2 | " | 16:40 | " | " | " | | X | | X | | | X | X | X | X | X | X | |
| MW-1 | -1 | " | 16:40 | " | HCl | 4-VOAs | | | | X | | | | | | | | | |
| MW-10 | -3 | " | 13:40 | Product | HCl | 1-VOA | | X | | X | | | | | | | | | |
| Trip Blank | -8 | " | | Water | HCl | 1-VOA | | | | X | | | | | | | | | |

| Relinquished by | Company | Date | Time | Received by | Company |
|---|---|---|---|---|---|
| Hiram Garcia | BETI | 3/18/04 | 16:50 | [signature] | S.T.S |
| Relinquished by | Company | Date | Time | Received by | Company |

Container types: A=Air Bag, G=Glass bottle, M=Metal Tube, P=Plastic bottle, V=VOA vial

ANCHEM0490

Southland Tech. Services, Inc.
7801 Telegraph Road, Suite L & K
Montebello, CA 90640
Tel: (323) 888-0728
Fax: (323) 888-1509

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report, PINK to courier.

**Southland Technical Services, Inc.**
Environmental Laboratories

04-07-2004

Mr. Hiram Garcia
Blakely Environmental Investigations, Inc.
4359 Phelan Road
Phelan, CA 92371

Project: Angeles Chemical Co.
Project Site: 8915 Sorensen Ave., Santa Fe Springs, CA
Sample Date: 03-18-2004
Lab Job No.: BL403124

Dear Mr. Garcia:

Enclosed please find the analytical report for the sample(s) received by STS Environmental Laboratories on 03-18-2004 and analyzed for the following parameters:

EPA 8015M (Gasoline)
EPA 8260B (VOCs by GC/MS)
EPA 160.1 (Total Dissolved Solids)
EPA 352.1 (Nitrate)
EPA 325.3 (Chloride)
EPA 375.4 (Sulfate)
EPA 376.1 (Sulfide)
EPA 7380 (Total Iron)
Ferrous Iron
Ethylene
EPA 7460 (Manganese)
EPA 310.1 (Alkalinity)
Standard Method 4500 (Carbonate & Bicarbonate)
EPA 415.1 (Total Organic Carbon, Dissolved Organic Carbon)

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

Chloride, sulfide, Alkalinity,TDS, Carbonate & Bicarbonate analyses were subcontracted to Americhem Testing Laboratory. TOC & DOC analyses were subcontracted to Associated Laboratories. Their original reports are attached.

STS Environmental Laboratory is certified by CA DHS (Certificate Number 1986). Thank you for giving us the opportunity to serve you. Please feel free to call me at (323) 888-0728 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph. D.
Laboratory Director

Enclosures
This cover letter is an integral part of this analytical report.

ANCHEM0491



7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

04-07-2004

| | | | |
|---|---|---|---|
| Client: | Blakely Environmental Investigations, Inc. | Lab Job No.: | BL403124 |
| Project: | Angeles Chemical Co. | | |
| Project Site: | 8915 Sorensen Ave., Santa Fe Springs, CA | Date Sampled: | 03-18-2004 |
| Matrix: | Water | Date Received: | 03-18-2004 |

**Analytical Test Results**

| Analyte | EPA Method | Date Analyzed | Reporting Unit | MW-09 | MW-12 | MW-13 | MW-17 | MW-20 | Reporting Limit |
|---|---|---|---|---|---|---|---|---|---|
| Ethylene | GC/FID | 03-26-04 | ug/L | 22.7 | 176 | ND | ND | ND | 5 |
| TDS | 160.1 | 03-19-04 | mg/L | 2,620 | 1,570 | 1,210 | 1,310 | 2,020 | 2 |
| Nitrate | 352.1 | 03-19-04 | mg/L | 22.5 | 0.46 | 19.6 | 18.0 | 28.7 | 0.01 |
| Sulfate | 375.4 | 03-19-04 | mg/L | 595 | 27.6 | 262 | 335 | 250 | 1.0 |
| Total Iron | 7380 | 03-22-04 | mg/L | 0.15 | 4.14 | ND | ND | 0.62 | 0.1 |
| Ferrous Iron | Colori-metry | 03-19-04 | mg/L | ND | 2.25 | ND | ND | 0.10 | 0.05 |

ND: Not Detected (at the specified limit)

ANCHEM0492



7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

**Southland Technical Services, Inc.**
Environmental Laboratories

04-07-2004

| | | | |
|---|---|---|---|
| Client: | Blakely Environmental Investigations, Inc. | Lab Job No.: | BL403124 |
| Project: | Angeles Chemical Co. | | |
| Project Site: | 8915 Sorensen Ave, Santa Fe Springs | Date Sampled: | 03-18-2004 |
| Matrix: | Water | Date Received: | 03-18-2004 |
| Batch No.: | AC21-GW1 | Date Analyzed: | 03-21-2004 |

**EPA 8015M (Gasoline)**
**Reporting Units: µg/L (ppb)**

| Sample ID | Lab ID | Gasoline (C4-C12) | Method Detection Limit | PQL |
|---|---|---|---|---|
| Method Blank | | ND | 50 | 50 |
| MW-09 | BL403124-2 | 1,430 | 50 | 50 |
| MW-10 | BL403124-3 | 446,000 | 50 | 50 |
| MW-12 | BL403124-4 | 4,410 | 50 | 50 |
| MW-13 | BL403124-5 | ND | 50 | 50 |
| MW-17 | BL403124-6 | ND | 50 | 50 |
| MW-20 | BL403124-7 | ND | 50 | 50 |
| | | | | |

ND: Not Detected (at the specified limit)

ANCHEM0493



7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

# Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc.
Project:Angeles Chemical Co.

Lab Job No.: BL403124
Matrix: Water

Date Reported: 04-07-2004
Date Sampled: 03-18-2004

**EPA 8260B (VOCs by GC/MS, Page 1 of 2)** Reporting Unit: ppb

| DATE ANALYZED | | | 03-19 | 03-19-04 | 03-19-04 | 03-19-04 | 03-19-04 | 03-19-04 | 03-19-04 |
|---|---|---|---|---|---|---|---|---|---|
| DILUTION FACTOR | | | | 10 | 10 | 250,000 | 2.5 | 1 | 1 |
| LAB SAMPLE I.D. | | | | BL403124-1 | BL403124-2 | BL403124-3 | BL403124-4 | BL403124-5 | BL403124-6 |
| CLIENT SAMPLE I.D. | | | | MW-01 | MW-09 | MW-10 | MW-12 | MW-13 | MW-17 |
| COMPOUND | MDL | PQL | MB | | | | | | |
| Dichlorodifluoromethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Chloromethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Vinyl Chloride | 1 | 2 | ND | 130 | 155 | ND | 8.5 | ND | ND |
| Bromomethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Chloroethane | 2 | 5 | ND | ND | ND | ND | ND | ND | 4.0 j |
| Trichlorofluoromethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethene | 2 | 5 | ND | 1,090 | 1,260 | 730,000 | 7.3 j | 6.7 | 3.8 j |
| Iodomethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Methylene Chloride | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| trans-1,2-Dichloroethene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethane | 1 | 2 | ND | 858 | 965 | 3,190,000 | 485 | 2.5 | ND |
| 2,2-Dichloropropane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| cis-1,2-Dichloroethene | 2 | 5 | ND | 351 | 391 | 1,530,000 | 3.8 j | 11.2 | 2.2 j |
| Bromochloromethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Chloroform | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichloroethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 2 | 5 | ND | 9.1 j | 11.1 j | 8,870,000 | 8.3 j | ND | ND |
| Carbon tetrachloride | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloropropene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Benzene | 1 | 1 | ND | 30.8 | 29.3 | ND | 7.5 | ND | ND |
| Trichloroethene | 2 | 2 | ND | 33.0 | 37.2 | ND | ND | 18.5 | 9.5 |
| 1,2-Dichloropropane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Bromodichloromethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Dibromomethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| trans-1,3-Dichloropropene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| cis-1,3-Dichloropropene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2-Trichloroethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,3-Dichloropropane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Dibromochloromethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 2-Chloroethylvinyl ether | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Bromoform | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Isopropylbenzene | 2 | 5 | ND | ND | ND | 1,120,000 | 86.1 | ND | ND |
| Bromobenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |

ANCHEM0494



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# Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc. Lab Job No.: BL403124 Date Reported: 04-07-2004
Project:Angeles Chemical Co. Matrix: Water Date Sampled: 03-18-2004

**EPA 8260B (VOCs by GC/MS, Page 2 of 2)** Reporting Unit: (ppb)

| COMPOUND | MDL | PQL | MB | MW-01 | MW-09 | MW-10 | MW-12 | MW-13 | MW-17 |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | 1 | 1 | ND | ND | ND | 8,620,000 | ND | ND | ND |
| Tetrachloroethene | 2 | 2 | ND | 134 | 149 | ND | 3.8 j | 51.4 | 36.2 |
| 1,2-Dibromoethane(EDB) | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Chlorobenzene | 2 | 5 | ND | ND | ND | ND | 5.8 j | ND | ND |
| 1,1,1,2-Tetrachloroethan | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Ethylbenzene | 1 | 1 | ND | ND | ND | 5,330,000 | 254 | ND | ND |
| Total Xylenes | 1 | 1 | ND | ND | ND | 17,600,000 | 231 | ND | ND |
| Styrene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethan | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,2,3-Trichloropropane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| n-Propylbenzene | 2 | 5 | ND | ND | ND | 2,820,000 | 237 | ND | ND |
| 2-Chlorotoluene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 4-Chlorotoluene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,3,5-Trimethylbenzene | 2 | 5 | ND | ND | ND | 8,560,000 | 619 | ND | ND |
| tert-Butylbenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,2,4-Trimethylbenzene | 2 | 5 | ND | ND | ND | 31,900,000 | 1,200 | ND | ND |
| Sec-Butylbenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,3-Dichlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| p-Isopropyltoluene | 2 | 5 | ND | ND | ND | ND | 7.3 j | ND | ND |
| 1,4-Dichlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| n-Butylbenzene | 2 | 5 | ND | ND | ND | 1,480,000 | 41.2 | ND | ND |
| 1,2,4-Trichlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dibromo-3-Chloropropane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Hexachlorobutadiene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Naphthalene | 2 | 5 | ND | ND | ND | 1,980,000 | 163 | ND | ND |
| 1,2,3-Trichlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Acetone | 5 | 25 | ND | ND | ND | ND | ND | ND | ND |
| 2-Butanone (MEK) | 5 | 25 | ND | ND | ND | ND | ND | ND | ND |
| Carbon disulfide | 5 | 25 | ND | ND | ND | ND | ND | ND | ND |
| 4-Methyl-2-pentanone | 5 | 25 | ND | ND | ND | ND | ND | ND | ND |
| 2-Hexanone | 5 | 25 | ND | ND | ND | ND | ND | ND | ND |
| Vinyl Acetate | 5 | 25 | ND | ND | ND | ND | ND | ND | ND |
| 1,4-Dioxane | 50 | 100 | ND | ND | ND | ND | ND | ND | ND |
| MTBE | 2 | 2 | ND | ND | ND | ND | ND | ND | ND |
| ETBE | 2 | 2 | ND | ND | ND | ND | ND | ND | ND |
| DIPE | 2 | 2 | ND | ND | ND | ND | ND | ND | ND |
| TAME | 2 | 2 | ND | ND | ND | ND | ND | ND | ND |
| T-Butyl Alcohol | 10 | 10 | ND | ND | ND | ND | ND | ND | ND |

MDL=Method Detection Limit; MB=Method Blank; ND=Not Detected (below DF × MDL), j=trace concentration.

ANCHEM0495



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# Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc.
Project:Angeles Chemical Co.

Lab Job No.: BL403124
Matrix: Water

Date Reported: 04-07-2004
Date Sampled: 03-18-2004

**EPA 8260B (VOCs by GC/MS, Page 1 of 2)** Reporting Unit: ppb

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DATE ANALYZED** | | | 03-19 | 03-19-04 | 03-19-04 | 03-19-04 | | |
| **DILUTION FACTOR** | | | | 1 | 1 | 1 | | |
| **LAB SAMPLE I.D.** | | | | BL403124-7 | BL403124-8 | BL403124-9 | | |
| **CLIENT SAMPLE I.D.** | | | | MW-20 | Trip Blank | Equip. Blank | | |
| **COMPOUND** | **MDL** | **PQL** | **MB** | | | | | |
| Dichlorodifluoromethane | 2 | 5 | ND | ND | ND | ND | | |
| Chloromethane | 2 | 5 | ND | ND | ND | ND | | |
| Vinyl Chloride | 1 | 2 | ND | ND | ND | ND | | |
| Bromomethane | 2 | 5 | ND | ND | ND | ND | | |
| Chloroethane | 2 | 5 | ND | ND | ND | ND | | |
| Trichlorofluoromethane | 2 | 5 | ND | ND | ND | ND | | |
| 1,1-Dichloroethene | 2 | 5 | ND | 21.0 | ND | ND | | |
| Iodomethane | 2 | 5 | ND | ND | ND | ND | | |
| Methylene Chloride | 2 | 5 | ND | ND | ND | ND | | |
| trans-1,2-Dichloroethene | 2 | 5 | ND | ND | ND | ND | | |
| 1,1-Dichloroethane | 1 | 2 | ND | 89.2 | ND | ND | | |
| 2,2-Dichloropropane | 2 | 5 | ND | ND | ND | ND | | |
| cis-1,2-Dichloroethene | 2 | 5 | ND | 18.8 | ND | ND | | |
| Bromochloromethane | 2 | 5 | ND | ND | ND | ND | | |
| Chloroform | 2 | 5 | ND | ND | ND | ND | | |
| 1,2-Dichloroethane | 2 | 5 | ND | ND | ND | ND | | |
| 1,1,1-Trichloroethane | 2 | 5 | ND | 20.9 | ND | ND | | |
| Carbon tetrachloride | 2 | 5 | ND | ND | ND | ND | | |
| 1,1-Dichloropropene | 2 | 5 | ND | ND | ND | ND | | |
| Benzene | 1 | 1 | ND | ND | ND | ND | | |
| Trichloroethene | 2 | 2 | ND | 2.5 | ND | ND | | |
| 1,2-Dichloropropane | 2 | 5 | ND | ND | ND | ND | | |
| Bromodichloromethane | 2 | 5 | ND | ND | ND | ND | | |
| Dibromomethane | 2 | 5 | ND | ND | ND | ND | | |
| trans-1,3-Dichloropropene | 2 | 5 | ND | ND | ND | ND | | |
| cis-1,3-Dichloropropene | 2 | 5 | ND | ND | ND | ND | | |
| 1,1,2-Trichloroethane | 2 | 5 | ND | ND | ND | ND | | |
| 1,3-Dichloropropane | 2 | 5 | ND | ND | ND | ND | | |
| Dibromochloromethane | 2 | 5 | ND | ND | ND | ND | | |
| 2-Chloroethylvinyl ether | 2 | 5 | ND | ND | ND | ND | | |
| Bromoform | 2 | 5 | ND | ND | ND | ND | | |
| Isopropylbenzene | 2 | 5 | ND | ND | ND | ND | | |
| Bromobenzene | 2 | 5 | ND | ND | ND | ND | | |

ANCHEM0496



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# Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc. Lab Job No.: BL403124 Date Reported: 04-07-2004
Project:Angeles Chemical Co. Matrix: Water Date Sampled: 03-18-2004

**EPA 8260B (VOCs by GC/MS, Page 2 of 2)** Reporting Unit: (ppb)

| COMPOUND | MDL | PQL | MB | MW-20 | Trip Blank | Equip. Blank | | |
|---|---|---|---|---|---|---|---|---|
| Toluene | 1 | 1 | ND | ND | ND | ND | | |
| Tetrachloroethene | 2 | 2 | ND | 9.3 | ND | ND | | |
| 1,2-Dibromoethane(EDB) | 2 | 5 | ND | ND | ND | ND | | |
| Chlorobenzene | 2 | 5 | ND | ND | ND | ND | | |
| 1,1,1,2-Tetrachloroethan | 2 | 5 | ND | ND | ND | ND | | |
| Ethylbenzene | 1 | 1 | ND | ND | ND | ND | | |
| Total Xylenes | 1 | 1 | ND | ND | ND | ND | | |
| Styrene | 2 | 5 | ND | ND | ND | ND | | |
| 1,1,2,2-Tetrachloroethan | 2 | 5 | ND | ND | ND | ND | | |
| 1,2,3-Trichloropropane | 2 | 5 | ND | ND | ND | ND | | |
| n-Propylbenzene | 2 | 5 | ND | ND | ND | ND | | |
| 2-Chlorotoluene | 2 | 5 | ND | ND | ND | ND | | |
| 4-Chlorotoluene | 2 | 5 | ND | ND | ND | ND | | |
| 1,3,5-Trimethylbenzene | 2 | 5 | ND | ND | ND | ND | | |
| tert-Butylbenzene | 2 | 5 | ND | ND | ND | ND | | |
| 1,2,4-Trimethylbenzene | 2 | 5 | ND | ND | ND | ND | | |
| Sec-Butylbenzene | 2 | 5 | ND | ND | ND | ND | | |
| 1,3-Dichlorobenzene | 2 | 5 | ND | ND | ND | ND | | |
| p-Isopropyltoluene | 2 | 5 | ND | ND | ND | ND | | |
| 1,4-Dichlorobenzene | 2 | 5 | ND | ND | ND | ND | | |
| 1,2-Dichlorobenzene | 2 | 5 | ND | ND | ND | ND | | |
| n-Butylbenzene | 2 | 5 | ND | ND | ND | ND | | |
| 1,2,4-Trichlorobenzene | 2 | 5 | ND | ND | ND | ND | | |
| 1,2-Dibromo-3-Chloropropane | 2 | 5 | ND | ND | ND | ND | | |
| Hexachlorobutadiene | 2 | 5 | ND | ND | ND | ND | | |
| Naphthalene | 2 | 5 | ND | ND | ND | ND | | |
| 1,2,3-Trichlorobenzene | 2 | 5 | ND | ND | ND | ND | | |
| Acetone | 5 | 25 | ND | ND | ND | ND | | |
| 2-Butanone (MEK) | 5 | 25 | ND | ND | ND | ND | | |
| Carbon disulfide | 5 | 25 | ND | ND | ND | ND | | |
| 4-Methyl-2-pentanone | 5 | 25 | ND | ND | ND | ND | | |
| 2-Hexanone | 5 | 25 | ND | ND | ND | ND | | |
| Vinyl Acetate | 5 | 25 | ND | ND | ND | ND | | |
| 1,4-Dioxane | 50 | 100 | ND | ND | ND | ND | | |
| MTBE | 2 | 2 | ND | ND | ND | ND | | |
| ETBE | 2 | 2 | ND | ND | ND | ND | | |
| DIPE | 2 | 2 | ND | ND | ND | ND | | |
| TAME | 2 | 2 | ND | ND | ND | ND | | |
| T-Butyl Alcohol | 10 | 10 | ND | ND | ND | ND | | |

MDL=Method Detection Limit; MB=Method Blank; ND=Not Detected (below DF × MDL), j=trace concentration.

ANCHEM0497



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04-07-2004

## EPA 8015M (TPH)
## Batch QA/QC Report

| | | | |
|---|---|---|---|
| Client: | Blakely Environmental Investigations, Inc. | Lab Job No.: | BL403124 |
| Project: | Angeles Chemical Co. | | |
| Matrix: | Water | Lab Sample ID: | R403145-1 |
| Batch No: | AC21-GW1 | Date Analyzed: | 03-21-2004 |

### I. MS/MSD Report
**Unit: ppb**

| Analyte | Sample Conc. | Spike Conc. | MS | MSD | MS %Rec. | MSD %Rec. | % RPD | %RPD Accept. Limit | %Rec Accept. Limit |
|---|---|---|---|---|---|---|---|---|---|
| TPH-G | ND | 1000 | 999 | 1,020 | 99.9 | 102.0 | 2.1 | 30 | 70-130 |

### II. LCS Result
**Unit: ppb**

| Analyte | LCS Report Value | True Value | Rec.% | Accept. Limit |
|---|---|---|---|---|
| TPH-G | 1,060 | 1000 | 106.0 | 80-120 |

ND: Not Detected (at the specified limit)

ANCHEM0498



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**Southland Technical Services, Inc.**
Environmental Laboratories

04-07-2004

# EPA 8260B
# Batch QA/QC Report

| | | | |
|---|---|---|---|
| Client: | Blakely Environmental Investigations, Inc. | Lab Job No.: | BL403124 |
| Project: | Angeles Chemical Co. | | |
| Matrix: | Water | Sample ID: | R403126-1 |
| Batch No: | 0319-VOAW | Date Analyzed: | 03-19-2004 |

## I. MS/MSD Report
**Unit: ppb**

| Compound | Sample Conc. | Spike Conc. | MS | MSD | MS %Rec. | MSD %Rec. | % RPD | %RPD Accept. Limit | %Rec Accept. Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | ND | 20 | 18.2 | 22.4 | 91.0 | 112.0 | 20.7 | 30 | 70-130 |
| Benzene | ND | 20 | 18.0 | 20.7 | 90.0 | 103.5 | 14.0 | 30 | 70-130 |
| Trichloro-ethene | ND | 20 | 16.9 | 19.0 | 84.5 | 95.0 | 11.7 | 30 | 70-130 |
| Toluene | ND | 20 | 16.9 | 19.8 | 84.5 | 99.0 | 15.8 | 30 | 70-130 |
| Chlorobenzene | ND | 20 | 17.9 | 20.1 | 89.5 | 100.5 | 11.6 | 30 | 70-130 |

## II. LCS Result
**Unit: ppb**

| Compound | LCS Report Value | True Value | Rec.% | Accept. Limit |
|---|---|---|---|---|
| 1,1-Dichloroethene | 16.9 | 20 | 84.5 | 80-120 |
| Benzene | 17.1 | 20 | 85.5 | 80-120 |
| Trichloro-ethene | 18.3 | 20 | 91.5 | 80-120 |
| Toluene | 18.2 | 20 | 91.0 | 80-120 |
| Chlorobenzene | 17.4 | 20 | 87.0 | 80-120 |

ND: Not Detected (at the specified limit)

ANCHEM0499



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**Southland Technical Services, Inc.**
Environmental Laboratories

04-07-2004

**Ethylene by GC/FID**
**Batch QA/QC Report**

| | | | |
|---|---|---|---|
| Client: | Blakely Environmental Investigations, Inc. | Lab Job No.: | BL403124 |
| Project: | Angeles Chemical Co. | | |
| Matrix: | Water | Lab Sample ID: | BL403124-5 |
| Batch No.: | FC26A | Date Analyzed: | 03-26-2004 |

**I. Sample/Sample Dup Report**
Reporting Units: µg/L

| Analyte | MB | Sample Conc. | Sample Duplicate | % RPD | %RPD Accept. Limit |
|---|---|---|---|---|---|
| Ethylene | ND | ND | ND | 0 | 30 |

**II. LCS Result**
**Reporting Units: µg/L**

| Analyte | LCS Report Value | True Value | Rec.% | Accept. Limi |
|---|---|---|---|---|
| Ethylene | 3,980 | 4,170 | 95.4 | 80-120 |
| | | | | |

ND: Not Detected.

ANCHEM0500



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# SOUTHLAND TECHNICAL SERVICES, INC.

## CHAIN OF CUSTODY RECORD



Lab Job Number BL403131

Client: BEII

Address: 4359 Phelan Rd. Phelan, CA 92371

Report Attention: Phone (760)868-8527 Fax (760)868-8573 Sampled by

Project Name/No. Project Site: Angeles Chemical Co.

T.A.T. Requested: ☐ Rush 8 12 24 hours ☐ 2-3 days ☒ Normal

Sample Condition: ☒ Chilled ☐ Intact ☐ Sample seals

| Client Sample ID | Lab Sample ID | Sample Collect Date | Sample Collect Time | Matrix Type | Sample Preserve | No.,type* & size of container | 602/8021 (BTEX,MTBE) | 8015M (Gasoline) | 8015M (Diesel) | 8260B (VOCs) | 8260B (Oxygenates, BTEX) | 8260B (MTBE Confirm.) | DOC, TOC, TDS | Chloride, Sulfate, Sulfide | Nitrate, Alkalinity | Ferrous Iron, Total Iron | Carbonates, Bicarbonates | Manganese, Ethane, Ethene | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-15 | BL403131-4 | 3/19/04 | 8:35 | Water | HCl HNO3 | 4-VOAs 2-250mL 1-250mL 1-L | | X | | X | | | X | X | X | X | X | X | Run 8270 |
| MW-14 | -3 | " | 9:00 | " | " | " | | X | | X | | | X | X | X | X | X | X | to get MRL |
| Equipment Blank | -9 | " | 9:50 | " | " | 4-VOAs | | | | X | | | | | | | | | Reporting Limit |
| MW-22 | -6 | " | 10:10 | " | " | 4 VOAs, 3-250mL 1-L | | X | | X | | | X | X | X | X | X | X | to 3ppb |
| MW-11 | -2 | " | 11:10 | " | " | " | | X | | X | | | X | X | X | X | X | X | 1,4 Dioxane |
| MW-21 | -5 | " | 12:00 | " | " | " | | X | | X | | | X | X | X | X | X | X | |
| MW-26 | -7 | " | 12:20 | " | " | " | | X | | X | | | X | X | X | X | X | X | |
| MW-2 | -1 | " | 9:20 | " | " | 4-VOAs | | | | X | | | | | | | | | |
| Trip Blank | -8 | " | | " | " | 1-VOA | | | | X | | | | | | | | | |

| Relinquished by | Company | Date | Time | Received by | Company |
|---|---|---|---|---|---|
| [signature] | BEII | 3/19/04 | 12:50 | Stevie | STS |
| Relinquished by | Company | Date | Time | Received by | Company |
| | | | | | |

Container types: A=Air Bag, G=Glass bottle, M=Metal Tube, P=Plastic bottle, V=VOA vial

ANCHEM0501

Southland Tech. Services, Inc.
7801 Telegraph Road, Suite L & K
Montebello, CA 90640
Tel: (323) 888-0728
Fax: (323) 888-1509

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report, PINK to courier.

**Southland Technical Services, Inc.**
Environmental Laboratories

04-08-2004

Mr. Hiram Garcia
Blakely Environmental Investigations, Inc.
4359 Phelan Road
Phelan, CA 92371

Project: Angeles Chemical Co.
Project Site: 8915 Sorensen Ave., Santa Fe Springs, CA
Sample Date: 03-19-2004
Lab Job No.: BL403131

Dear Mr. Garcia:

Enclosed please find the analytical report for the sample(s) received by STS Environmental Laboratories on 03-19-2004 and analyzed for the following parameters:

EPA 8015M (Gasoline)
EPA 8260B (VOCs by GC/MS)
EPA 160.1 (Total Dissolved Solids)
EPA 352.1 (Nitrate)
EPA 325.3 (Chloride)
EPA 375.4 (Sulfate)
EPA 376.1 (Sulfide)
EPA 7380 (Total Iron)
Ferrous Iron
Ethylene
EPA 7460 (Manganese)
EPA 310.1 (Alkalinity)
Standard Method 4500 (Carbonate & Bicarbonate)
EPA 415.1 (Total Organic Carbon, Dissolved Organic Carbon)
Modified EPA 8270C (1,4-Dioxane by GC/MS)

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

Chloride, sulfide, Alkalinity,TDS, Carbonate & Bicarbonate analyses were subcontracted to Americhem Testing Laboratory. TOC & DOC analyses were subcontracted to Associated Laboratories. Their original reports are attached.

STS Environmental Laboratory is certified by CA DHS (Certificate Number 1986). Thank you for giving us the opportunity to serve you. Please feel free to call me at (323) 888-0728 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph. D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

ANCHEM0502



7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

# Southland Technical Services, Inc.
Environmental Laboratories

04-08-2004

| | | | |
|---|---|---|---|
| Client: | Blakely Environmental Investigations, Inc. | Lab Job No.: | BL403131 |
| Project: | Angeles Chemical Co. | | |
| Project Site: | 8915 Sorensen Ave., Santa Fe Springs, CA | Date Sampled: | 03-19-2004 |
| Matrix: | Water | Date Received: | 03-19-2004 |

**Analytical Test Results**

| Analyte | EPA Method | Date Analyzed | Reporting Unit | MW-11 | MW-14 | MW-15 | MW-21 | MW-22 | Reporting Limit |
|---|---|---|---|---|---|---|---|---|---|
| Ethylene | GC/FID | 03-26-04 | ug/L | 1001 | 255 | ND | ND | ND | 5 |
| TDS | 160.1 | 03-19-04 | mg/L | 1,660 | 855 | 873 | 1,080 | 645 | 2 |
| Nitrate | 352.1 | 03-19-04 | mg/L | 12.7 | 24.1 | 17.1 | 20.0 | 7.3 | 0.01 |
| Sulfate | 375.4 | 03-23-04 | mg/L | ND | ND5 | ND | ND | ND | 1.0 |
| Total Iron | 7380 | 03-22-04 | mg/L | 10.5 | ND | ND | ND | ND | 0.1 |
| Ferrous Iron | Colori-metry | 03-19-04 | mg/L | 2.62 | 0.31 | 0.57 | 0.86 | 0.40 | 0.05 |

| Analyte | EPA Method | Date Analyzed | Reporting Unit | MW-26 | | | | | Reporting Limit |
|---|---|---|---|---|---|---|---|---|---|
| Ethylene | GC/FID | 03-26-04 | ug/L | ND | | | | | 5 |
| TDS | 160.1 | 03-19-04 | mg/L | 956 | | | | | 2 |
| Nitrate | 352.1 | 03-19-04 | mg/L | ND | | | | | 0.01 |
| Sulfate | 375.4 | 03-23-04 | mg/L | ND | | | | | 1.0 |
| Total Iron | 7380 | 12-11-03 | mg/L | ND | | | | | 0.1 |
| Ferrous Iron | Colori-metry | 03-19-04 | mg/L | 0.60 | | | | | |

ND: Not Detected (at the specified limit).

ANCHEM0503



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**Southland Technical Services, Inc.**
Environmental Laboratories

04-08-2004

| | | | |
|---|---|---|---|
| Client: | Blakely Environmental Investigations, Inc. | Lab Job No.: | BL403131 |
| Project: | Angeles Chemical Co. | | |
| Project Site: | 8915 Sorensen Ave., Santa Fe Springs, CA | Date Sampled: | 03-19-2004 |
| Matrix: | Water | Date Received: | 03-19-2004 |
| Batch No.: | 0323-BNA1 | Date Analyzed: | 03-23-2004 |

**Modified EPA 8270C (1,4-Dioxane by GC/MS)**
**Reporting Units: µg/L (ppb)**

| Sample ID | Lab ID | 1,4-Dioxane | Method Detection Limit | PQL |
|---|---|---|---|---|
| Method Blank | | ND | 2 | 3.0 |
| MW-11 | BL403131-2 | 546 | 2 | 3.0 |
| MW-14 | BL403131-3 | 38.8 | 2 | 3.0 |
| MW-15 | BL403131-4 | 54.4 | 2 | 3.0 |
| MW-21 | BL403131-5 | 314 | 2 | 3.0 |
| MW-22 | BL403131-6 | 936 | 2 | 3.0 |
| MW-26 | BL403131-7 | 816 | 2 | 3.0 |
| | | | | |

ND: Not Detected (at the specified limit)

ANCHEM0504



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04-08-2004

| | | | |
|---|---|---|---|
| Client: | Blakely Environmental Investigations, Inc. | Lab Job No.: | BL403131 |
| Project: | Angeles Chemical Co. | | |
| Project Site: | 8915 Sorensen Ave, Santa Fe Springs | Date Sampled: | 03-19-2004 |
| Matrix: | Water | Date Received: | 03-19-2004 |
| Batch No.: | AC21-GW1 | Date Analyzed: | 03-21-2004 |

**EPA 8015M (Gasoline)**
**Reporting Units: µg/L (ppb)**

| Sample ID | Lab ID | Gasoline (C4-C12) | Method Detection Limit | PQL |
|---|---|---|---|---|
| Method Blank | | ND | 50 | 50 |
| MW-11 | BL403131-2 | 43,500 | 50 | 50 |
| MW-14 | BL403131-3 | 154 | 50 | 50 |
| MW-15 | BL403131-4 | 1,680 | 50 | 50 |
| MW-21 | BL403131-5 | 2,650 | 50 | 50 |
| MW-22 | BL403131-6 | 3,060 | 50 | 50 |
| MW-26 | BL403131-7 | 41,600 | 50 | 50 |
| | | | | |

ND: Not Detected (at the specified limit)

ANCHEM0505

# Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc.
Project:Angeles Chemical Co.

Lab Job No.: BL403131
Matrix: Water

Date Reported: 04-08-2004
Date Sampled: 03-19-2004

**EPA 8260B (VOCs by GC/MS, Page 1 of 2) Reporting Unit: ppb**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **DATE ANALYZED** | | | 03-29-04 | 03-29-04 | 03-29-04 | 03-29-04 | 03-29-04 | | |
| **DILUTION FACTOR** | | | | 1 | 50 | 1 | 1 | | |
| **LAB SAMPLE I.D.** | | | | BL403131-1 | BL403131-2 | BL403131-3 | BL403131-4 | | |
| **CLIENT SAMPLE I.D.** | | | | MW-02 | MW-11 | MW-14 | MW-15 | | |
| **COMPOUND** | **MDL** | **PQL** | **MB** | | | | | | |
| Dichlorodifluoromethane | 2 | 5 | ND | ND | ND | ND | ND | | |
| Chloromethane | 2 | 5 | ND | ND | ND | ND | ND | | |
| Vinyl Chloride | 1 | 2 | ND | ND | 1,190 | ND | 546 | | |
| Bromomethane | 2 | 5 | ND | ND | ND | ND | ND | | |
| Chloroethane | 2 | 5 | ND | ND | 4,670 | ND | 49.4 | | |
| Trichlorofluoromethane | 2 | 5 | ND | ND | ND | ND | ND | | |
| 1,1-Dichloroethene | 2 | 5 | ND | 226* | 520 | 264 | 725* | | |
| Iodomethane | 2 | 5 | ND | ND | ND | ND | ND | | |
| Methylene Chloride | 2 | 5 | ND | ND | ND | ND | ND | | |
| trans-1,2-Dichloroethene | 2 | 5 | ND | ND | ND | ND | 29.4 | | |
| 1,1-Dichloroethane | 1 | 2 | ND | 81.1 | 52,700 | 110 | 672 | | |
| 2,2-Dichloropropane | 2 | 5 | ND | ND | ND | ND | ND | | |
| cis-1,2-Dichloroethene | 2 | 5 | ND | 60.0 | 5,650 | 69.8 | 2,890* | | |
| Bromochloromethane | 2 | 5 | ND | ND | ND | ND | ND | | |
| Chloroform | 2 | 5 | ND | ND | ND | ND | ND | | |
| 1,2-Dichloroethane | 2 | 5 | ND | 3.2 j | 130 j | 5.0 | 2.1 j | | |
| 1,1,1-Trichloroethane | 2 | 5 | ND | ND | 170 j | ND | 7.7 | | |
| Carbon tetrachloride | 2 | 5 | ND | ND | ND | ND | ND | | |
| 1,1-Dichloropropene | 2 | 5 | ND | ND | ND | ND | ND | | |
| Benzene | 1 | 1 | ND | 4.0 | 935 | 4.5 | 36.1 | | |
| Trichloroethene | 2 | 2 | ND | 14.0 | ND | 16.1 | 17.9 | | |
| 1,2-Dichloropropane | 2 | 5 | ND | ND | ND | ND | ND | | |
| Bromodichloromethane | 2 | 5 | ND | ND | ND | ND | ND | | |
| Dibromomethane | 2 | 5 | ND | ND | ND | ND | ND | | |
| trans-1,3-Dichloropropene | 2 | 5 | ND | ND | ND | ND | ND | | |
| cis-1,3-Dichloropropene | 2 | 5 | ND | ND | ND | ND | ND | | |
| 1,1,2-Trichloroethane | 2 | 5 | ND | ND | ND | ND | ND | | |
| 1,3-Dichloropropane | 2 | 5 | ND | ND | ND | ND | ND | | |
| Dibromochloromethane | 2 | 5 | ND | ND | ND | ND | ND | | |
| 2-Chloroethylvinyl ether | 2 | 5 | ND | ND | ND | ND | ND | | |
| Bromoform | 2 | 5 | ND | ND | ND | ND | ND | | |
| Isopropylbenzene | 2 | 5 | ND | ND | ND | ND | ND | | |
| Bromobenzene | 2 | 5 | ND | ND | ND | ND | ND | | |

ANCHEM0506



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# Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc.
Project:Angeles Chemical Co.

Lab Job No.: BL403131
Matrix: Water

Date Reported: 04-08-2004
Date Sampled: 03-19-2004

**EPA 8260B (VOCs by GC/MS, Page 2 of 2)** Reporting Unit: (ppb)

| COMPOUND | MDL | PQL | MB | MW-02 | MW-11 | MW-14 | MW-15 | | |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | 1 | 1 | ND | ND | 6,050 | ND | 54.8 | | |
| Tetrachloroethene | 2 | 2 | ND | 34.1 | ND | 42.0 | 63.2 | | |
| 1,2-Dibromoethane(EDB) | 2 | 5 | ND | ND | ND | ND | ND | | |
| Chlorobenzene | 2 | 5 | ND | ND | ND | ND | 12.8 | | |
| 1,1,1,2-Tetrachloroethan | 2 | 5 | ND | ND | ND | ND | ND | | |
| Ethylbenzene | 1 | 1 | ND | ND | 1,080 | ND | 6.7 | | |
| Total Xylenes | 1 | 1 | ND | ND | 2,170 | ND | 27.3 | | |
| Styrene | 2 | 5 | ND | ND | ND | ND | ND | | |
| 1,1,2,2-Tetrachloroethan | 2 | 5 | ND | ND | ND | ND | ND | | |
| 1,2,3-Trichloropropane | 2 | 5 | ND | ND | ND | ND | ND | | |
| n-Propylbenzene | 2 | 5 | ND | ND | 355 | ND | ND | | |
| 2-Chlorotoluene | 2 | 5 | ND | ND | ND | ND | ND | | |
| 4-Chlorotoluene | 2 | 5 | ND | ND | ND | ND | ND | | |
| 1,3,5-Trimethylbenzene | 2 | 5 | ND | ND | 375 | ND | 3.4 j | | |
| tert-Butylbenzene | 2 | 5 | ND | ND | ND | ND | ND | | |
| 1,2,4-Trimethylbenzene | 2 | 5 | ND | ND | 2,060 | ND | 15.0 | | |
| Sec-Butylbenzene | 2 | 5 | ND | ND | ND | ND | ND | | |
| 1,3-Dichlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | | |
| p-Isopropyltoluene | 2 | 5 | ND | ND | ND | ND | ND | | |
| 1,4-Dichlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | | |
| 1,2-Dichlorobenzene | 2 | 5 | ND | ND | ND | ND | 4.8 | | |
| n-Butylbenzene | 2 | 5 | ND | ND | ND | ND | ND | | |
| 1,2,4-Trichlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | | |
| 1,2-Dibromo-3-Chloropropane | 2 | 5 | ND | ND | ND | ND | ND | | |
| Hexachlorobutadiene | 2 | 5 | ND | ND | ND | ND | ND | | |
| Naphthalene | 2 | 5 | ND | ND | ND | ND | ND | | |
| 1,2,3-Trichlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | | |
| Acetone | 5 | 25 | ND | ND | 33,000 | ND | ND | | |
| 2-Butanone (MEK) | 5 | 25 | ND | ND | 13,600 | ND | ND | | |
| Carbon disulfide | 5 | 25 | ND | ND | ND | ND | ND | | |
| 4-Methyl-2-pentanone | 5 | 25 | ND | ND | ND | ND | ND | | |
| 2-Hexanone | 5 | 25 | ND | ND | ND | ND | ND | | |
| Vinyl Acetate | 5 | 25 | ND | ND | ND | ND | ND | | |
| MTBE | 2 | 2 | ND | ND | ND | ND | ND | | |
| ETBE | 2 | 2 | ND | ND | ND | ND | ND | | |
| DIPE | 2 | 2 | ND | ND | ND | ND | ND | | |
| TAME | 2 | 2 | ND | ND | ND | ND | ND | | |
| T-Butyl Alcohol | 10 | 10 | ND | ND | ND | ND | ND | | |

MDL=Method Detection Limit; MB=Method Blank; ND=Not Detected (below DF × MDL), j=trace concentration.

ANCHEM0507



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# Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc.
Project:Angeles Chemical Co.

Lab Job No.: BL403131
Matrix: Water

Date Reported: 04-08-2004
Date Sampled: 03-19-2004

**EPA 8260B (VOCs by GC/MS, Page 1 of 2)** Reporting Unit: ppb

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **DATE ANALYZED** | | | 03-29 | 03-29-04 | 03-29-04 | 03-29-04 | 03-29-04 | 03-29-04 | |
| **DILUTION FACTOR** | | | | 2.5 | 2 | 50 | | | |
| **LAB SAMPLE I.D.** | | | | BL403131-5 | BL403131-6 | BL403131-7 | BL403131-8 | BL403131-9 | |
| **CLIENT SAMPLE I.D.** | | | | MW-21 | MW-22 | MW-26 | TB | EB | |
| **COMPOUND** | **MDL** | **PQL** | **MB** | | | | | | |
| Dichlorodifluoromethane | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| Chloromethane | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| Vinyl Chloride | 1 | 2 | ND | 66.0 | 860* | 450 | ND | ND | |
| Bromomethane | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| Chloroethane | 2 | 5 | ND | ND | 104 | 2,000 | ND | ND | |
| Trichlorofluoromethane | 2 | 5 | ND | 29.5 | ND | 200 j | ND | ND | |
| 1,1-Dichloroethene | 2 | 5 | ND | 2,540 | 440* | 7,740 | ND | ND | |
| Iodomethane | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| Methylene Chloride | 2 | 5 | ND | ND | 6.6 j | 9,300 | ND | ND | |
| trans-1,2-Dichloroethene | 2 | 5 | ND | 14.5 | 32.3 | ND | ND | ND | |
| 1,1-Dichloroethane | 1 | 2 | ND | 2,240 | 1,900* | 3,620 | ND | ND | |
| 2,2-Dichloropropane | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| cis-1,2-Dichloroethene | 2 | 5 | ND | 4,090 | 6,020* | 5,130 | ND | ND | |
| Bromochloromethane | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| Chloroform | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| 1,2-Dichloroethane | 2 | 5 | ND | 17.5 | 11.7 | ND | ND | ND | |
| 1,1,1-Trichloroethane | 2 | 5 | ND | 186 | ND | 7,350 | ND | ND | |
| Carbon tetrachloride | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| 1,1-Dichloropropene | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| Benzene | 1 | 1 | ND | 92.7 | 34.0 | 225 | ND | ND | |
| Trichloroethene | 2 | 2 | ND | 240 | ND | 3,000 | ND | ND | |
| 1,2-Dichloropropane | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| Bromodichloromethane | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| Dibromomethane | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| trans-1,3-Dichloropropene | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| cis-1,3-Dichloropropene | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| 1,1,2-Trichloroethane | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| 1,3-Dichloropropane | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| Dibromochloromethane | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| 2-Chloroethylvinyl ether | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| Bromoform | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| Isopropylbenzene | 2 | 5 | ND | 41.3 | ND | ND | ND | ND | |
| Bromobenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | |

ANCHEM0508



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# Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc.
Project:Angeles Chemical Co.

Lab Job No.: BL403131
Matrix: Water

Date Reported: 04-08-2004
Date Sampled: 03-19-2004

**EPA 8260B (VOCs by GC/MS, Page 2 of 2)** Reporting Unit: (ppb)

| COMPOUND | MDL | PQL | MB | MW-21 | MW-22 | MW-26 | TB | EB | |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | 1 | 1 | ND | 17.5 | 16.4 | 15,200 | ND | ND | |
| Tetrachloroethene | 2 | 2 | ND | 347 | 4.0 j | 4,160 | ND | ND | |
| 1,2-Dibromoethane(EDB). | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| Chlorobenzene | 2 | 5 | ND | 4.8 j | 29.0 | ND | ND | ND | |
| 1,1,1,2-Tetrachloroethan | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| Ethylbenzene | 1 | 1 | ND | 6.8 | ND | 3,180 | ND | ND | |
| Total Xylenes | 1 | 1 | ND | 175 | 8.8 | 9,320 | ND | ND | |
| Styrene | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| 1,1,2,2-Tetrachloroethan | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| 1,2,3-Trichloropropane | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| n-Propylbenzene | 2 | 5 | ND | 14.3 | ND | ND | ND | ND | |
| 2-Chlorotoluene | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| 4-Chlorotoluene | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| 1,3,5-Trimethylbenzene | 2 | 5 | ND | 5.5 | ND | 300 | ND | ND | |
| tert-Butylbenzene | 2 | 5 | ND | 6.0 j | ND | ND | ND | ND | |
| 1,2,4-Trimethylbenzene | 2 | 5 | ND | 30.0 | 6.6 j | 1,140 | ND | ND | |
| Sec-Butylbenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| 1,3-Dichlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| p-Isopropyltoluene | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| 1,4-Dichlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| 1,2-Dichlorobenzene | 2 | 5 | ND | ND | 7.8 j | 165 | ND | ND | |
| n-Butylbenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| 1,2,4-Trichlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| 1,2-Dibromo-3-Chloropropane | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| Hexachlorobutadiene | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| Naphthalene | 2 | 5 | ND | 53.5 | 6.6 j | ND | ND | ND | |
| 1,2,3-Trichlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | |
| Acetone | 5 | 25 | ND | ND | ND | 10,200 | ND | ND | |
| 2-Butanone (MEK) | 5 | 25 | ND | ND | ND | 6,050 | ND | ND | |
| Carbon disulfide | 5 | 25 | ND | ND | ND | ND | ND | ND | |
| 4-Methyl-2-pentanone | 5 | 25 | ND | ND | ND | 6,600 | ND | ND | |
| 2-Hexanone | 5 | 25 | ND | ND | ND | ND | ND | ND | |
| Vinyl Acetate | 5 | 25 | ND | ND | ND | ND | ND | ND | |
| MTBE | 2 | 2 | ND | ND | ND | ND | ND | ND | |
| ETBE | 2 | 2 | ND | ND | ND | ND | ND | ND | |
| DIPE | 2 | 2 | ND | ND | ND | ND | ND | ND | |
| TAME | 2 | 2 | ND | ND | ND | ND | ND | ND | |
| T-Butyl Alcohol | 10 | 10 | ND | ND | ND | ND | ND | ND | |

MDL=Method Detection Limit; MB=Method Blank; ND=Not Detected (below DF × MDL), j=trace concentration.

ANCHEM0509



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**Southland Technical Services, Inc.**
Environmental Laboratories

04-08-2004

## Modified EPA 8270C (1,4-Dioxane by GC/MS)
## Batch QA/QC Report

| | | | |
|---|---|---|---|
| Client: | Blakely Environmental Investigations, Inc. | Lab Job No.: | BL403131 |
| Project: | Angeles Chemical Co. | | |
| Matrix: | Water | Lab Sample ID: | ST40323-1 |
| Batch No.: | 0323-BNA | Date Analyzed: | 03-23-2004 |

**LCS/LCSD Result**
**Unit: ppb**

| Analyte | Sample Conc. | Spike Conc. | LCS | LCSD | LCS %Rec. | LCSD %Rec. | % RPD | %RPD Accept. Limit | %Rec Accept. Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | ND | 10.0 | 9.54 | 9.35 | 95.4 | 93.5 | 2.0 | 30 | 70-130 |

ND:Not Detected

ANCHEM0510



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**Southland Technical Services, Inc.**
Environmental Laboratories

04-08-2004

## EPA 8015M (TPH)
## Batch QA/QC Report

| | | | |
|---|---|---|---|
| Client: | Blakely Environmental Investigations, Inc. | Lab Job No.: | BL403131 |
| Project: | Angeles Chemical Co. | | |
| Matrix: | Water | Lab Sample ID: | R403145-1 |
| Batch No: | AC21-GW1 | Date Analyzed: | 03-21-2004 |

### I. MS/MSD Report
**Unit: ppb**

| Analyte | Sample Conc. | Spike Conc. | MS | MSD | MS %Rec. | MSD %Rec. | % RPD | %RPD Accept. Limit | %Rec Accept. Limit |
|---|---|---|---|---|---|---|---|---|---|
| TPH-G | ND | 1000 | 999 | 1,020 | 99.9 | 102.0 | 2.1 | 30 | 70-130 |

### II. LCS Result
**Unit: ppb**

| Analyte | LCS Report Value | True Value | Rec.% | Accept. Limit |
|---|---|---|---|---|
| TPH-G | 1,060 | 1000 | 106.0 | 80-120 |

ND: Not Detected (at the specified limit)

ANCHEM0511



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04-08-2004

# EPA 8260B
## Batch QA/QC Report

| | | | |
|---|---|---|---|
| Client: | Blakely Environmental Investigations, Inc. | Lab Job No.: | BL403131 |
| Project: | Angeles Chemical Co. | | |
| Matrix: | Water | Lab Sample ID: | AH403133-11 |
| Batch No: | 0329-VOAW | Date Analyzed: | 03-29-2004 |

### I. MS/MSD Report
**Unit: ppb**

| Compound | Sample Conc. | Spike Conc. | MS | MSD | MS %Rec. | MSD %Rec. | % RPD | %RPD Accept. Limit | %Rec Accept. Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | ND | 20 | 25.5 | 26.0 | 127.5 | 130.0 | 1.9 | 30 | 70-130 |
| Benzene | ND | 20 | 25.4 | 26.0 | 127.0 | 130.0 | 2.3 | 30 | 70-130 |
| Trichloro-ethene | ND | 20 | 24.1 | 23.3 | 120.5 | 116.5 | 3.4 | 30 | 70-130 |
| Toluene | ND | 20 | 24.8 | 26.0 | 124.0 | 130.0 | 4.7 | 30 | 70-130 |
| Chlorobenzene | ND | 20 | 24.8 | 25.4 | 124.0 | 127.0 | 2.4 | 30 | 70-130 |

### II. LCS Result
**Unit: ppb**

| Analyte | LCS Value | True Value | Rec.% | Accept. Limit |
|---|---|---|---|---|
| 1,1-Dichloroethene | 47.4 | 50.0 | 94.8 | 80-120 |
| Benzene | 44.7 | 50.0 | 89.4 | 80-120 |
| Trichloro-ethene | 40.0 | 50.0 | 80.0 | 80-120 |
| Toluene | 43.3 | 50.0 | 86.6 | 80-120 |
| Chlorobenzene | 42.9 | 50.0 | 85.8 | 80-120 |

ND: Not Detected.

ANCHEM0512

**Southland Technical Services, Inc.**
Environmental Laboratories

04-08-2004

**Ethylene by GC/FID**
**Batch QA/QC Report**

| | | | |
|---|---|---|---|
| Client: | Blakely Environmental Investigations, Inc. | Lab Job No.: | BL403131 |
| Project: | Angeles Chemical Co. | | |
| Matrix: | Water | Lab Sample ID: | BL403124-5 |
| Batch No.: | FC26A | Date Analyzed: | 03-26-2004 |

**I. Sample/Sample Dup Report**
Reporting Units: µg/L

| Analyte | MB | Sample Conc. | Sample Duplicate | % RPD | %RPD Accept. Limit |
|---|---|---|---|---|---|
| Ethylene | ND | ND | ND | 0 | 30 |

**II. LCS Result**
**Reporting Units: µg/L**

| Analyte | LCS Report Value | True Value | Rec.% | Accept. Limi |
|---|---|---|---|---|
| Ethylene | 3,980 | 4,170 | 95.4 | 80-120 |
| | | | | |

ND: Not Detected.

ANCHEM0513



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# SOUTHLAND TECHNICAL SERVICES, INC.

## CHAIN OF CUSTODY RECORD



Lab Job Number BL 403130

Client: BEII

Address: 4359 Phelan Rd. Phelan CA 92371

Report Attention: | Phone: | Fax: | Sampled by: H.G

Project Name/No.: | Project Site: Angeles Chemical Co.

| Client Sample ID | Lab Sample ID | Sample Collect Date | Sample Collect Time | Matrix Type | Sample Preserve | No.,type* & size of container | 602/8021 (BTEX,MTBE) | 8015M (Gasoline) | 8015M (Diesel) | 8260B (VOCs) | 8260B (Oxygenates, BTEX) | 8260B (MTBE Confirm.) | $C_4-C_{40}$ | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-10 | BL403130.-1 | 3/18/04 | 11:05 | Product | HCL | 1-VOA | | X | | X | | | X | | | | | | |
| MW-18 | -2 | " | 11:10 | " | " | " | | X | | X | | | X | | | | | | |
| MW-19 | -3 | " | 11:20 | " | " | " | | X | | X | | | X | | | | | | |

Analyses Requested

T.A.T. Requested: ☐ Rush 8 12 24 hours ☐ 2-3 days ☒ Normal

Sample Condition: ☒ Chilled ☒ Intact ☐ Sample seals

Relinquished by: [signature] Company: BEII Date: 3/18/04 Time: 1144

Received by: [signature] Company: STS

Relinquished by: Company: Date: Time:

Received by: Company:

Container types: M=Metal Tube, A=Air Bag, P=Plastic bottle, G=Glass bottle, V=VOA vial

ANCHEM0514

Southland Tech. Services, Inc.
7801 Telegraph Road, Suite L & K
Montebello, CA 90640
Tel: (323) 888-0728
Fax: (323) 888-1509

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report, PINK to courier.

**Southland Technical Services, Inc.**
Environmental Laboratories

03-20-2004

Mr. Hiram Garcia
Blakely Environmental Investigations, Inc.
4359 Phelan Road
Phelan, CA 92371

Project: Angeles Chemical Co.
Project Site: 8915 Sorensen Ave., Santa Fe Springs, CA
Sample Date: 03-19-2004
Lab Job No.: BL403130

Dear Mr. Garcia:

Enclosed please find the analytical report for the sample(s) received by STS Environmental Laboratories on 03-19-2004 and analyzed for the following parameters:

EPA 8015M (Total Petroleum Hydrocarbons)
EPA 8260B (VOCs by GC/MS)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

STS Environmental Laboratory is certified by CA DHS (Certificate Number 1986). Thank you for giving us the opportunity to serve you. Please feel free to call me at (323) 888-0728 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph. D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

ANCHEM0515



7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

# Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc.
Project:Angeles Chemical Co.

Lab Job No.: BL403130
Matrix: Product

Date Reported: 03-20-2004
Date Sampled: 03-19-2004

**EPA 8260B (VOCs by GC/MS, Page 1 of 2)** Reporting Unit: ppb

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **DATE ANALYZED** | | | 03-19 | 03-19-04 | 03-19-04 | 03-19-04 | |
| **DILUTION FACTOR** | | | | 250,000 | 250,000 | 250,000 | |
| **LAB SAMPLE I.D.** | | | | BL403130-1 | BL403130-2 | BL403130-3 | |
| **CLIENT SAMPLE I.D.** | | | | MW-10 | MW-18 | MW-19 | |
| **COMPOUND** | **MDL** | **PQL** | **MB** | | | | |
| Dichlorodifluoromethane | 2 | 5 | ND | ND | ND | ND | |
| Chloromethane | 2 | 5 | ND | ND | ND | ND | |
| Vinyl Chloride | 2 | 2 | ND | ND | ND | ND | |
| Bromomethane | 2 | 5 | ND | ND | ND | ND | |
| Chloroethane | 2 | 5 | ND | ND | ND | ND | |
| Trichlorofluoromethane | 2 | 5 | ND | ND | ND | ND | |
| 1,1-Dichloroethene | 2 | 5 | ND | 730,000 | 928,000 | 4,840,000 | |
| Iodomethane | 2 | 5 | ND | ND | ND | ND | |
| Methylene Chloride | 2 | 5 | ND | ND | ND | ND | |
| trans-1,2-Dichloroethene | 2 | 5 | ND | ND | ND | ND | |
| 1,1-Dichloroethane | 2 | 5 | ND | 3,190,000 | 1,590,000 | 625,000 | |
| 2,2-Dichloropropane | 2 | 5 | ND | ND | ND | ND | |
| cis-1,2-Dichloroethene | 2 | 5 | ND | 1,530,000 | 1,620,000 | 1,630,000 | |
| Bromochloromethane | 2 | 5 | ND | ND | ND | ND | |
| Chloroform | 2 | 5 | ND | ND | ND | ND | |
| 1,2-Dichloroethane | 2 | 5 | ND | ND | ND | ND | |
| 1,1,1-Trichloroethane | 2 | 5 | ND | 8,870,000 | 4,140,000 | 35,000,000 | |
| Carbon tetrachloride | 2 | 5 | ND | ND | ND | ND | |
| 1,1-Dichloropropene | 2 | 5 | ND | ND | ND | ND | |
| Benzene | 1 | 1 | ND | ND | ND | 365,000 | |
| Trichloroethene | 2 | 2 | ND | ND | ND | 560,000 | |
| 1,2-Dichloropropane | 2 | 5 | ND | ND | ND | ND | |
| Bromodichloromethane | 2 | 5 | ND | ND | ND | ND | |
| Dibromomethane | 2 | 5 | ND | ND | ND | ND | |
| trans-1,3-Dichloropropene | 2 | 5 | ND | ND | ND | ND | |
| cis-1,3-Dichloropropene | 2 | 5 | ND | ND | ND | ND | |
| 1,1,2-Trichloroethane | 2 | 5 | ND | ND | ND | ND | |
| 1,3-Dichloropropane | 2 | 5 | ND | ND | ND | ND | |
| Dibromochloromethane | 2 | 5 | ND | ND | ND | ND | |
| 2-Chloroethylvinyl ether | 2 | 5 | ND | ND | ND | ND | |
| Bromoform | 2 | 5 | ND | ND | ND | ND | |
| Isopropylbenzene | 2 | 5 | ND | 1,120,000 | 1,230,000 | 1,050,000 | |
| Bromobenzene | 2 | 5 | ND | ND | ND | ND | |

ANCHEM0516



7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

# Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc.
Project:Angeles Chemical Co.

Lab Job No.: BL403130
Matrix: Product

Date Reported: 03-20-2004
Date Sampled: 03-19-2004

**EPA 8260B (VOCs by GC/MS, Page 2 of 2)** Reporting Unit: (ppb)

| COMPOUND | MDL | PQL | MB | MW-10 | MW-18 | MW-19 | |
|---|---|---|---|---|---|---|---|
| Toluene | 1 | 1 | ND | 8,620,000 | 15,300,000 | 11,400,000 | |
| Tetrachloroethene | 2 | 2 | ND | ND | 543,000 | 4,820,000 | |
| 1,2-Dibromoethane(EDB) | 2 | 5 | ND | ND | ND | ND | |
| Chlorobenzene | 2 | 5 | ND | ND | ND | ND | |
| 1,1,1,2-Tetrachloroethan | 2 | 5 | ND | ND | ND | ND | |
| Ethylbenzene | 1 | 1 | ND | 5,330,000 | 7,080,000 | 6,960,000 | |
| Total Xylenes | 1 | 1 | ND | 17,600,000 | 22,500,000 | 16,000,000 | |
| Styrene | 2 | 5 | ND | ND | ND | ND | |
| 1,1,2,2-Tetrachloroethan | 2 | 5 | ND | ND | ND | ND | |
| 1,2,3-Trichloropropane | 2 | 5 | ND | ND | ND | ND | |
| n-Propylbenzene | 2 | 5 | ND | 2,820,000 | 3,230,000 | 2,980,000 | |
| 2-Chlorotoluene | 2 | 5 | ND | ND | ND | ND | |
| 4-Chlorotoluene | 2 | 5 | ND | ND | ND | ND | |
| 1,3,5-Trimethylbenzene | 2 | 5 | ND | 8,560,000 | 9,020,000 | 9,480,000 | |
| tert-Butylbenzene | 2 | 5 | ND | ND | ND | ND | |
| 1,2,4-Trimethylbenzene | 2 | 5 | ND | 31,900,000 | 30,600,000 | 45,400,000 | |
| Sec-Butylbenzene | 2 | 5 | ND | ND | ND | ND | |
| 1,3-Dichlorobenzene | 2 | 5 | ND | ND | ND | ND | |
| p-Isopropyltoluene | 2 | 5 | ND | ND | ND | ND | |
| 1,4-Dichlorobenzene | 2 | 5 | ND | ND | ND | ND | |
| 1,2-Dichlorobenzene | 2 | 5 | ND | ND | ND | ND | |
| n-Butylbenzene | 2 | 5 | ND | 1,480,000 | 1,330,000 | 2,600,000 | |
| 1,2,4-Trichlorobenzene | 2 | 5 | ND | ND | ND | ND | |
| 1,2-Dibromo-3-Chloropropane | 2 | 5 | ND | ND | ND | ND | |
| Hexachlorobutadiene | 2 | 5 | ND | ND | ND | ND | |
| Naphthalene | 2 | 5 | ND | 1,980,000 | 1,620,000 | 4,120,000 | |
| 1,2,3-Trichlorobenzene | 2 | 5 | ND | ND | ND | ND | |
| Acetone | 5 | 25 | ND | ND | ND | ND | |
| 2-Butanone (MEK) | 5 | 25 | ND | ND | ND | ND | |
| Carbon disulfide | 5 | 25 | ND | ND | ND | ND | |
| 4-Methyl-2-pentanone | 5 | 25 | ND | ND | ND | ND | |
| 2-Hexanone | 5 | 25 | ND | ND | ND | ND | |
| Vinyl Acetate | 5 | 25 | ND | ND | ND | ND | |
| 1,4-Dioxane | 50 | 100 | ND | ND | ND | ND | |
| MTBE | 2 | 2 | ND | ND | ND | ND | |
| ETBE | 2 | 2 | ND | ND | ND | ND | |
| DIPE | 2 | 2 | ND | ND | ND | ND | |
| TAME | 2 | 2 | ND | ND | ND | ND | |
| T-Butyl Alcohol | 10 | 50 | ND | ND | ND | ND | |

MDL=Method Detection Limit; MB=Method Blank; ND=Not Detected (below DF × PQL), j=trace concentration.

ANCHEM0517



7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

# Southland Technical Services, Inc.
Environmental Laboratories

03-20-2004

| | | | |
|---|---|---|---|
| Client: | Blakely Environmental Investigations, Inc. | Lab Job No.: | BL403130 |
| Project: | Angeles Chemical Co. | | |
| Project Site: | 8915 Sorensen Ave, Santa Fe Springs | Date Sampled: | 03-19-2004 |
| Matrix: | PRODUCT | Date Received: | 03-19-2004 |
| Batch No.: | AC19-DP1 | Date Analyzed: | 03-19-2004 |

**EPA 8015M (Total Petroleum Hydrocarbons)**
**Reporting Units: mg/L (ppm)**

| Sample ID | Lab ID | C4-C12* (Gasoline Range) | C13-C23 (Diesel Range) | C24-C40 (Oil Range) |
|---|---|---|---|---|
| Method Detection Limit (MDL) | | 5 | 5 | 25 |
| Practical Quantitation Limit | | 10 | 10 | 50 |
| Method Blank | | ND | ND | ND |
| MW-10 | BL403130-1 | 446,000 | 38 ,200 | ND |
| MW-18 | BL403130-2 | 450,000 | 37,700 | ND |
| MW-19 | BL403130-3 | 432,000 | 38,800 | ND |
| | | | | |

* C4-C14 results are obtained from purge and trap analysis.

ND: Not Detected (at the specified limit)

ANCHEM0518



7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

03-20-2004

## EPA 8015M (TPH)
## Batch QA/QC Report

| | | | |
|---|---|---|---|
| Client: | Blakely Environmental Investigations, Inc. | Lab Job No.: | BL403124 |
| Project: | Angeles Chemical Co. | | |
| Matrix: | Water | Lab Sample ID: | R403116-1 |
| Batch No: | AC19-GW1 | Date Analyzed: | 03-19-2004 |

### I. MS/MSD Report
**Unit: ppb**

| Analyte | Sample Conc. | Spike Conc. | MS | MSD | MS %Rec. | MSD %Rec. | % RPD | %RPD Accept. Limit | %Rec Accept. Limit |
|---|---|---|---|---|---|---|---|---|---|
| TPH-g | ND | 1,000 | 874 | 920 | 87.4 | 92.0 | 5.1 | 30 | 70-130 |

### II. LCS Result
**Unit: ppb**

| Analyte | LCS Report Value | True Value | Rec.% | Accept. Limit |
|---|---|---|---|---|
| TPH-g | 841 | 1,000 | 84.1 | 80-120 |

ND: Not Detected (at the specified limit)

ANCHEM0519

**Southland Technical Services, Inc.**
Environmental Laboratories

03-20-2004

# EPA 8260B
## Batch QA/QC Report

| | | | |
|---|---|---|---|
| Client: | Blakely Environmental Investigations, Inc. | Lab Job No.: | BL403130 |
| Project: | Angeles Chemical Co. | | |
| Matrix: | Water | Sample ID: | R403126-1 |
| Batch No: | 0319-VOAW | Date Analyzed: | 03-19-2004 |

### I. MS/MSD Report
**Unit: ppb**

| Compound | Sample Conc. | Spike Conc. | MS | MSD | MS %Rec. | MSD %Rec. | % RPD | %RPD Accept. Limit | %Rec Accept. Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | ND | 20 | 18.2 | 22.4 | 91.0 | 112.0 | 20.7 | 30 | 70-130 |
| Benzene | ND | 20 | 18.0 | 20.7 | 90.0 | 103.5 | 14.0 | 30 | 70-130 |
| Trichloro-ethene | ND | 20 | 16.9 | 19.0 | 84.5 | 95.0 | 11.7 | 30 | 70-130 |
| Toluene | ND | 20 | 16.9 | 19.8 | 84.5 | 99.0 | 15.8 | 30 | 70-130 |
| Chlorobenzene | ND | 20 | 17.9 | 20.1 | 89.5 | 100.5 | 11.6 | 30 | 70-130 |

### II. LCS Result
**Unit: ppb**

| Compound | LCS Report Value | True Value | Rec.% | Accept. Limit |
|---|---|---|---|---|
| 1,1-Dichloroethene | 16.9 | 20 | 84.5 | 80-120 |
| Benzene | 17.1 | 20 | 85.5 | 80-120 |
| Trichloro-ethene | 18.3 | 20 | 91.5 | 80-120 |
| Toluene | 18.2 | 20 | 91.0 | 80-120 |
| Chlorobenzene | 17.4 | 20 | 87.0 | 80-120 |

ND: Not Detected (at the specified limit)

ANCHEM0520



7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

# CHAIN OF CUSTODY RECORD

Lab Job Number _____

Client: Southland Technical Services Inc.

Address: 7801 Telegraph Rd. Ste L. Montebello, CA 90640

Report Attention: Roger Wang | Phone 323 888-0728 | Fax 323 888-1509 | Sampled by

Project Name/No.: BL403124 & BL403131 | Project Site: Angelos chemicals Co.

T.A.T. Requested: ☐ Rush 8 12 24 hours ☐ 2-3 days ☒ Normal

Sample Condition: ☐ Chilled ☐ Intact ☐ Sample seals

| Client Sample ID | Lab Sample ID | Sample Collect Date | Sample Collect Time | Matrix Type | Sample Preserve | No.,type* & size of container | 602/8021 (BTEX,MTBE) | 8015M (Gasoline) | 8015M (Diesel) | 8260B (VOCs) | 8260B (Oxygenates, BTEX) | 8260B (MTBE Confirm.) | Chloride | Sulfide | Alkalinity | Carbonates, Bicarbonates | Mn. | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-9 | BL403124-2 | 3/18/04 | | $H_2O$ | | | | | | | | | X | X | X | X | X | | |
| MW-12 | -4 | " | | " | | | | | | | | | X | X | X | X | X | | |
| MW-13 | -5 | " | | " | | | | | | | | | X | X | X | X | X | | |
| MW-17 | -6 | " | | " | | | | | | | | | X | X | X | X | X | | |
| MW-20 | -7 | " | | " | | | | | | | | | X | X | X | X | X | | |
| | | | | | | | | | | | | | | | | | | | |
| MW-11 | BL403131-2 | 3/19/04 | | $H_2O$ | | | | | | | | | X | X | X | X | X | | |
| -14 | -3 | " | | " | | | | | | | | | X | X | X | X | X | | |
| -15 | -4 | " | | " | | | | | | | | | X | X | X | X | X | | |
| -21 | -5 | " | | " | | | | | | | | | X | X | X | X | X | | |
| -22 | -6 | " | | " | | | | | | | | | X | X | X | X | X | | |
| -26 | -7 | " | | " | | | | | | | | | X | X | X | X | X | | |

| Relinquished by | Company | Date | Time | Received by | Company |
|---|---|---|---|---|---|
| [signature] | STS | 3/19/04 | 3:00 pm | [signature] | Jano 3/19/04 |
| Relinquished by | Company | Date | Time | Received by | Company |
| | | | | | |

Container types: M=Metal Tube, A=Air Bag, P=Plastic bottle, G=Glass bottle, V=VOA vial

Southland Tech. Services, Inc.
7801 Telegraph Road, Suite L & K
Montebello, CA 90640
Tel: (323) 888-0728
Fax: (323) 888-1509

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report, PINK to courier.

ANCHEM0521

AmeriChem Testing Laboratory

1761 N. Batavia St.
Orange, CA 92865
(714) 921-1530
FAX: (714) 921-4770

# Analytical Report

**REPORT NUMBER: AL-5428-4**
**CLIENT:**
**STS Environmental Lab.**
**7801 Telegraph Rd. suite J**
**Montebello, CA 90640**

**REPORT ON:**
**Water samples, BL 403124, 3-18-04**

**DATE RECEIVED: 03/19/04**
**DATE REPORTED: 03/23/04**

| ANALYSIS | DET. LIMIT | METHOD |
|---|---|---|
| Sulfide | 0.02 mg/l | EPA 376.1 |
| Chloride | 0.1 mg/l | EPA 325.3 |
| Total Alkalinity | 1.0 mg/l | EPA 310.1 |
| Carbonate/bicarbonate | 2.0 mg/l | Standard Method 4500 |
| Manganese | 0.05 mg/l | EPA 243.1 |

| | TEST RESULT, mg/l | | | | |
|---|---|---|---|---|---|
| SAMPLE ID. | Sulfide | Chloride | Total Alkalinity | Carbonate /bicarbonate | Manganese |
| -2 | ND | 221 | 485 | 582 | 0.11 |
| -4 | ND | 76.2 | 498 | 598 | 1.12 |
| -5 | ND | 92.6 | 452 | 542 | 0.13 |
| -6 | ND | 95.3 | 407 | 488 | 0.09 |
| -7 | ND | 123 | 449 | 539 | 0.14 |

Peter T. Wu
Lab Director

AmeriChem Testing Laboratory

1761 N. Batavia St.
Orange, CA 92865
(714) 921-1550
FAX: (714) 921-4770

# Analytical Report

**REPORT NUMBER: AL-5428-5**
**CLIENT:**
**STS Environmental Lab.**
**7801 Telegraph Rd. suite J**
**Montebello, CA 90640**

**REPORT ON:**
**Water samples, BL 403131, 3-19-04**

**DATE RECEIVED: 03/19/04**
**DATE REPORTED: 03/23/04**

| ANALYSIS | DET. LIMIT | METHOD |
|---|---|---|
| Sulfide | 0.02 mg/l | EPA 376.1 |
| Chloride | 0.1 mg/l | EPA 325.3 |
| Total Alkalinity | 1.0 mg/l | EPA 310.1 |
| Carbonate/bicarbonate | 2.0 mg/l | Standard Method 4500 |
| Manganese | 0.05 mg/l | EPA 243.1 |

| | TEST RESULT, mg/l | | | | |
|---|---|---|---|---|---|
| SAMPLE ID. | Sulfide | Chloride | Total Alkalinity | Carbonate /bicarbonate | Manganese |
| -2 | ND | 441 | 766 | 919 | 4.71 |
| -3 | ND | 92.6 | 298 | 351 | 0.15 |
| -4 | ND | 104 | 458 | 550 | 1.11 |
| -5 | ND | 158 | 542 | 650 | 1.78 |
| -6 | ND | 128 | 593 | 712 | 0.92 |
| -7 | ND | 267 | 593 | 713 | 2.48 |

P. T. Wu

Peter T. Wu
Lab Director

**ASSOCIATED LABORATORIES**
806 N. Batavia • Orange, CA 92868
(714) 771-6900 • Fax: (714) 538-1209

126528

# CHAIN OF CUSTODY RECORD

Date 3-22-04 Page 1 of 1

CLIENT Southland Technical Services
ADDRESS 7801 Telegraph Rd #L
Montebello, CA 90640

PROJECT MANAGER Roger Wang
PHONE NUMBER 323-888-0728

Samples Intact Yes ____ No ____
County Seals Intact Yes ____ No ____
Sample Ambient ____ Cooled ____ Frozen ____
Same Day ____ 24 Hr. ____
Regular ✓ 48 Hr. ____

PROJECT NAME
BL403124 & BL403131

SAMPLERS: (Signature)

| SAMPLE NUMBER | LOCATION DESCRIPTION | DATE | TIME | SAMPLE TYPE WATER | AIR | SOLID | NO OF CNTNRS | SUSP. CONTAM. | TESTS REQUIRED |
|---|---|---|---|---|---|---|---|---|---|
| MW-9 | | 3/18/04 | | ✓ | | | 1G | | TOC & Dissolved Org. Carbon |
| -12 | | " | | ✓ | | | " | | TOC & DOC |
| -13 | | " | | ✓ | | | " | | ↓ ↓ |
| -17 | | " | | ✓ | | | " | | ↓ ↓ |
| -20 | | " | | ✓ | | | " | | ↓ ↓ |
| MW-11 | | 3/19/04 | | ✓ | | | | | ↓ ↓ |
| -14 | | " | | ✓ | | | | | ↓ ↓ |
| -15 | | " | | ✓ | | | | | ↓ ↓ |
| -21 | | " | | ✓ | | | | | ↓ ↓ |
| -22 | | " | | ✓ | | | | | ↓ ↓ |
| -26 | | " | | ✓ | | | | | ↓ ↓ |
| | | | | | | | | | |
| | | | | | | | | | |

| Relinquished by: (Signature) | Received by: (Signature) | Date/Time |
|---|---|---|
| Carlino STS | [signature] | 3/22/04 2:00 |
| Relinquished by: (Signature) | Received by Laboratory for analysis: (Signature) 3-22-04 2:50 | Date/Time |

Special Instructions:

I hereby authorize the performance of the above indicated work.

[signature]

DISTRIBUTION: White with report. Yellow to AL, Pink to Courier

ANCHEM0524

**ASSOCIATED LABORATORIES**
*806 North Batavia - Orange, California 92868 - 714/771-6900* *FAX 714/538-1209*

CLIENT Southland Technical Services (6304)
ATTN: Roger Wang
7801 Telegraph Rd.- Suite L
Montebello, CA 90640

LAB REQUEST 126528
REPORTED 04/01/2004
RECEIVED 03/22/2004

PROJECT BL403124 & BL403131

SUBMITTER Client

COMMENTS

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

| Order No. | Client Sample Identification |
|---|---|
| 507389 | MW-9 |
| 507390 | MW-12 |
| 507391 | MW-13 |
| 507392 | MW-17 |
| 507393 | MW-20 |
| 507394 | MW-11 |
| 507395 | MW-14 |
| 507396 | MW-15 |
| 507397 | MW-21 |
| 507398 | MW-22 |
| 507399 | MW-26 |
| 507400 | Laboratory Method Blank |

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Edward S. Behare, Ph.D.
Vice President

*NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.*

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*TESTING & CONSULTING*
*Chemical*
*Microbiological*
*Environmental*



ANCHEM0525

**Order #:** 507389 **Client Sample ID:** MW-9
**Matrix:** WATER
**Date Sampled:** 03/18/2004

| Analyte | Result | DLR | Units | Date/Analyst | |
|---|---|---|---|---|---|
| **9060 Total Organic Carbon (TOC)** | | | | | |
| Dissolved Organic Carbon | 8.6 | 1.0 | mg/L | 03/25/04 | QP |
| Total Organic Carbon | 9.6 | 1.0 | mg/L | 03/25/04 | QP |

**Order #:** 507390 **Client Sample ID:** MW-12
**Matrix:** WATER
**Date Sampled:** 03/18/2004

| Analyte | Result | DLR | Units | Date/Analyst | |
|---|---|---|---|---|---|
| **9060 Total Organic Carbon (TOC)** | | | | | |
| Dissolved Organic Carbon | 3.1 | 1.0 | mg/L | 03/25/04 | QP |
| Total Organic Carbon | 3.4 | 1.0 | mg/L | 03/25/04 | QP |

**Order #:** 507391 **Client Sample ID:** MW-13
**Matrix:** WATER
**Date Sampled:** 03/18/2004

| Analyte | Result | DLR | Units | Date/Analyst | |
|---|---|---|---|---|---|
| **9060 Total Organic Carbon (TOC)** | | | | | |
| Dissolved Organic Carbon | 1.3 | 0.5 | mg/L | 03/25/04 | QP |
| Total Organic Carbon | 1.5 | 0.5 | mg/L | 03/25/04 | QP |

**Order #:** 507392 **Client Sample ID:** MW-17
**Matrix:** WATER
**Date Sampled:** 03/18/2004

| Analyte | Result | DLR | Units | Date/Analyst | |
|---|---|---|---|---|---|
| **9060 Total Organic Carbon (TOC)** | | | | | |
| Dissolved Organic Carbon | 0.6 | 0.5 | mg/L | 03/25/04 | QP |
| Total Organic Carbon | 1.0 | 0.5 | mg/L | 03/25/04 | QP |

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit

**Order #:** 507393 **Client Sample ID:** MW-20
**Matrix:** WATER
**Date Sampled:** 03/18/2004

| Analyte | Result | DLR | Units | Date/Analyst | |
|---|---|---|---|---|---|
| **9060 Total Organic Carbon (TOC)** | | | | | |
| Dissolved Organic Carbon | 1.0 | 0.5 | mg/L | 03/25/04 | QP |
| Total Organic Carbon | 1.1 | 0.5 | mg/L | 03/25/04 | QP |

**Order #:** 507394 **Client Sample ID:** MW-11
**Matrix:** WATER
**Date Sampled:** 03/19/2004

| Analyte | Result | DLR | Units | Date/Analyst | |
|---|---|---|---|---|---|
| **9060 Total Organic Carbon (TOC)** | | | | | |
| Dissolved Organic Carbon | 240 | 2.5 | mg/L | 03/25/04 | QP |
| Total Organic Carbon | 270 | 2.5 | mg/L | 03/25/04 | QP |

**Order #:** 507395 **Client Sample ID:** MW-14
**Matrix:** WATER
**Date Sampled:** 03/19/2004

| Analyte | Result | DLR | Units | Date/Analyst | |
|---|---|---|---|---|---|
| **9060 Total Organic Carbon (TOC)** | | | | | |
| Dissolved Organic Carbon | 2.4 | 0.5 | mg/L | 03/25/04 | QP |
| Total Organic Carbon | 3.1 | 0.5 | mg/L | 03/25/04 | QP |

**Order #:** 507396 **Client Sample ID:** MW-15
**Matrix:** WATER
**Date Sampled:** 03/19/2004

| Analyte | Result | DLR | Units | Date/Analyst | |
|---|---|---|---|---|---|
| **9060 Total Organic Carbon (TOC)** | | | | | |
| Dissolved Organic Carbon | 5.6 | 1.0 | mg/L | 03/25/04 | QP |

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit

| | | | | | |
|---|---|---|---|---|---|
| Total Organic Carbon | 6.5 | 1.0 | mg/L | 03/25/04 | QP |

**Order #:** 507397 **Client Sample ID:** MW-21
**Matrix:** WATER
**Date Sampled:** 03/19/2004

| Analyte | Result | DLR | Units | Date/Analyst | |
|---|---|---|---|---|---|
| **9060 Total Organic Carbon (TOC)** | | | | | |
| Dissolved Organic Carbon | 3.3 | 0.5 | mg/L | 03/25/04 | QP |
| Total Organic Carbon | 3.7 | 0.5 | mg/L | 03/25/04 | QP |

**Order #:** 507398 **Client Sample ID:** MW-22
**Matrix:** WATER
**Date Sampled:** 03/19/2004

| Analyte | Result | DLR | Units | Date/Analyst | |
|---|---|---|---|---|---|
| **9060 Total Organic Carbon (TOC)** | | | | | |
| Dissolved Organic Carbon | 10 | 1.0 | mg/L | 03/25/04 | QP |
| Total Organic Carbon | 11 | 1.0 | mg/L | 03/25/04 | QP |

**Order #:** 507399 **Client Sample ID:** MW-26
**Matrix:** WATER
**Date Sampled:** 03/19/2004

| Analyte | Result | DLR | Units | Date/Analyst | |
|---|---|---|---|---|---|
| **9060 Total Organic Carbon (TOC)** | | | | | |
| Dissolved Organic Carbon | 50 | 1.0 | mg/L | 03/25/04 | QP |
| Total Organic Carbon | 60 | 1.0 | mg/L | 03/25/04 | QP |

**Order #:** 507400 **Client Sample ID:** Laboratory Method Blank
**Matrix:** WATER

| Analyte | Result | DLR | Units | Date/Analyst | |
|---|---|---|---|---|---|
| **9060 Total Organic Carbon (TOC)** | | | | | |
| Dissolved Organic Carbon | ND | 0.5 | mg/L | 03/25/04 | QP |

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit

| | | | | | |
|---|---|---|---|---|---|
| Total Organic Carbon | ND | 0.5 | mg/L | 03/25/04 | QP |

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit

ASSOCIATED LABORATORIES
**QA REPORT FORM**

QC Sample: LR 126528-3

Matrix: WATER

Prep. Date: 03/25/04

Analysis Date: 03/25/04

ID#'s in Batch: LR 126528, 126525, 126438, 25449, 126519

**MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULT**

Reporting Units = mg/L

| Test | Method | Sample Result | Spike Added | Matrix Spike | Matrix Spike Dup | %Rec MS | %Rec MSD | RPD |
|---|---|---|---|---|---|---|---|---|
| TOC | 415.1 | 1.5 | 10 | 11.8 | 12.1 | 103 | 106 | 3 |

*ND = "U" - Not Detected*
*RPD = Relative Percent Difference of Matrix Spike and Matrix Spike Duplicate*
*%REC-MS & MSD = Percent Recovery of Matrix Spike & Matrix Spike Duplicate*

| |
|---|
| *%REC LIMITS = 80 - 120* |
| *RPD LIMITS = 20* |

**PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS**

| PREP BLK | LCS | | | | |
|---|---|---|---|---|---|
| Value | Result | True | %Rec | L.Limit | H.Limit |
| ND | 9.8 | 10 | 98 | 80% | 120% |

*Value = Preparation Blank Value; ND = Not-Detected*
*LCS Result = Lab Control Sample Result*
*True = True Value of LCS*
*L.Limit / H.Limit = LCS Control Limits*

# SOUTHLAND TECHNICAL SERVICES, INC.

## CHAIN OF CUSTODY RECORD



Lab Job Number BL403170

Client: BEII

Address: 4359 Phelan Rd. Phelan CA 92371

Report Attention:

Phone: (760) 868-8572

Fax: (760) 868-8573

Sampled by: H.G.

Project Name/No.:

Project Site: Angeles Chemical Co.

T.A.T. Requested: ☐ Rush 8 12 24 hours ☐ 2-3 days ☒ Normal

Sample Condition: ☒ Chilled ☒ Intact ☐ Sample seals

| Client Sample ID | Lab Sample ID | Sample Collect Date | Sample Collect Time | Matrix Type | Sample Preserve | No.,type* & size of container | 602/8021 (BTEX,MTBE) | 8015M (Gasoline) | 8015M (Diesel) | 8260B (VOCs) | 8260B (Oxygenates, BTEX) | 8260B (MTBE Confirm.) | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-23 Top | BL403170-1 | 3/24/04 | | Water | HCl | 3-VOAs | | | | X | | | |
| MW-23 Bot | -2 | " | | " | " | " | | | | X | | | |
| MW-24 Top | -3 | " | | " | " | " | | | | X | | | |
| MW-24 Bot | -4 | " | | " | " | " | | | | X | | | |
| MW-25 Top | -5 | " | | " | " | " | | | | X | | | |
| MW-25 Bot | -6 | " | | " | " | " | | | | X | | | |
| Trip Blank | -7 | " | | " | " | 1-VOA | | | | X | | | |

Relinquished by: [signature] Company: BEII Date: 3/24/04 Time: 13:30 Received by: [signature] Company: STS

Relinquished by: Company: Date: Time: Received by: Company:

Container types: A=Air Bag, G=Glass bottle, M=Metal Tube, P=Plastic bottle, V=VOA vial

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.

Distribution: WHITE with report, PINK to courier.

Southland Tech. Services, Inc.
7801 Telegraph Road, Suite L & K
Montebello, CA 90640
Tel: (323) 888-0728
Fax: (323) 888-1509

ANCHEM0531

**Southland Technical Services, Inc.**
Environmental Laboratories

04-05-2004

Mr. Hiram Garcia
Blakely Environmental Investigations, Inc.
4359 Phelan Road
Phelan, CA 92371

Project: Angeles Chemical Co.
Project Site: 8915 Sorensen Ave, Santa Fe Springs
Sample Date: 03-24-2004
Lab Job No.: BL403170

Dear Mr. Garcia:

Enclosed please find the analytical report for the sample(s) received by STS Environmental Laboratories on 03-24-2004 and analyzed for the following parameters:

EPA 8260B (VOCs by GC/MS)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

STS Environmental Laboratory is certified by CA DHS (Certificate Number 1986). Thank you for giving us the opportunity to serve you. Please feel free to call me at (323) 888-0728 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph. D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

ANCHEM0532

7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

# Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc.
Project:Angeles Chemical Co.

Lab Job No.: BL403170
Matrix: Water

Date Reported: 04-05-2004
Date Sampled: 03-24-2004

**EPA 8260B (VOCs by GC/MS, Page 1 of 2)** Reporting Unit: ppb

| DATE ANALYZED | | | 03-30 | 03-30-04 | 03-30-04 | 03-30-04 | 03-30-04 | 03-30-04 | 03-30-04 |
|---|---|---|---|---|---|---|---|---|---|
| DILUTION FACTOR | | | | 1 | 1 | 1 | 1 | 1 | 1 |
| LAB SAMPLE I.D. | | | | BL403170 -1 | BL403170 -2 | BL403170 -3 | BL403170 -4 | BL403170 -5 | BL403170 -6 |
| CLIENT SAMPLE I.D. | | | | MW-23 Top | MW-23 Bottom | MW-24 Top | MW-24 Bottom | MW-25 Top | MW-25 Bottom |
| COMPOUND | MDL | PQL | MB | | | | | | |
| Dichlorodifluoromethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Chloromethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Vinyl Chloride | 1 | 2 | ND | ND | ND | ND | ND | ND | ND |
| Bromomethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Chloroethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Trichlorofluoromethane | 2 | 5 | ND | ND | ND | 4.9 j | 6.9 | 3.2 j | 5.2 |
| 1,1-Dichloroethene | 2 | 5 | ND | 4.2 j | 4.4 j | 6.6 | 7.6 | 6.2 | 7.4 |
| Iodomethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Methylene Chloride | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| trans-1,2-Dichloroethene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethane | 1 | 2 | ND | ND | ND | ND | ND | ND | ND |
| 2,2-Dichloropropane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| cis-1,2-Dichloroethene | 2 | 5 | ND | ND | ND | 11.3 | 11.7 | ND | ND |
| Bromochloromethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Chloroform | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichloroethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,1,1-Trichloroethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Carbon tetrachloride | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloropropene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Benzene | 1 | 1 | ND | ND | ND | ND | ND | ND | ND |
| Trichloroethene | 2 | 2 | ND | 14.7 | 14.2 | 67.1 | 74.5 | 18.6 | 34.9 |
| 1,2-Dichloropropane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Bromodichloromethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Dibromomethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| trans-1,3-Dichloropropene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| cis-1,3-Dichloropropene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2-Trichloroethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,3-Dichloropropane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Dibromochloromethane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 2-Chloroethylvinyl ether | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Bromoform | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Isopropylbenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Bromobenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |

ANCHEM0533

7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

# Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc.
Project:Angeles Chemical Co.

Lab Job No.: BL403170
Matrix: Water

Date Reported: 04-05-2004
Date Sampled: 03-24-2004

**EPA 8260B (VOCs by GC/MS, Page 2 of 2)** Reporting Unit: (ppb)

| COMPOUND | MDL | PQL | MB | MW-23 Top | MW-23 Bottom | MW-24 Top | MW-24 Bottom | MW-25 Top | MW-25 Bottom |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | 1 | 1 | ND | ND | ND | ND | ND | ND | ND |
| Tetrachloroethene | 2 | 2 | ND | 37.7 | 38.2 | 263 | 225 | 24.9 | 30.3 |
| 1,2-Dibromoethane(EDB) | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Chlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,1,1,2-Tetrachloroethan | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Ethylbenzene | 1 | 1 | ND | ND | ND | ND | ND | ND | ND |
| Total Xylenes | 1 | 1 | ND | ND | ND | ND | ND | ND | ND |
| Styrene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethan | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,2,3-Trichloropropane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| n-Propylbenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 2-Chlorotoluene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 4-Chlorotoluene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,3,5-Trimethylbenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| tert-Butylbenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,2,4-Trimethylbenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Sec-Butylbenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,3-Dichlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| p-Isopropyltoluene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,4-Dichlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| n-Butylbenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,2,4-Trichlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dibromo-3-Chloropropane | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Hexachlorobutadiene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Naphthalene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| 1,2,3-Trichlorobenzene | 2 | 5 | ND | ND | ND | ND | ND | ND | ND |
| Acetone | 25 | 25 | ND | ND | ND | ND | ND | ND | ND |
| 2-Butanone (MEK) | 25 | 25 | ND | ND | ND | ND | ND | ND | ND |
| Carbon disulfide | 25 | 25 | ND | ND | ND | ND | ND | ND | ND |
| 4-Methyl-2-pentanone | 25 | 25 | ND | ND | ND | ND | ND | ND | ND |
| 2-Hexanone | 25 | 25 | ND | ND | ND | ND | ND | ND | ND |
| Vinyl Acetate | 25 | 25 | ND | ND | ND | ND | ND | ND | ND |
| 1,4-Dioxane | 50 | 100 | ND | ND | ND | ND | ND | ND | ND |
| MTBE | 2 | 2 | ND | ND | ND | ND | ND | ND | ND |
| ETBE | 2 | 2 | ND | ND | ND | ND | ND | ND | ND |
| DIPE | 2 | 2 | ND | ND | ND | ND | ND | ND | ND |
| TAME | 2 | 2 | ND | ND | ND | ND | ND | ND | ND |
| T-Butyl Alcohol | 10 | 10 | ND | ND | ND | ND | ND | ND | ND |

MB=Method Blank; MDL=Method Detection Limit; PQL=Practical Quantitation Limit; ND=Not Detected (below DF × MDL). j=trace concentration

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# Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc. Lab Job No.: BL403170 Date Reported: 04-05-2004
Project: Angeles Chemical Co. Matrix: Water Date Sampled: 03-24-2004

**EPA 8260B (VOCs by GC/MS, Page 1 of 2)** Reporting Unit: ppb

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **DATE ANALYZED** | | | 03-30 | 03-30-04 | | | | | |
| **DILUTION FACTOR** | | | | 1 | | | | | |
| **LAB SAMPLE I.D.** | | | | BL403170-1 | | | | | |
| **CLIENT SAMPLE I.D.** | | | | Trip Blank | | | | | |
| **COMPOUND** | **MDL** | **PQL** | **MB** | | | | | | |
| Dichlorodifluoromethane | 2 | 5 | ND | ND | | | | | |
| Chloromethane | 2 | 5 | ND | ND | | | | | |
| Vinyl Chloride | 1 | 2 | ND | ND | | | | | |
| Bromomethane | 2 | 5 | ND | ND | | | | | |
| Chloroethane | 2 | 5 | ND | ND | | | | | |
| Trichlorofluoromethane | 2 | 5 | ND | ND | | | | | |
| 1,1-Dichloroethene | 2 | 5 | ND | ND | | | | | |
| Iodomethane | 2 | 5 | ND | ND | | | | | |
| Methylene Chloride | 2 | 5 | ND | ND | | | | | |
| trans-1,2-Dichloroethene | 2 | 5 | ND | ND | | | | | |
| 1,1-Dichloroethane | 1 | 2 | ND | ND | | | | | |
| 2,2-Dichloropropane | 2 | 5 | ND | ND | | | | | |
| cis-1,2-Dichloroethene | 2 | 5 | ND | ND | | | | | |
| Bromochloromethane | 2 | 5 | ND | ND | | | | | |
| Chloroform | 2 | 5 | ND | ND | | | | | |
| 1,2-Dichloroethane | 2 | 5 | ND | ND | | | | | |
| 1,1,1-Trichloroethane | 2 | 5 | ND | ND | | | | | |
| Carbon tetrachloride | 2 | 5 | ND | ND | | | | | |
| 1,1-Dichloropropene | 2 | 5 | ND | ND | | | | | |
| Benzene | 1 | 1 | ND | ND | | | | | |
| Trichloroethene | 2 | 2 | ND | ND | | | | | |
| 1,2-Dichloropropane | 2 | 5 | ND | ND | | | | | |
| Bromodichloromethane | 2 | 5 | ND | ND | | | | | |
| Dibromomethane | 2 | 5 | ND | ND | | | | | |
| trans-1,3-Dichloropropene | 2 | 5 | ND | ND | | | | | |
| cis-1,3-Dichloropropene | 2 | 5 | ND | ND | | | | | |
| 1,1,2-Trichloroethane | 2 | 5 | ND | ND | | | | | |
| 1,3-Dichloropropane | 2 | 5 | ND | ND | | | | | |
| Dibromochloromethane | 2 | 5 | ND | ND | | | | | |
| 2-Chloroethylvinyl ether | 2 | 5 | ND | ND | | | | | |
| Bromoform | 2 | 5 | ND | ND | | | | | |
| Isopropylbenzene | 2 | 5 | ND | ND | | | | | |
| Bromobenzene | 2 | 5 | ND | ND | | | | | |

ANCHEM0535

# Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc.
Project:Angeles Chemical Co.

Lab Job No.: BL403170
Matrix: Water

Date Reported: 04-05-2004
Date Sampled: 03-24-2004

**EPA 8260B (VOCs by GC/MS, Page 2 of 2)** Reporting Unit: (ppb)

| COMPOUND | MDL | PQL | MB | Trip Blank | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Toluene | 1 | 1 | ND | ND | | | | | |
| Tetrachloroethene | 2 | 2 | ND | ND | | | | | |
| 1,2-Dibromoethane(EDB) | 2 | 5 | ND | ND | | | | | |
| Chlorobenzene | 2 | 5 | ND | ND | | | | | |
| 1,1,1,2-Tetrachloroethan | 2 | 5 | ND | ND | | | | | |
| Ethylbenzene | 1 | 1 | ND | ND | | | | | |
| Total Xylenes | 1 | 1 | ND | ND | | | | | |
| Styrene | 2 | 5 | ND | ND | | | | | |
| 1,1,2,2-Tetrachloroethan | 2 | 5 | ND | ND | | | | | |
| 1,2,3-Trichloropropane | 2 | 5 | ND | ND | | | | | |
| n-Propylbenzene | 2 | 5 | ND | ND | | | | | |
| 2-Chlorotoluene | 2 | 5 | ND | ND | | | | | |
| 4-Chlorotoluene | 2 | 5 | ND | ND | | | | | |
| 1,3,5-Trimethylbenzene | 2 | 5 | ND | ND | | | | | |
| tert-Butylbenzene | 2 | 5 | ND | ND | | | | | |
| 1,2,4-Trimethylbenzene | 2 | 5 | ND | ND | | | | | |
| Sec-Butylbenzene | 2 | 5 | ND | ND | | | | | |
| 1,3-Dichlorobenzene | 2 | 5 | ND | ND | | | | | |
| p-Isopropyltoluene | 2 | 5 | ND | ND | | | | | |
| 1,4-Dichlorobenzene | 2 | 5 | ND | ND | | | | | |
| 1,2-Dichlorobenzene | 2 | 5 | ND | ND | | | | | |
| n-Butylbenzene | 2 | 5 | ND | ND | | | | | |
| 1,2,4-Trichlorobenzene | 2 | 5 | ND | ND | | | | | |
| 1,2-Dibromo-3-Chloropropane | 2 | 5 | ND | ND | | | | | |
| Hexachlorobutadiene | 2 | 5 | ND | ND | | | | | |
| Naphthalene | 2 | 5 | ND | ND | | | | | |
| 1,2,3-Trichlorobenzene | 2 | 5 | ND | ND | | | | | |
| Acetone | 25 | 25 | ND | ND | | | | | |
| 2-Butanone (MEK) | 25 | 25 | ND | ND | | | | | |
| Carbon disulfide | 25 | 25 | ND | ND | | | | | |
| 4-Methyl-2-pentanone | 25 | 25 | ND | ND | | | | | |
| 2-Hexanone | 25 | 25 | ND | ND | | | | | |
| Vinyl Acetate | 25 | 25 | ND | ND | | | | | |
| 1,4-Dioxane | 50 | 100 | ND | ND | | | | | |
| MTBE | 2 | 2 | ND | ND | | | | | |
| ETBE | 2 | 2 | ND | ND | | | | | |
| DIPE | 2 | 2 | ND | ND | | | | | |
| TAME | 2 | 2 | ND | ND | | | | | |
| T-Butyl Alcohol | 10 | 10 | ND | ND | | | | | |

MB=Method Blank; MDL=Method Detection Limit; PQL=Practical Quantitation Limit; ND=Not Detected (below DF × MDL). j=trace concentration

ANCHEM0536

7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

**Southland Technical Services, Inc.**
Environmental Laboratories

04-05-2004

# EPA 8260B
# Batch QA/QC Report

| | | | |
|---|---|---|---|
| Client: | Blakely Environmental Investigations, Inc. | Lab Job No.: | BL403170 |
| Project: | Angeles Chemical Co. | | |
| Matrix: | Water | Lab Sample ID: | R403149-3 |
| Batch No.: | 0330-VOAW | Date Analyzed: | 03-30-2004 |

## I. MS/MSD Report
**Unit: ppb**

| Compound | Sample Conc. | Spike Conc. | MS | MSD | MS %Rec. | MSD %Rec. | % RPD | %RPD Accept. Limit | %Rec Accept. Limit |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | ND | 20 | 15.0 | 14.9 | 75.0 | 74.5 | 0.7 | 30 | 70-130 |
| Benzene | ND | 20 | 18.6 | 18.5 | 93.0 | 92.5 | 0.5 | 30 | 70-130 |
| Trichloro-ethene | ND | 20 | 21.9 | 22.0 | 109.5 | 110.0 | 0.5 | 30 | 70-130 |
| Toluene | ND | 20 | 19.5 | 18.4 | 97.5 | 92.0 | 5.8 | 30 | 70-130 |
| Chlorobenzene | ND | 20 | 21.0 | 21.1 | 105.0 | 105.5 | 0.5 | 30 | 70-130 |

## II. LCS Result
**Unit: ppb**

| Analyte | LCS Value | True Value | Rec.% | Accept. Limit |
|---|---|---|---|---|
| 1,1-Dichloroethene | 19.5 | 20 | 97.5 | 80-120 |
| Benzene | 20.3 | 20 | 101.5 | 80-120 |
| Trichloro-ethene | 22.5 | 20 | 112.5 | 80-120 |
| Toluene | 22.4 | 20 | 112.0 | 80-120 |
| Chlorobenzene | 22.9 | 20 | 114.5 | 80-120 |

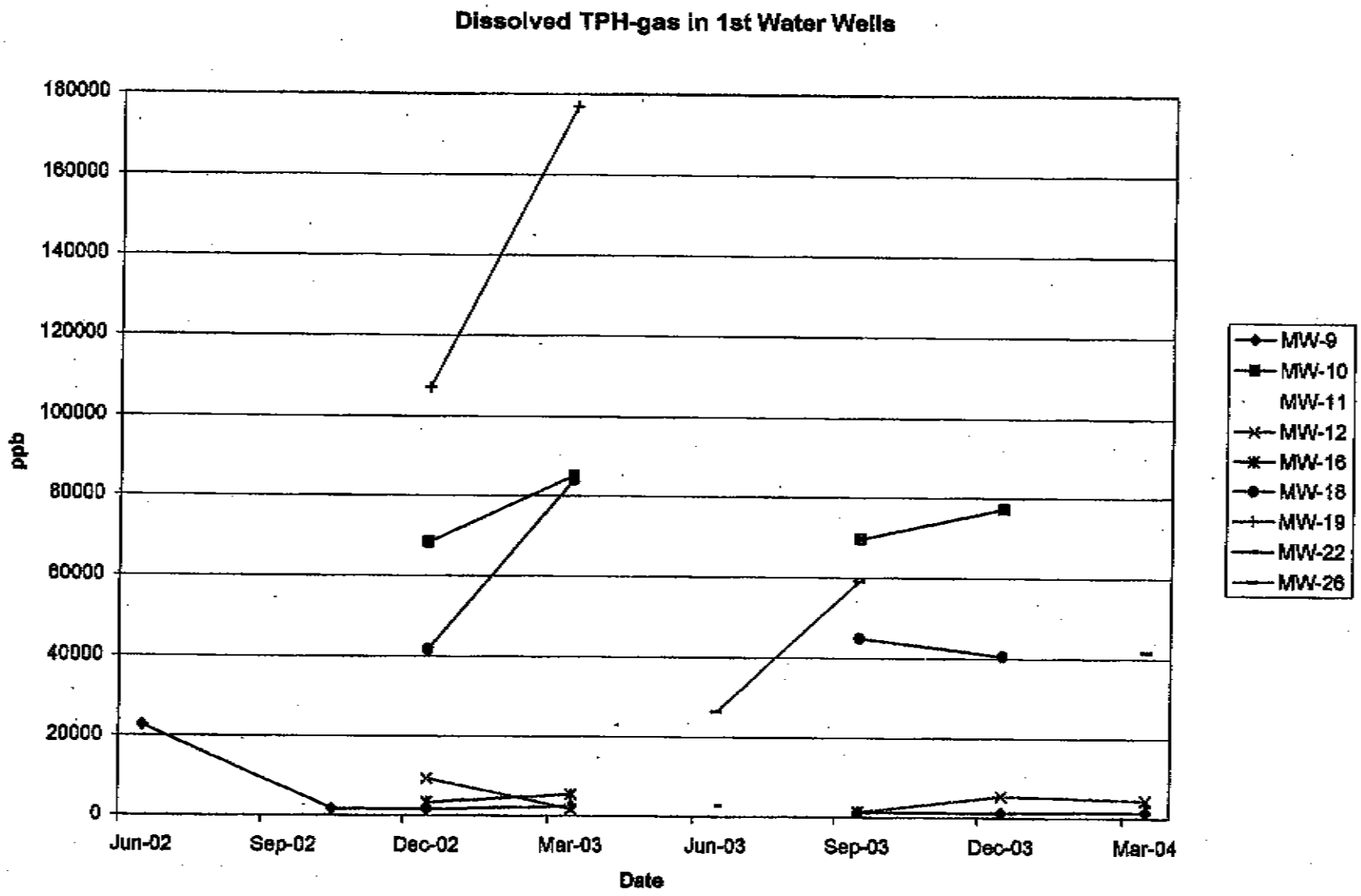
ND: Not Detected.

ANCHEM0537

7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

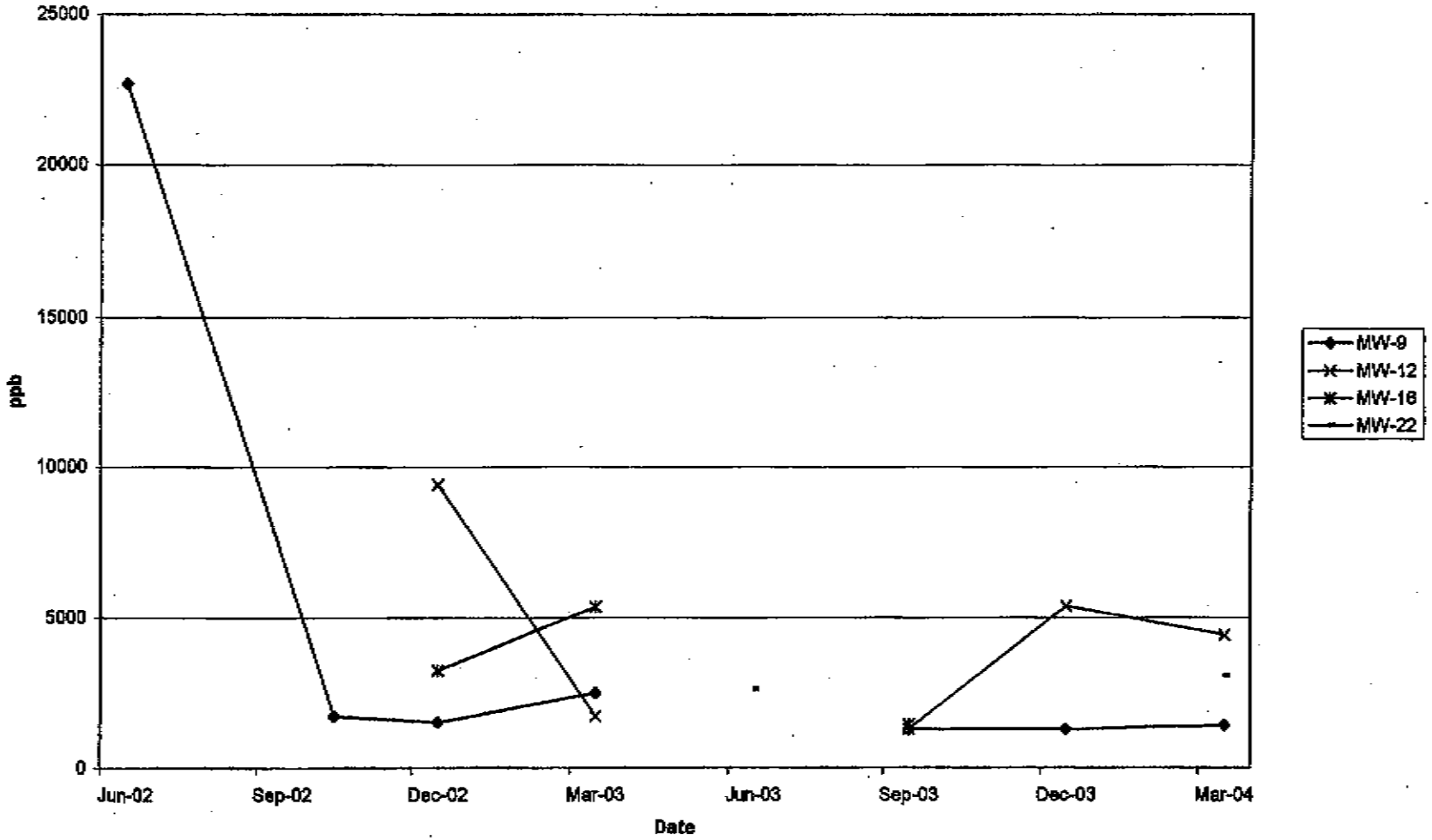
# Appendix D

ANCHEM0538

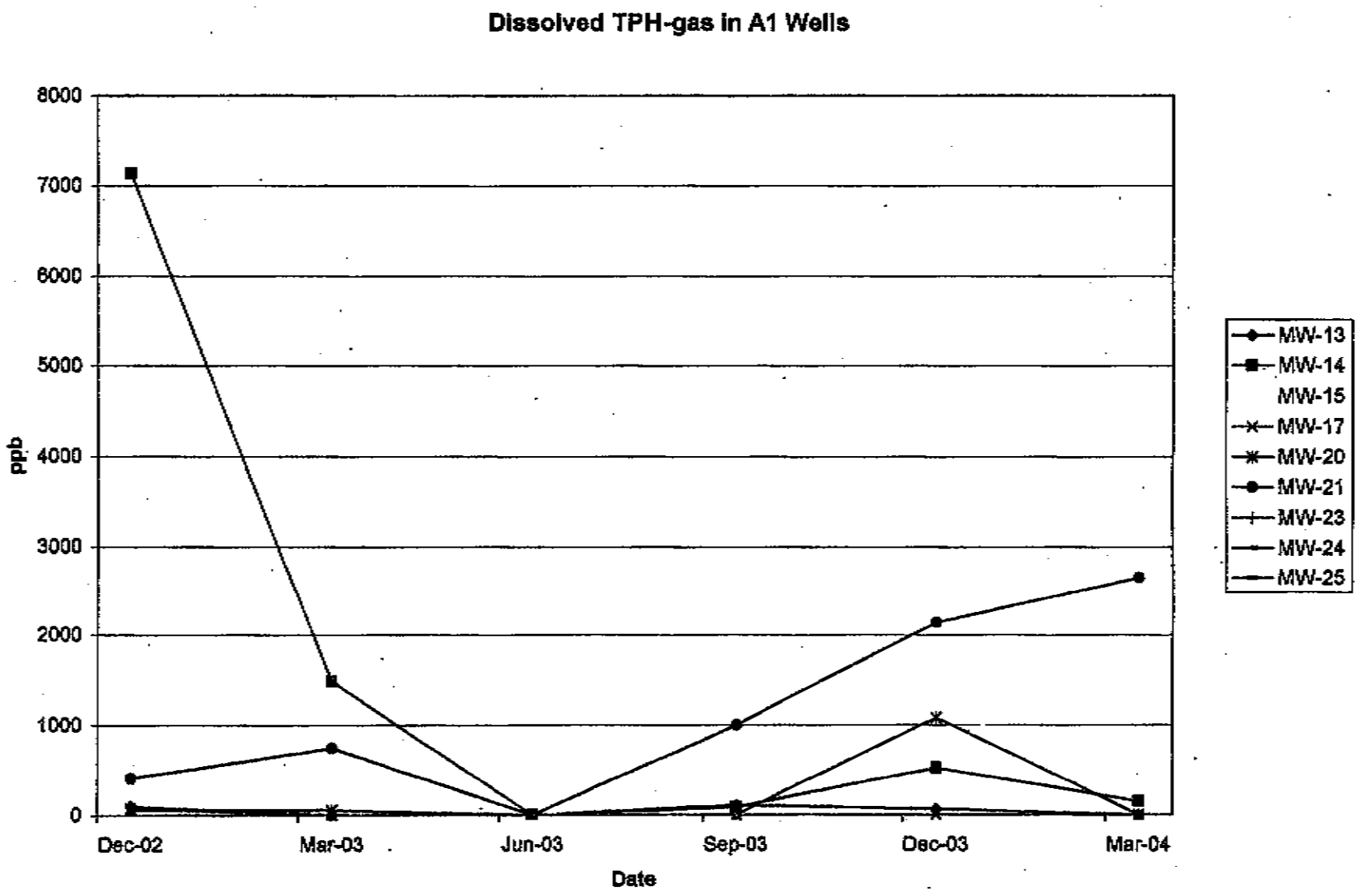

Dissolved TPH-gas in 1st Water Wells
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
ppb
Jun-02
Sep-02
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-9
MW-10
MW-11
MW-12
MW-16
MW-18
MW-19
MW-22
MW-26

ANCHEM0539

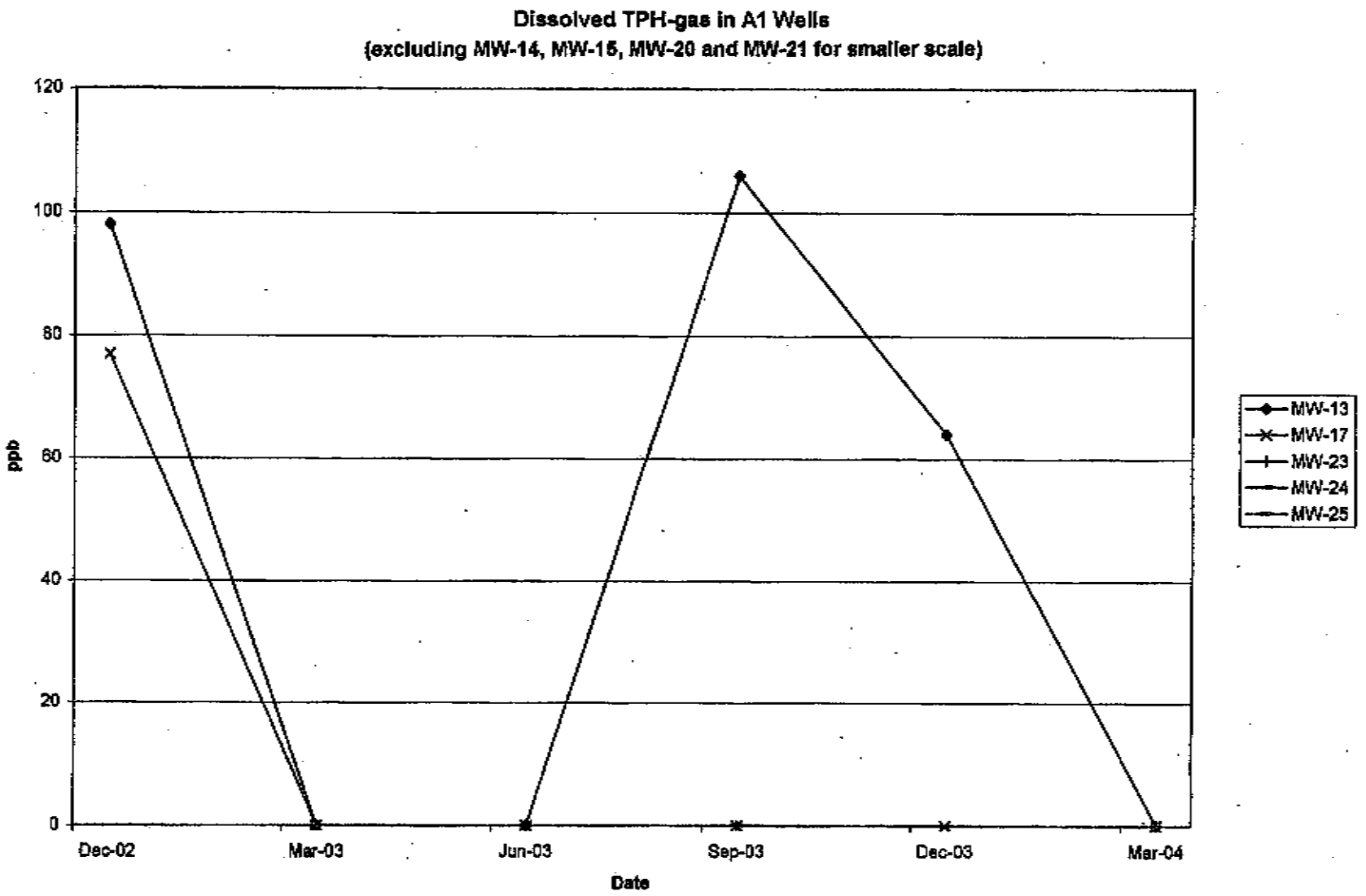
**Dissolved TPH-gas in 1st Water Wells**
**(excluding MW-10, MW-11, MW-18, MW-19 and MW-26 for smaller scale)**



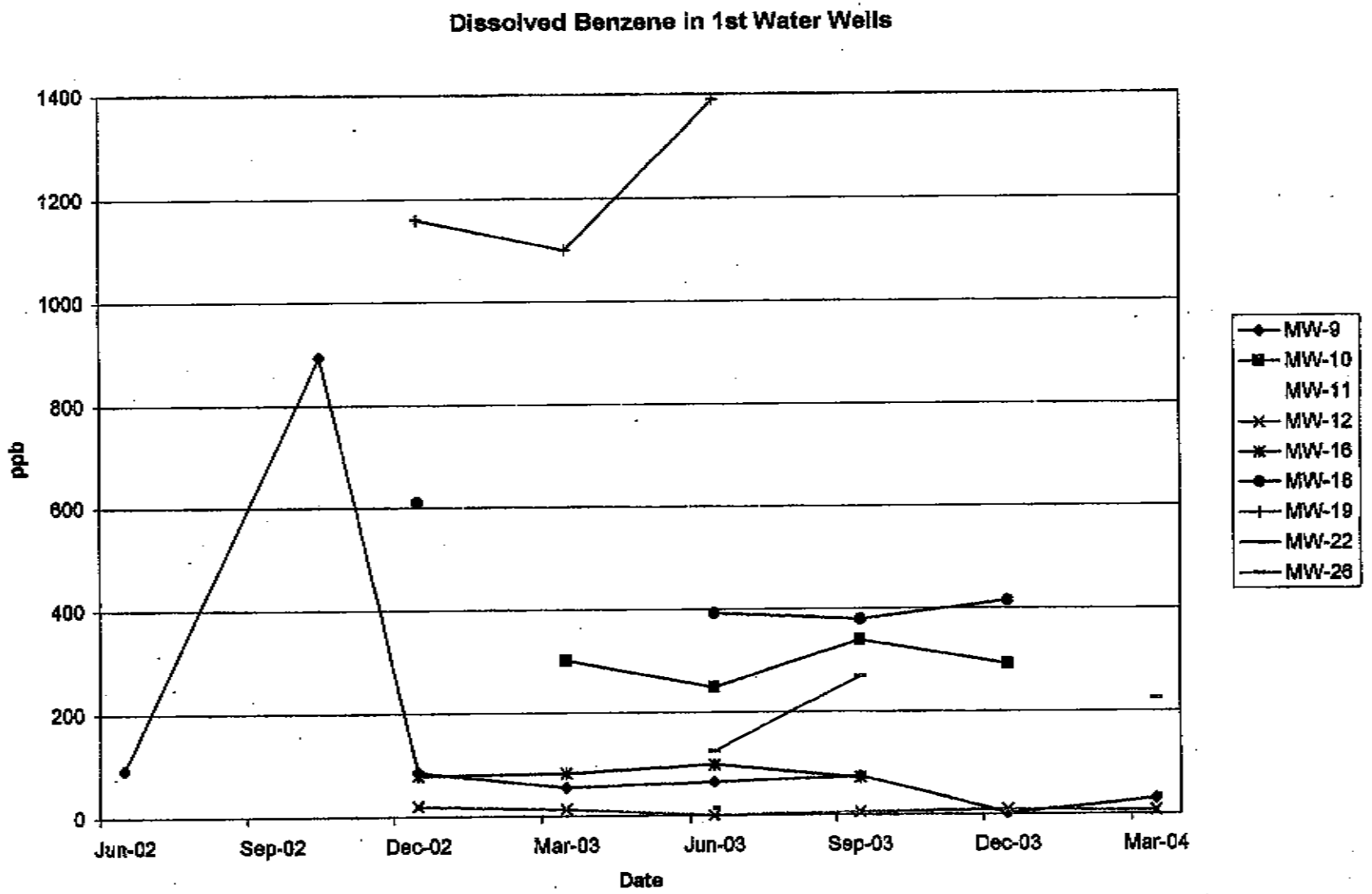

ANCHEM0540


Dissolved TPH-gas in A1 Wells
8000
7000
6000
5000
4000
3000
2000
1000
0
ppb
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-13
MW-14
MW-15
MW-17
MW-20
MW-21
MW-23
MW-24
MW-25

ANCHEM0541

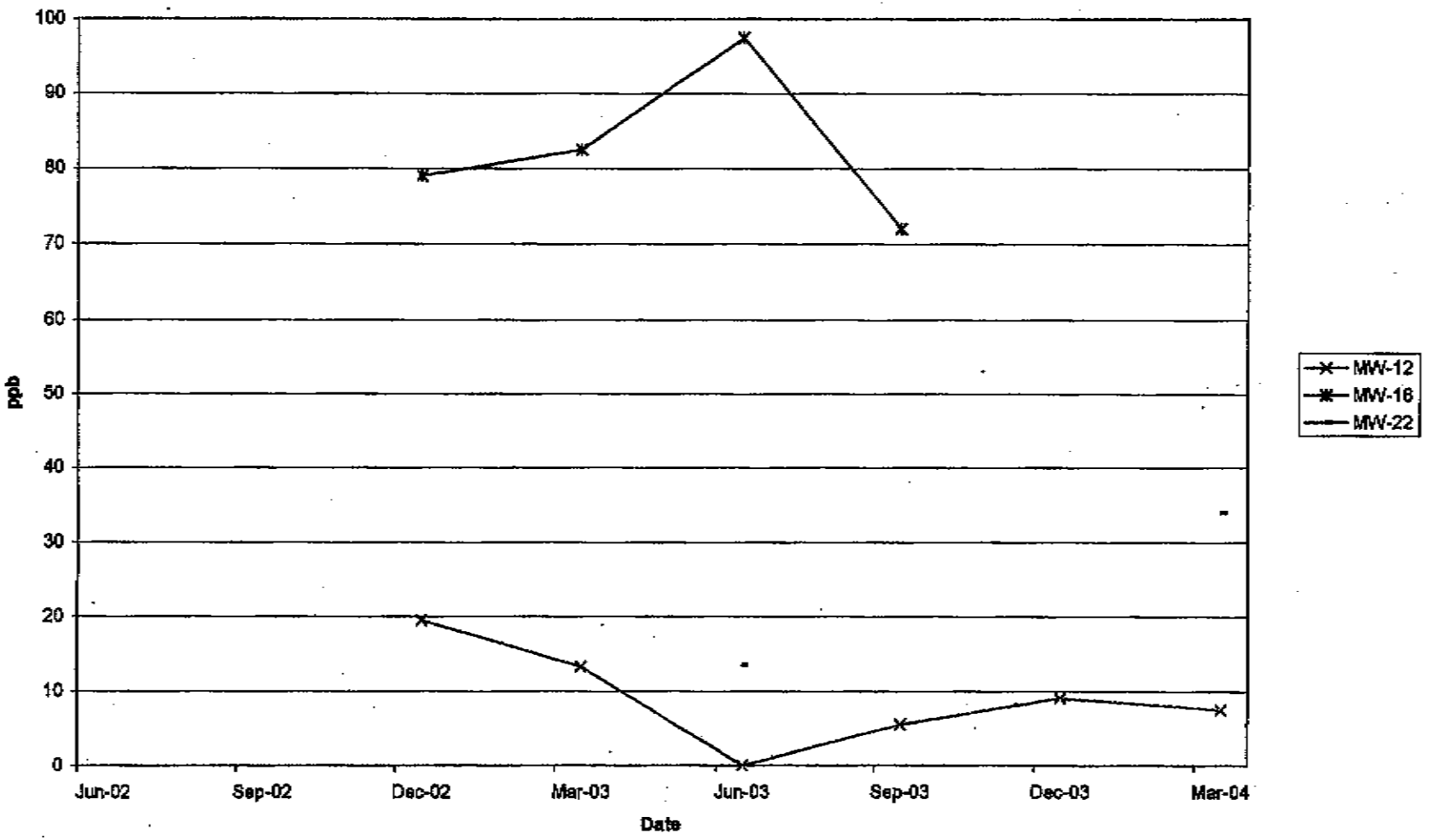

Dissolved TPH-gas in A1 Wells
(excluding MW-14, MW-15, MW-20 and MW-21 for smaller scale)
120
100
80
60
40
20
0
ppb
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-13
MW-17
MW-23
MW-24
MW-25

ANCHEM0542

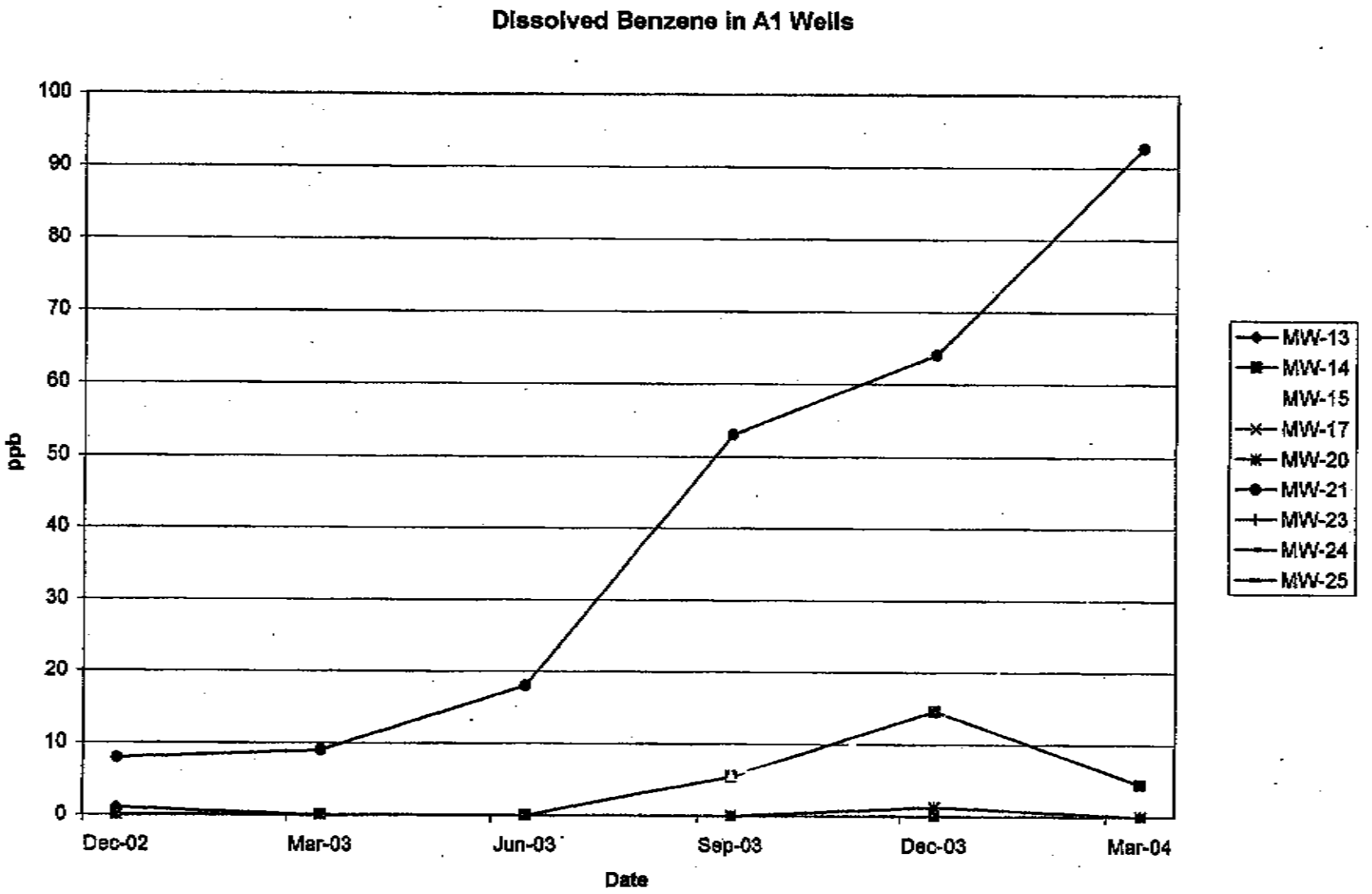

Dissolved Benzene in 1st Water Wells
1400
1200
1000
800
600
400
200
0
ppb
Jun-02
Sep-02
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-9
MW-10
MW-11
MW-12
MW-16
MW-18
MW-19
MW-22
MW-26

ANCHEM0543

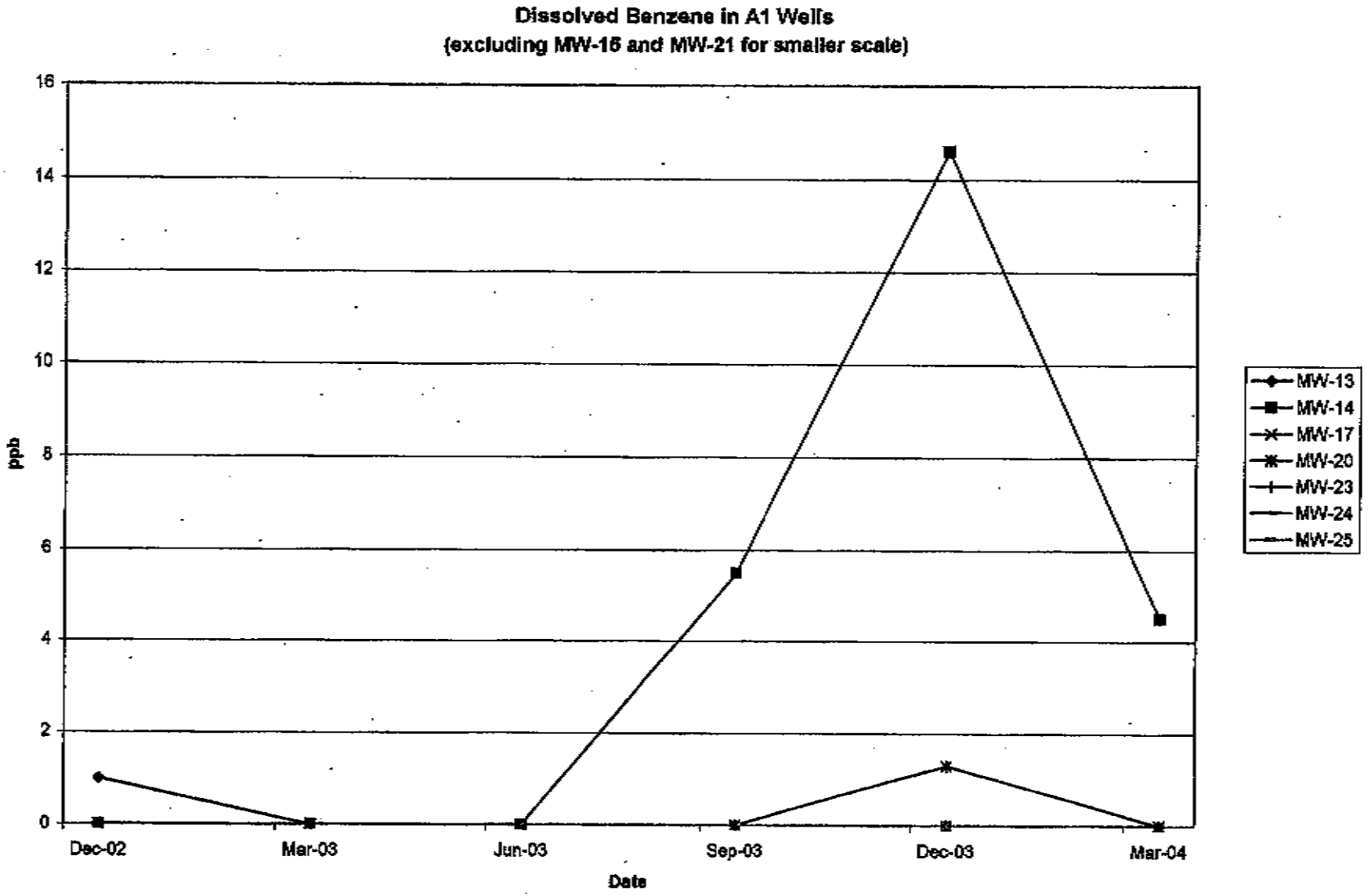
**Dissolved Benzene in 1st Water Wells**
**(excluding MW-9, MW-10, MW-11, MW-18, MW-19 and MW-26 for smaller scale)**



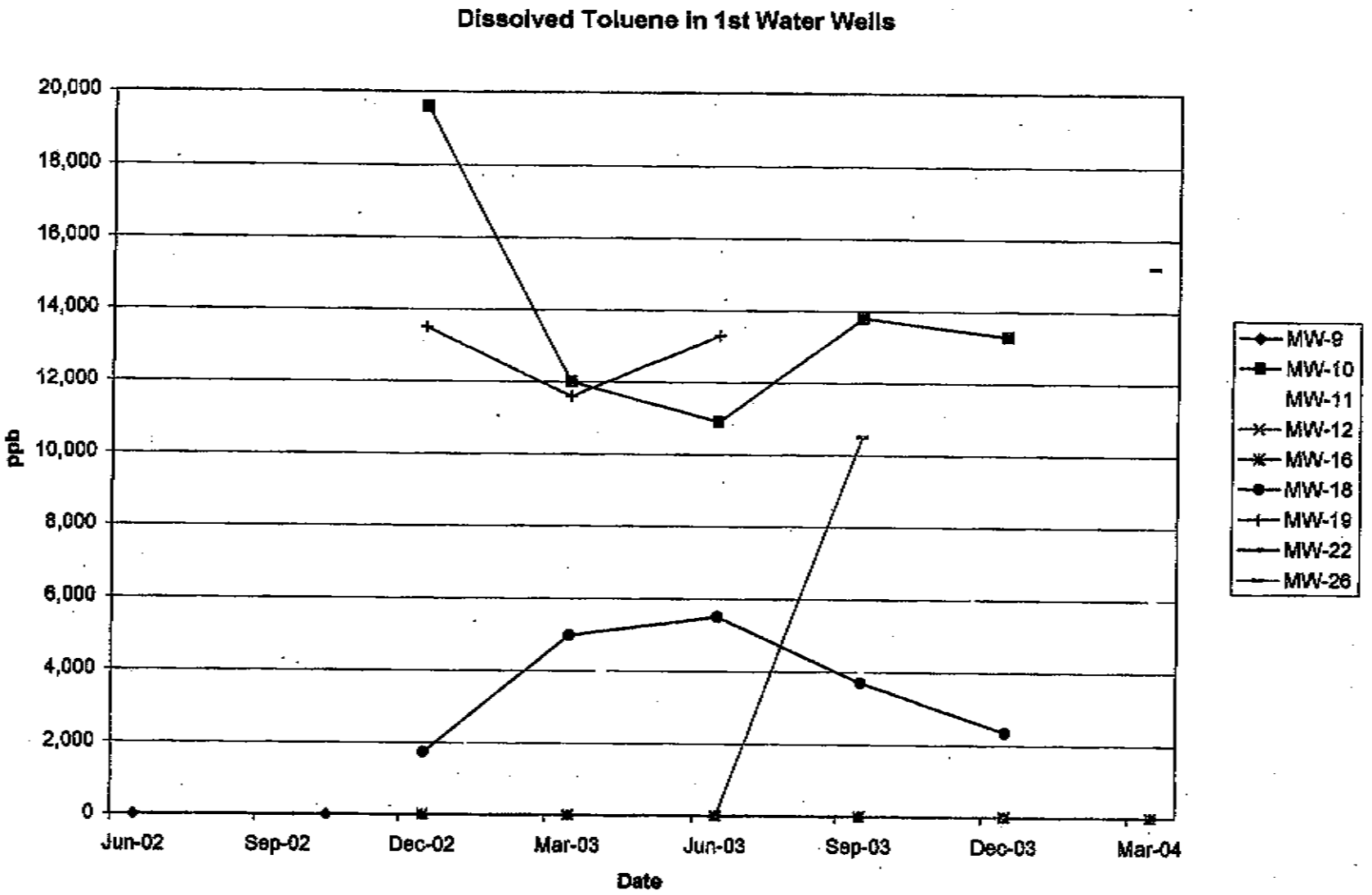

ANCHEM0544


Dissolved Benzene in A1 Wells
100
90
80
70
60
50
40
30
20
10
0
ppb
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-13
MW-14
MW-15
MW-17
MW-20
MW-21
MW-23
MW-24
MW-25

ANCHEM0545

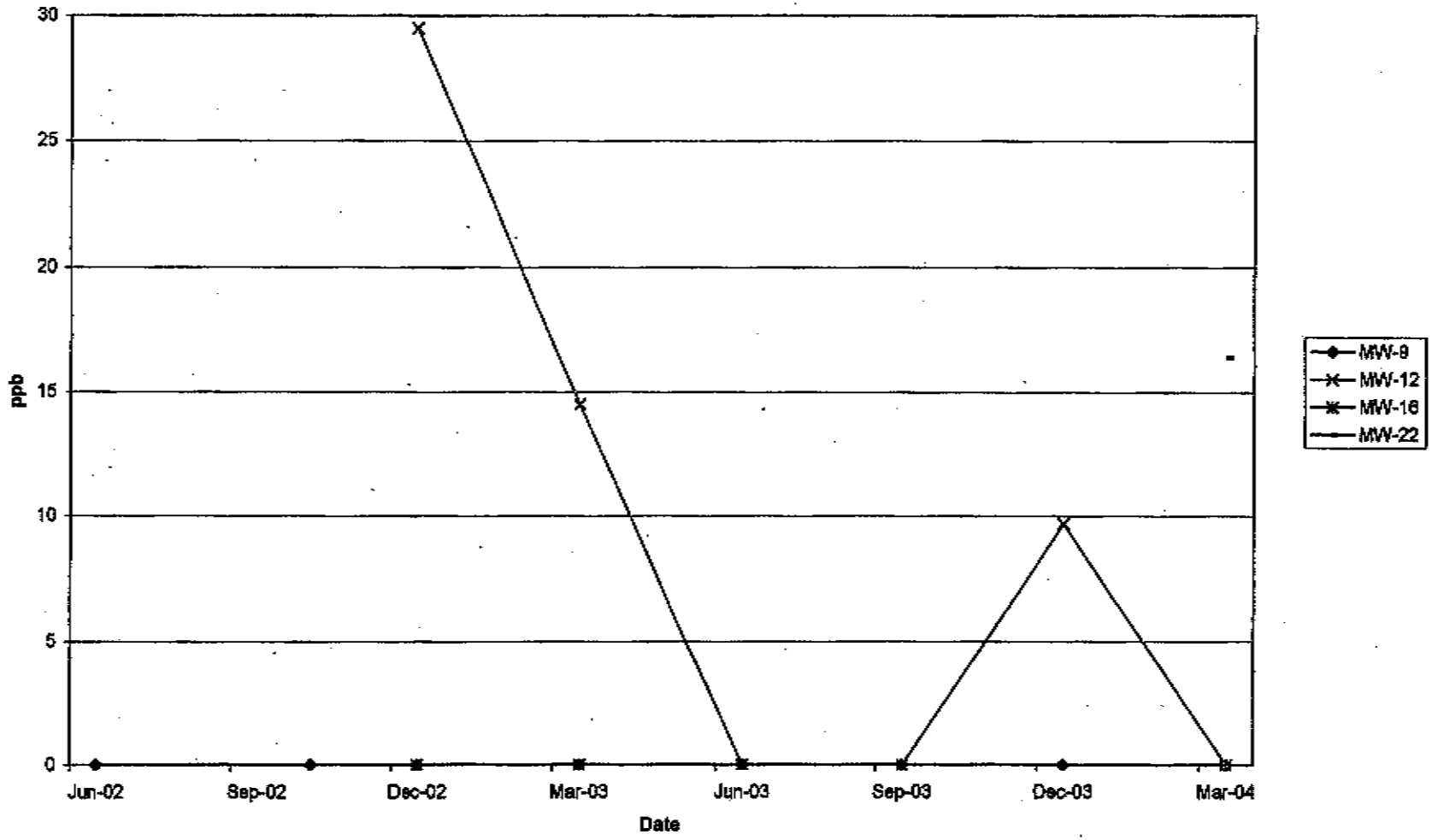

Dissolved Benzene in A1 Wells
(excluding MW-16 and MW-21 for smaller scale)
16
14
12
10
8
6
4
2
0
ppb
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-13
MW-14
MW-17
MW-20
MW-23
MW-24
MW-25

ANCHEM0546


Dissolved Toluene in 1st Water Wells
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
ppb
Jun-02
Sep-02
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-9
MW-10
MW-11
MW-12
MW-16
MW-18
MW-19
MW-22
MW-26

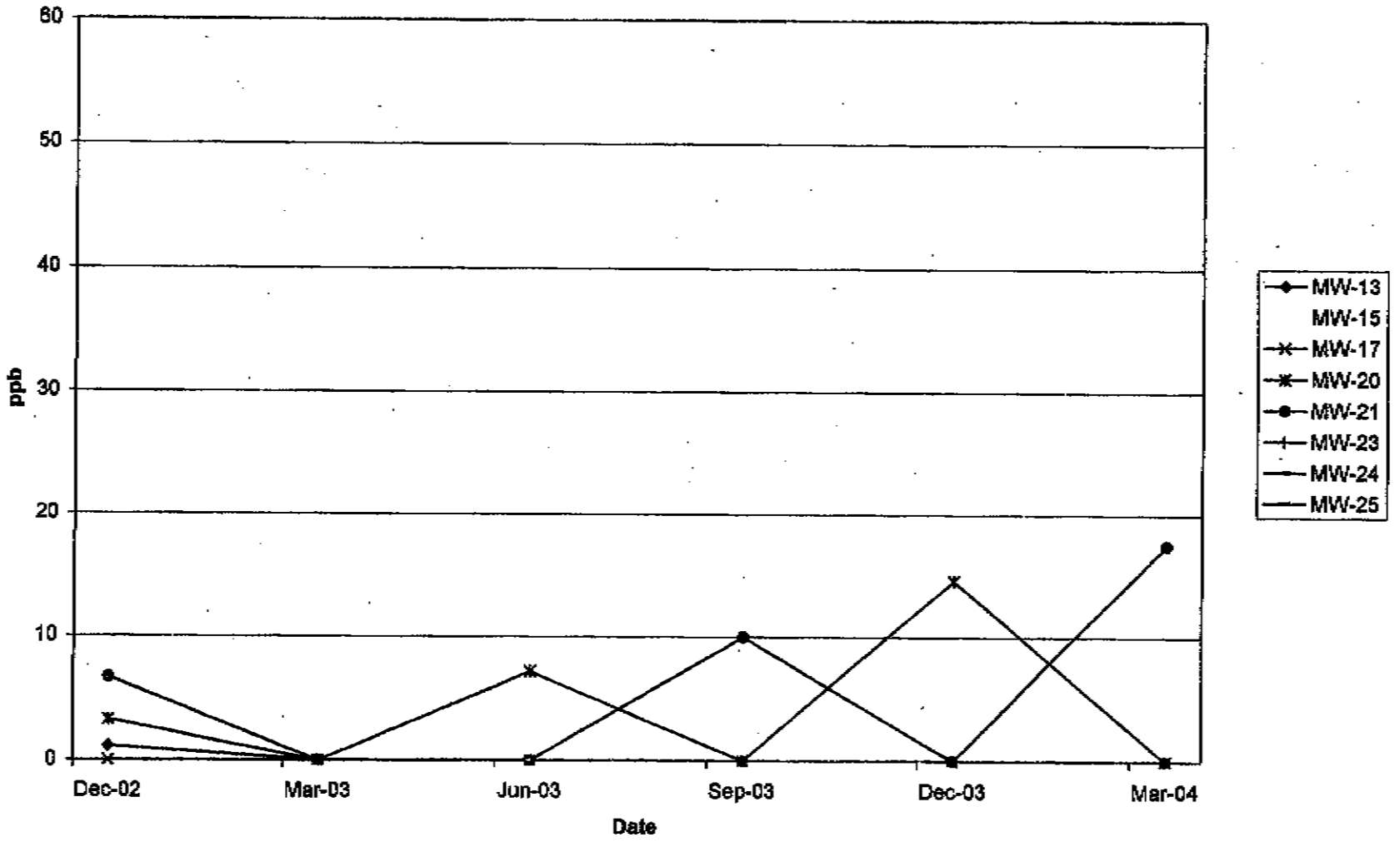
ANCHEM0547

**Dissolved Toluene in 1st Water Wells**
**(excluding MW-10, MW-11, MW-18, MW-19 and MW-26 for smaller scale)**

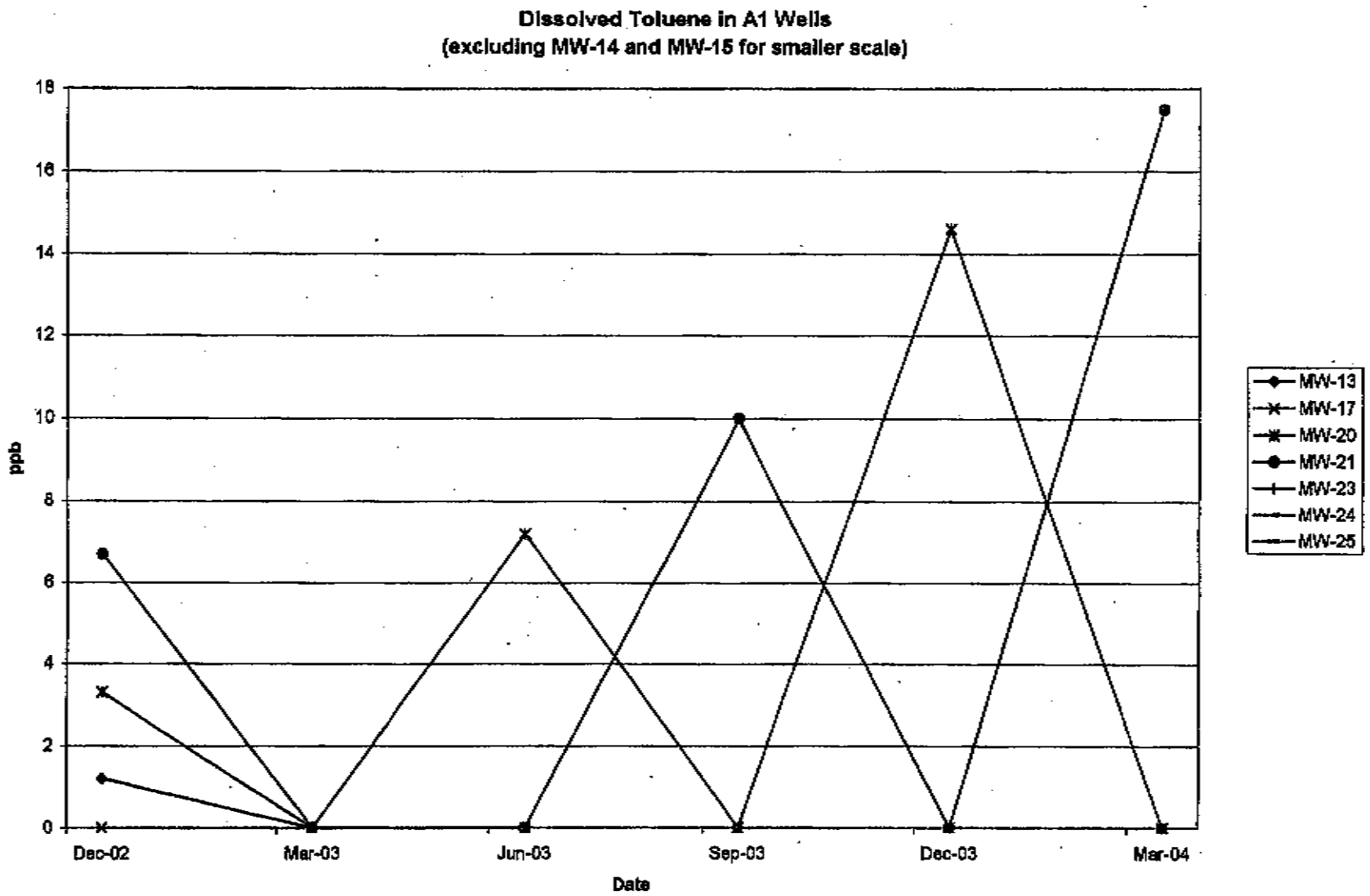



ANCHEM0548

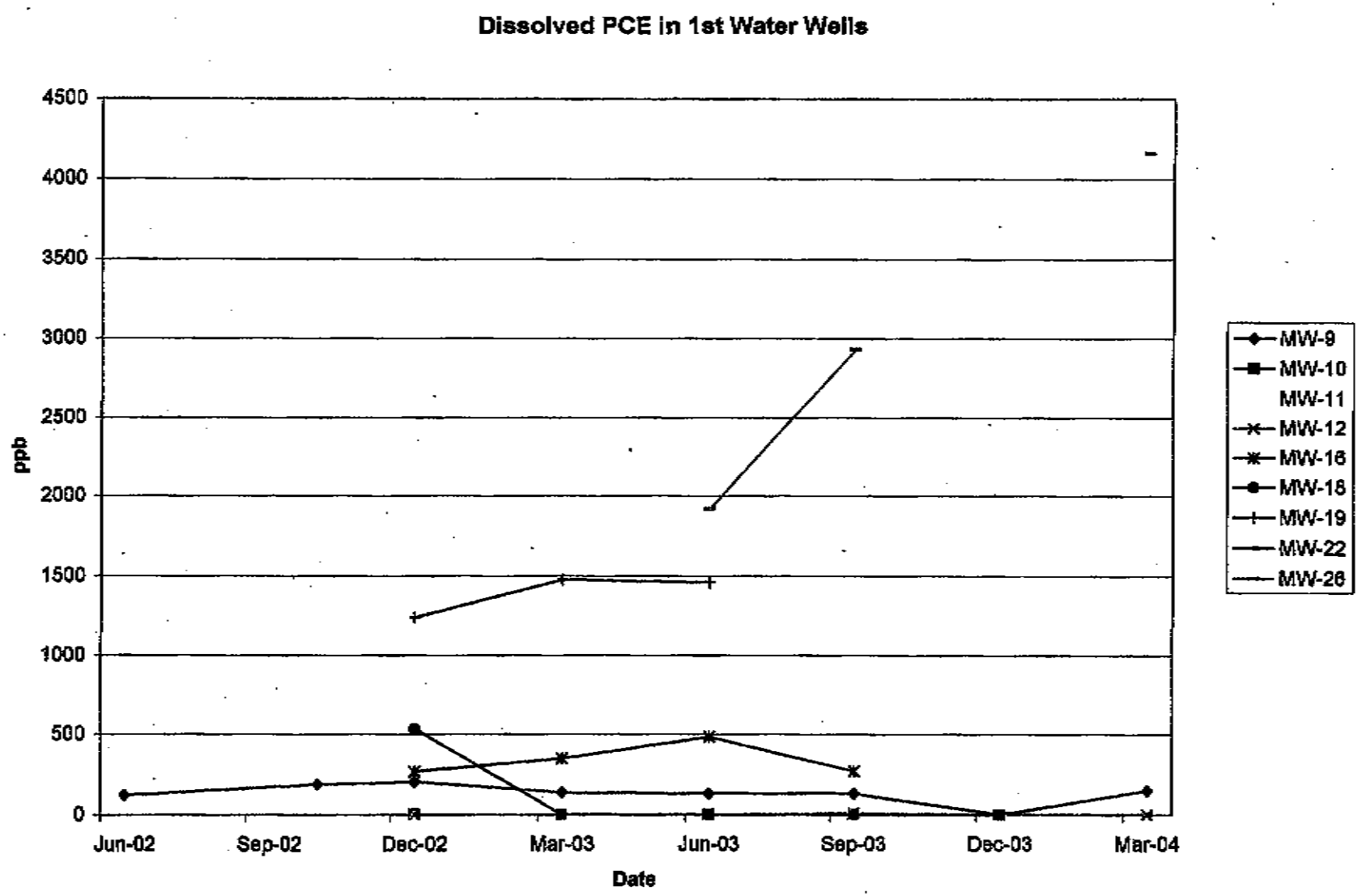
## Dissolved Toluene in A1 Wells




ANCHEM0549

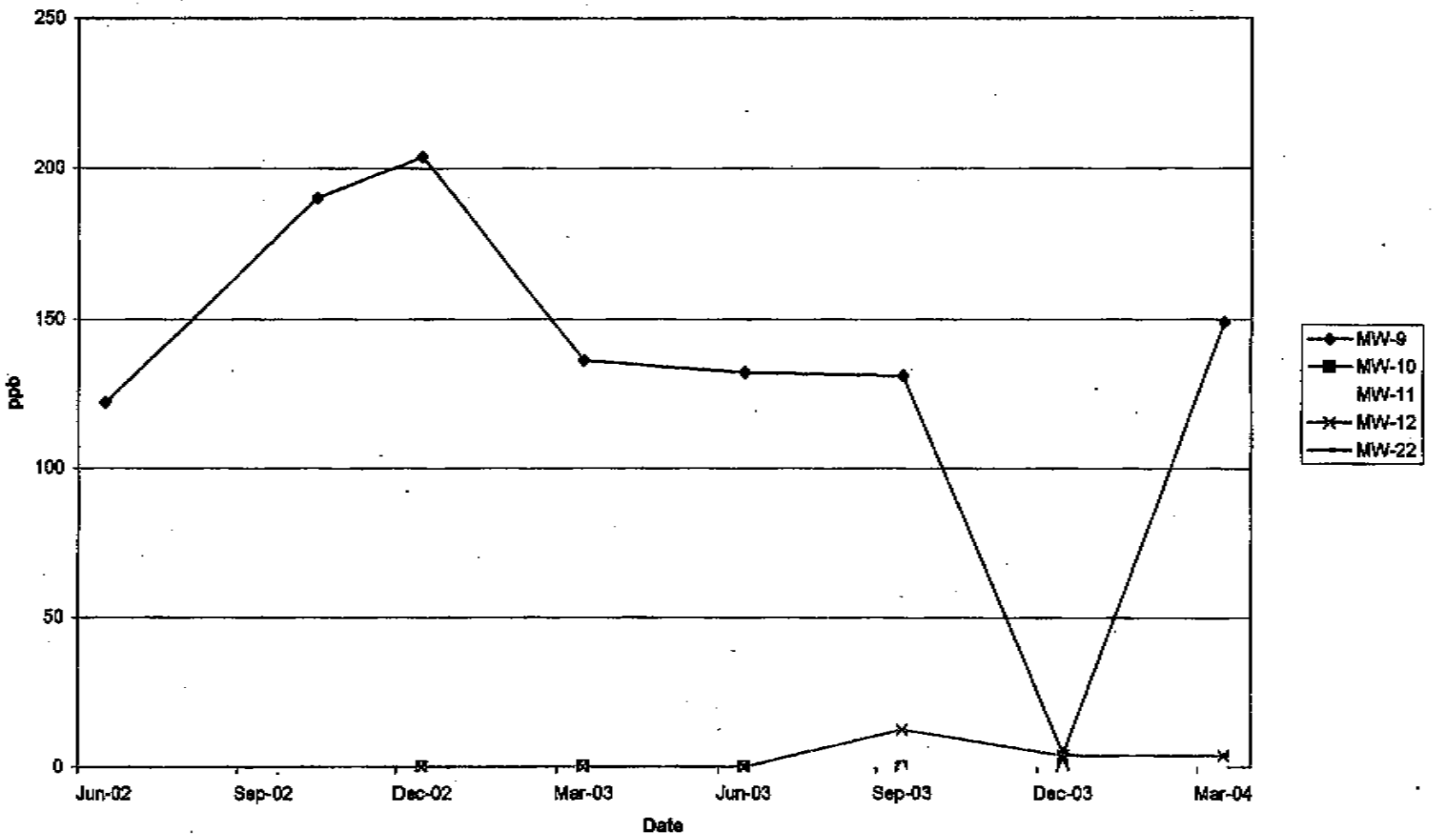

Dissolved Toluene in A1 Wells
(excluding MW-14 and MW-15 for smaller scale)
ppb
18
16
14
12
10
8
6
4
2
0
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-13
MW-17
MW-20
MW-21
MW-23
MW-24
MW-25

ANCHEM0550


Dissolved PCE in 1st Water Wells
4500
4000
3500
3000
2500
2000
1500
1000
500
0
ppb
Jun-02
Sep-02
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-9
MW-10
MW-11
MW-12
MW-16
MW-18
MW-19
MW-22
MW-26

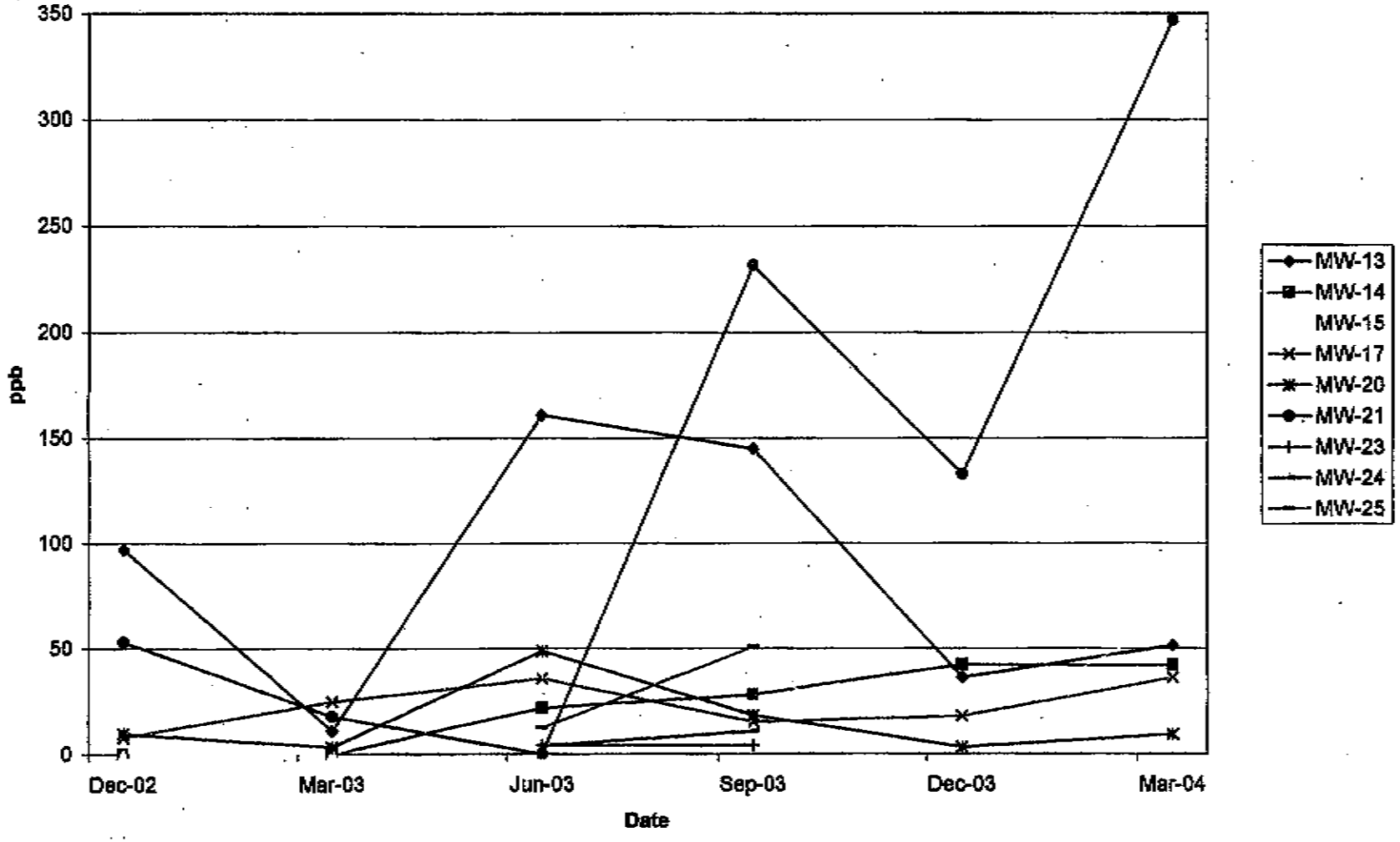
ANCHEM0S1

**Dissolved PCE in 1st Water Wells**
**(excluding MW-16, MW-18, MW-19 and MW-26 for smaller scale)**

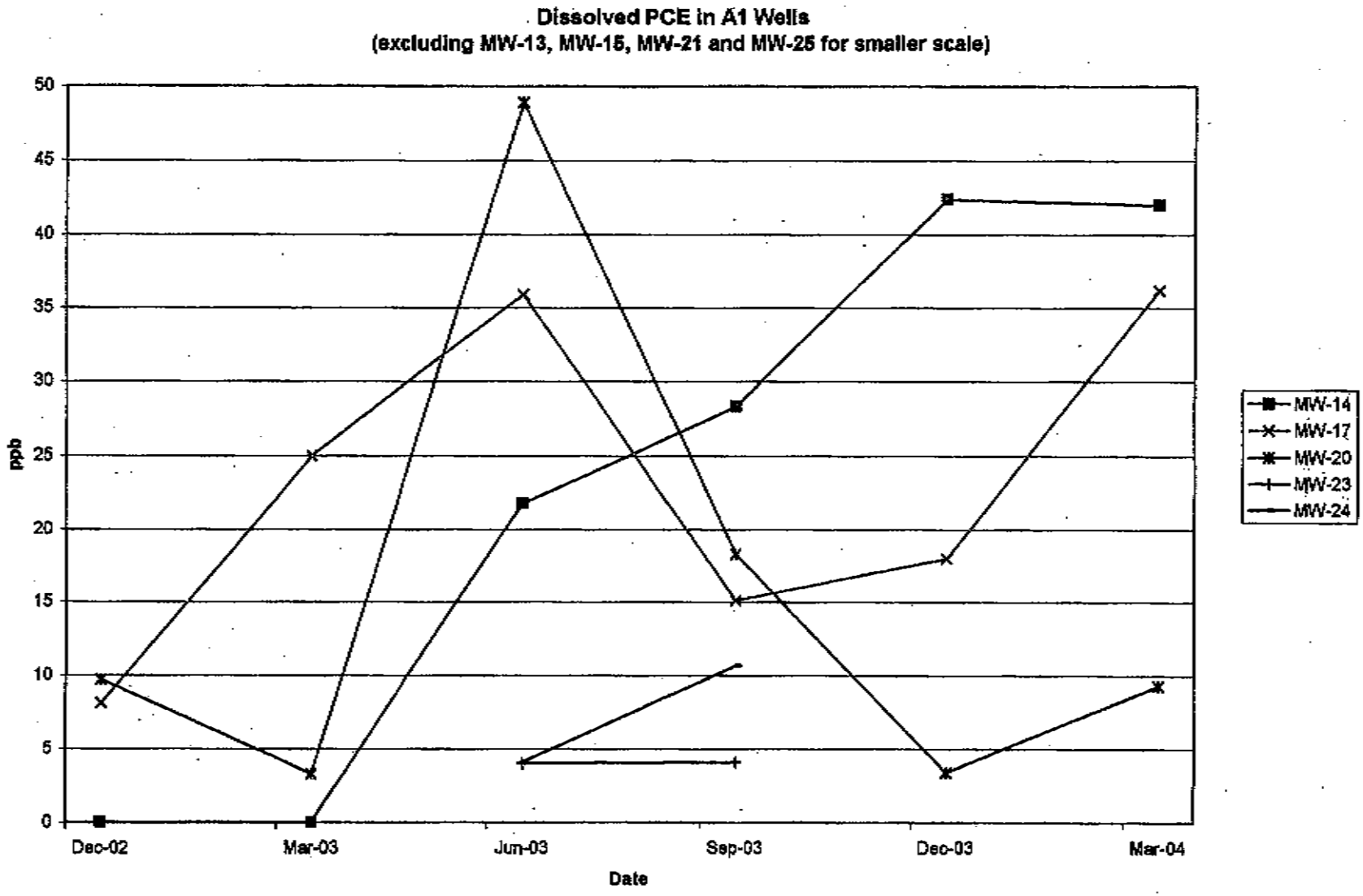



ANCHEM0552

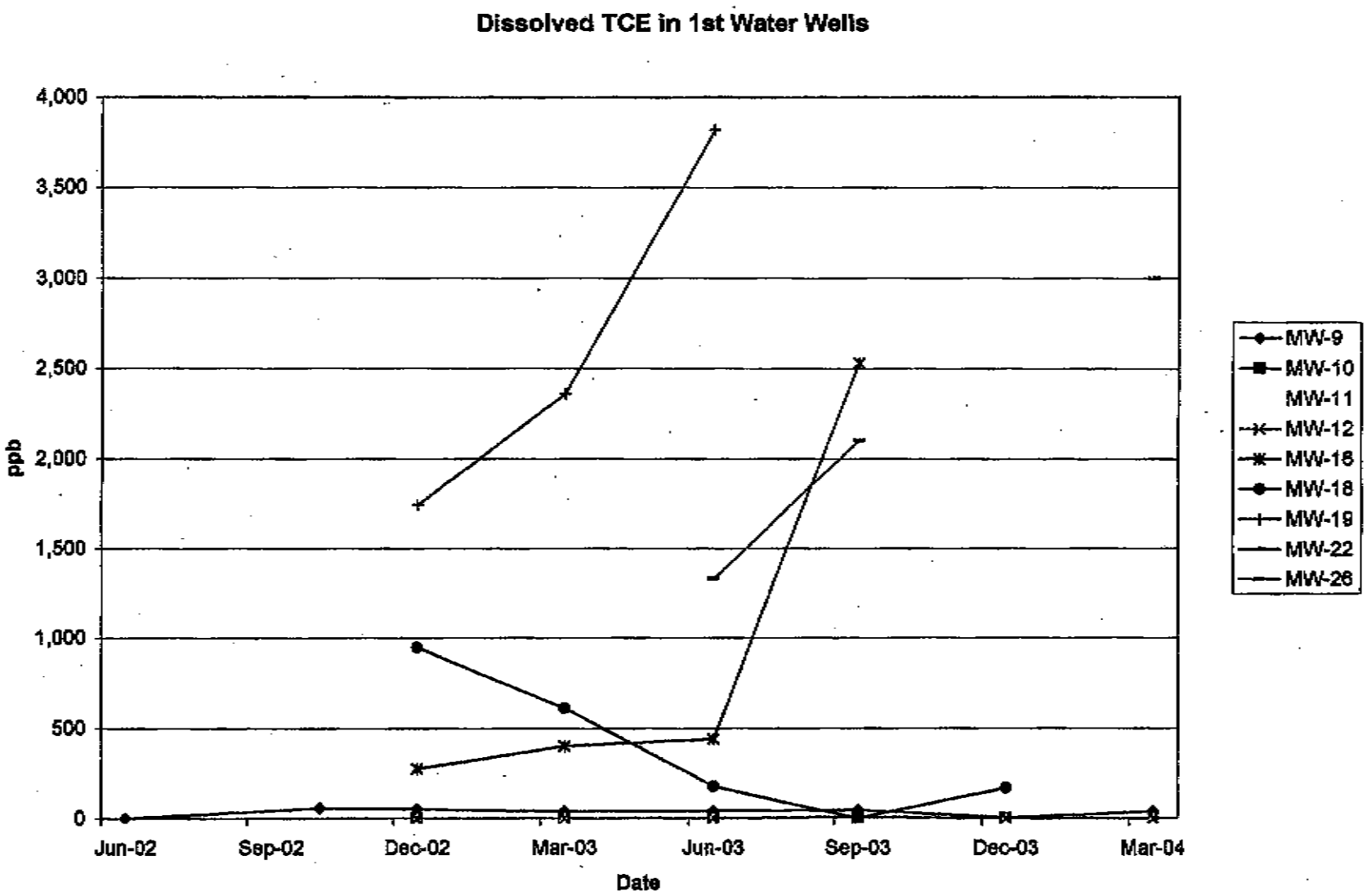
## Dissolved PCE in A1 Wells




ANCHEM0553

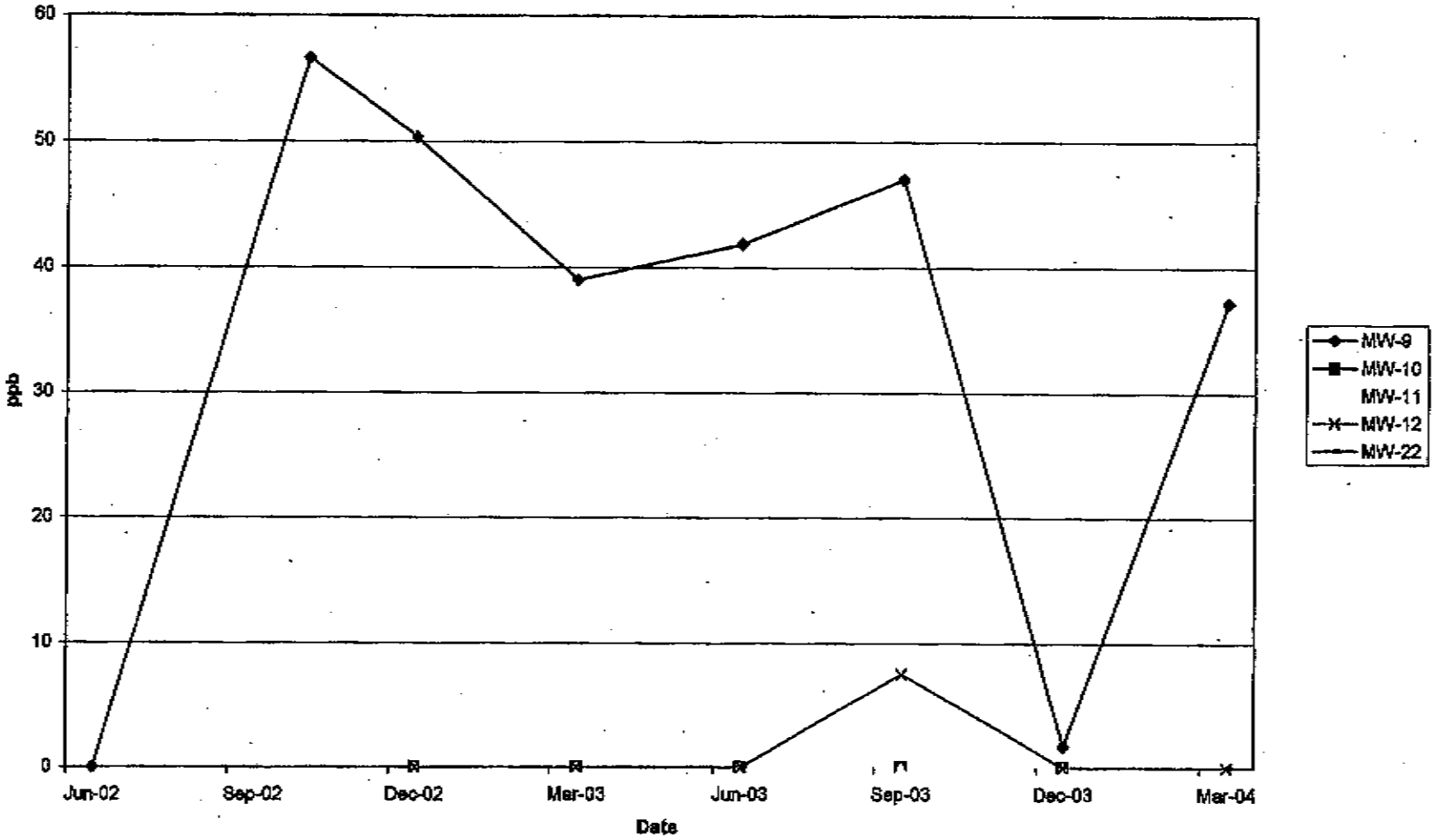

Dissolved PCE in A1 Wells
(excluding MW-13, MW-15, MW-21 and MW-25 for smaller scale)
ppb
50
45
40
35
30
25
20
15
10
5
0
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-14
MW-17
MW-20
MW-23
MW-24

ANCHEM0554

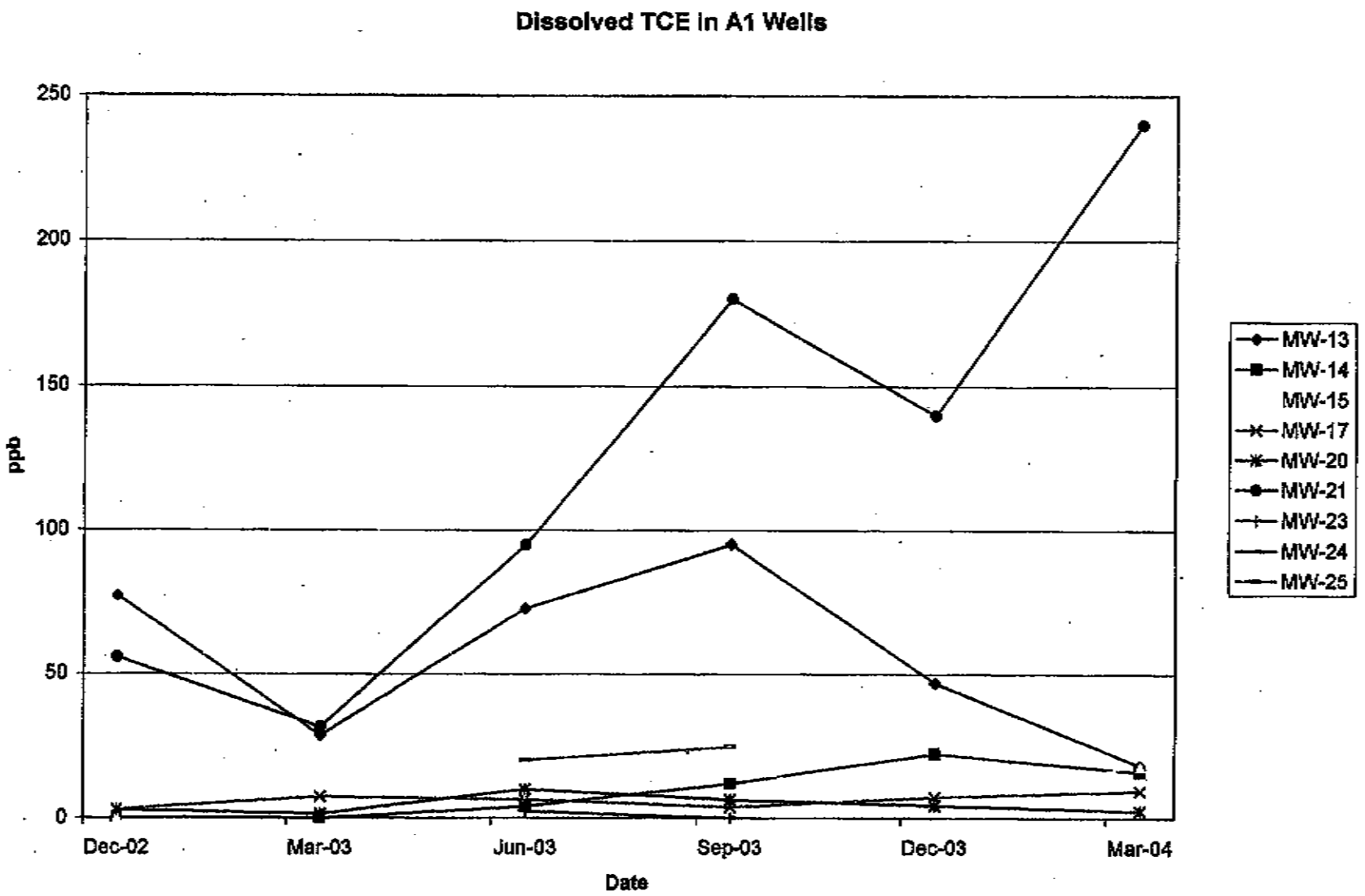

Dissolved TCE in 1st Water Wells
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
ppb
Jun-02
Sep-02
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-9
MW-10
MW-11
MW-12
MW-16
MW-18
MW-19
MW-22
MW-26

ANCHEM0555

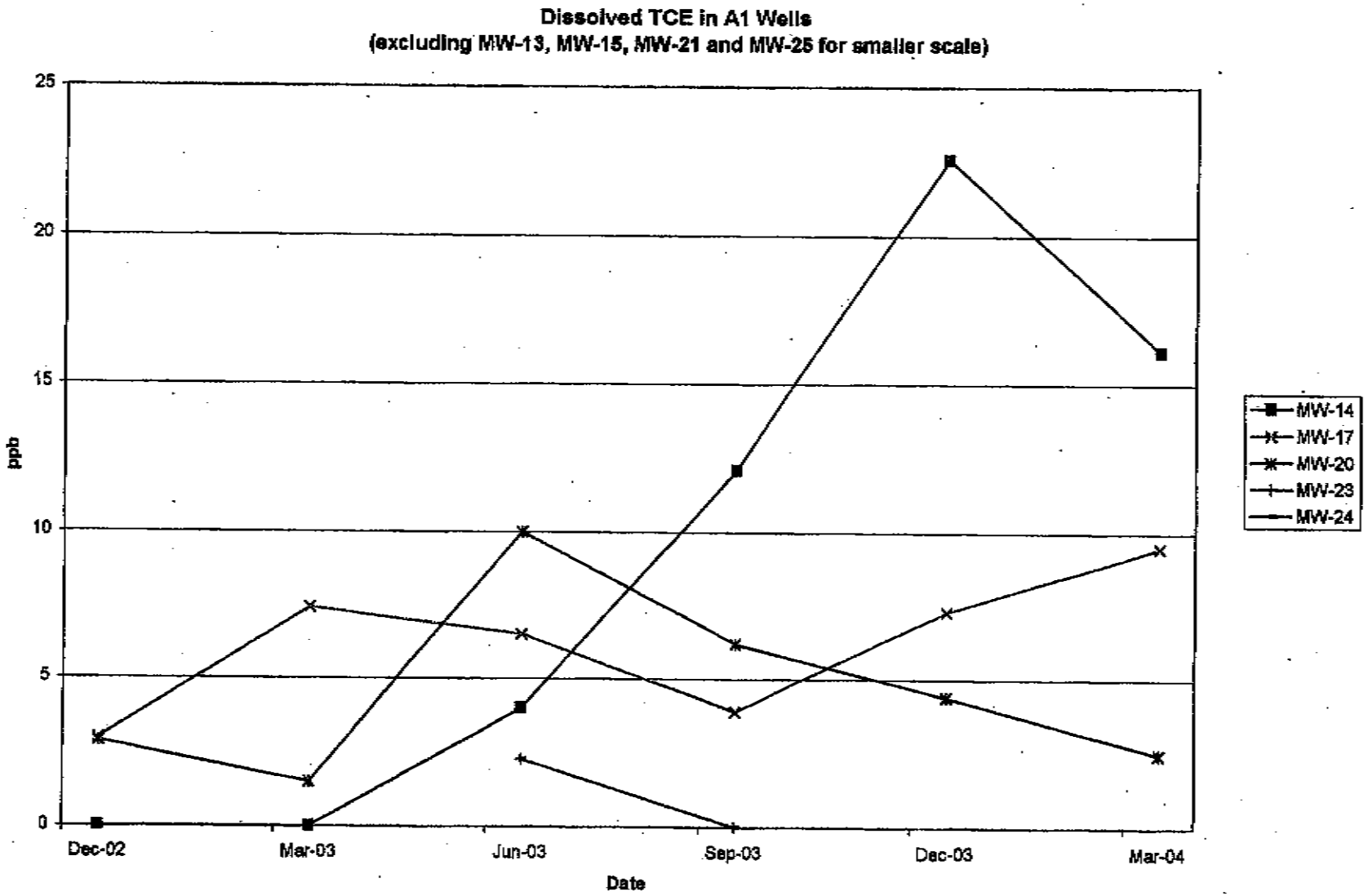
**Dissolved TCE in 1st Water Wells**
**(excluding MW-16, MW-18, MW-19 and MW-26 for smaller scale)**



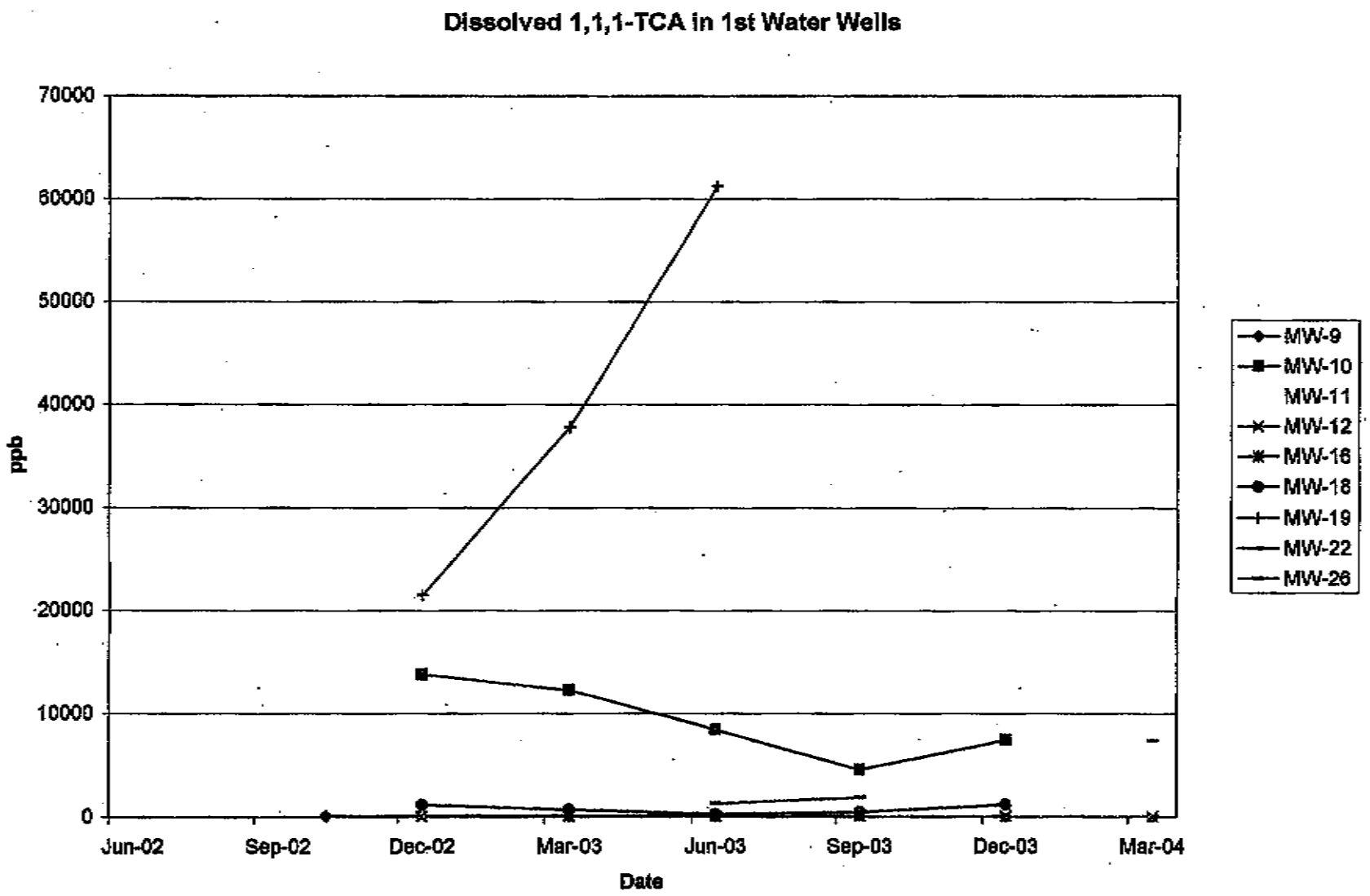

ANCHEM0555


Dissolved TCE in A1 Wells
250
200
150
100
50
0
ppb
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-13
MW-14
MW-15
MW-17
MW-20
MW-21
MW-23
MW-24
MW-25

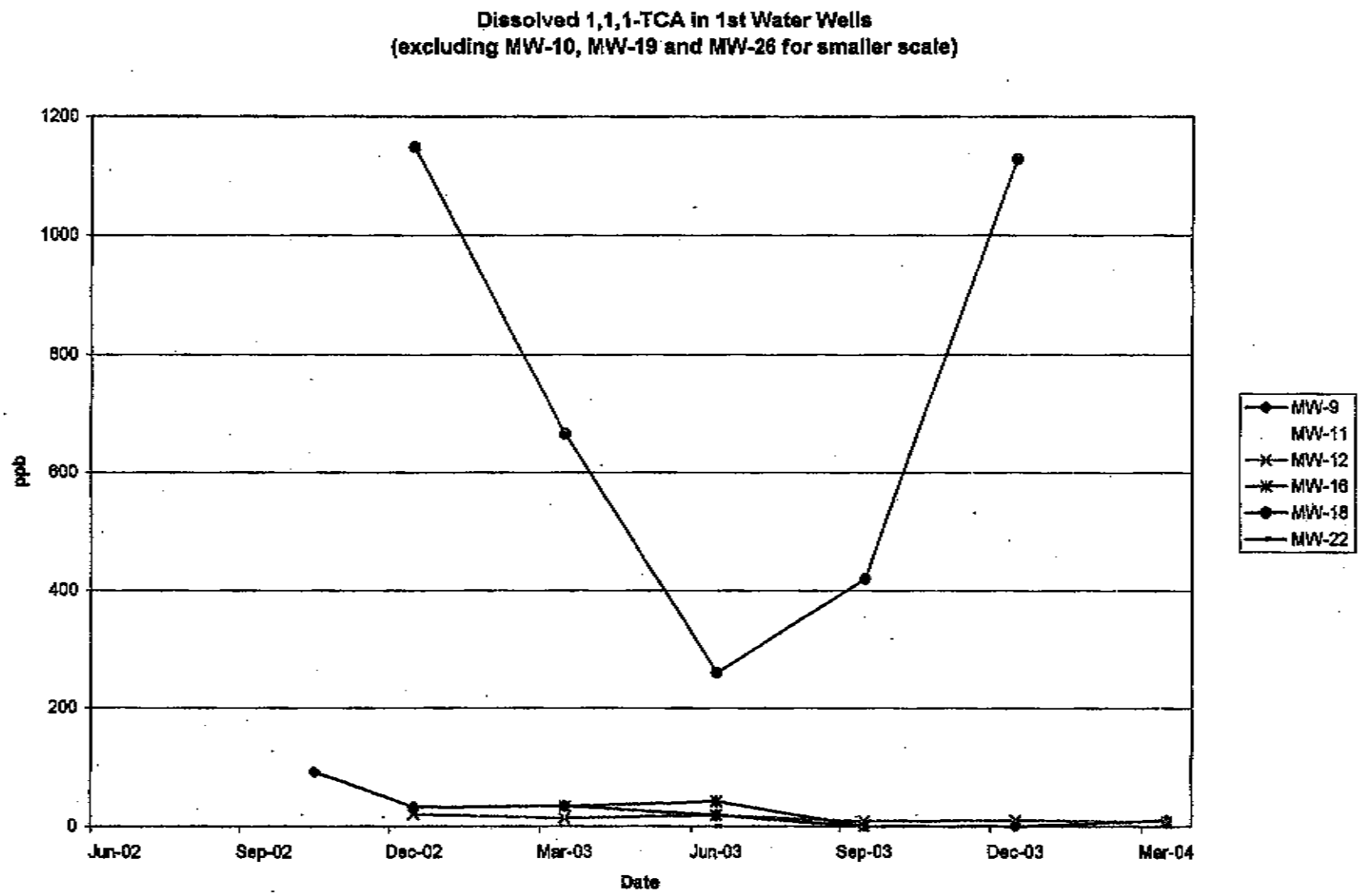
ANCHEM0557


Dissolved TCE in A1 Wells
(excluding MW-13, MW-15, MW-21 and MW-25 for smaller scale)
25
20
15
10
5
0
ppb
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-14
MW-17
MW-20
MW-23
MW-24

ANCHEM0558

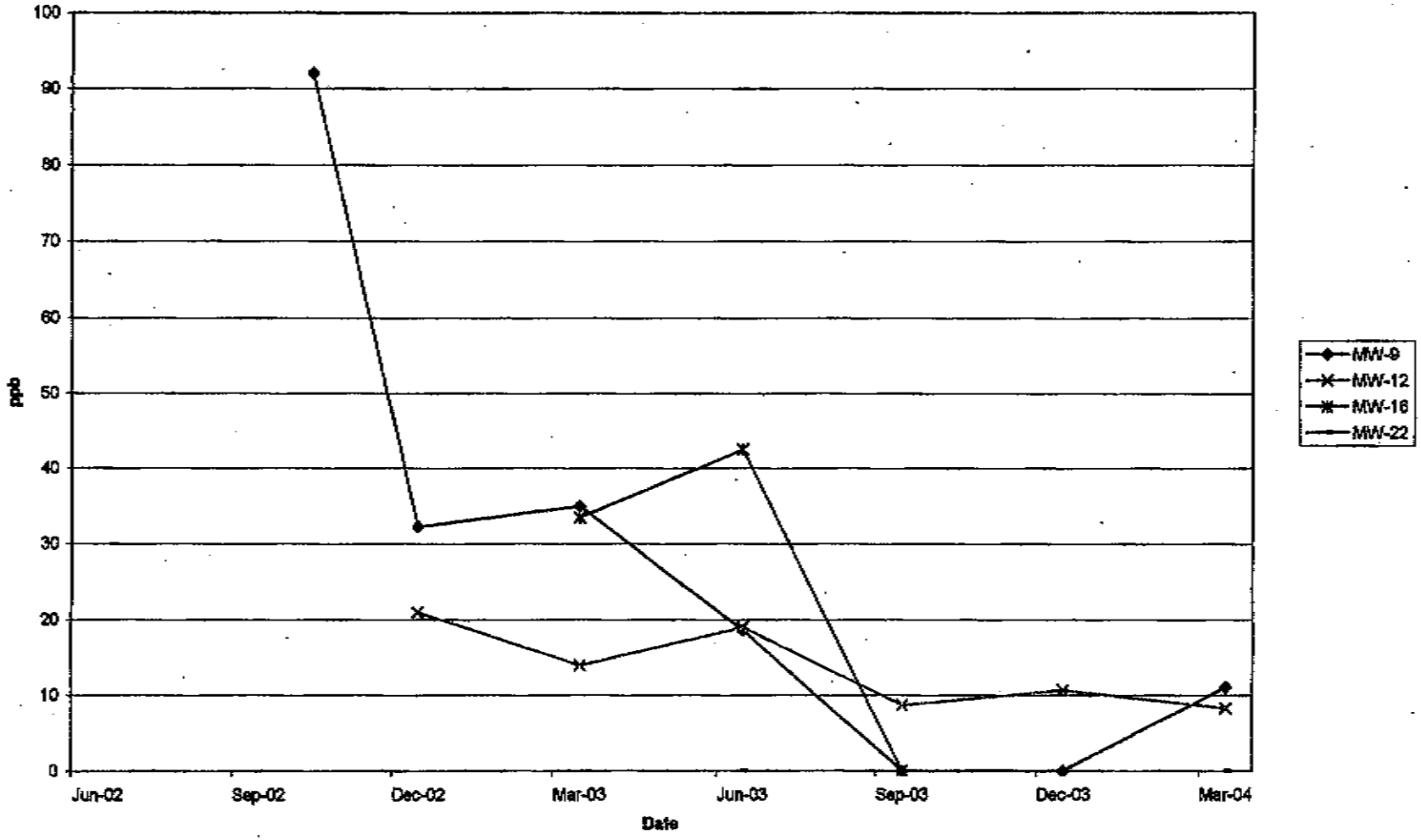

Dissolved 1,1,1-TCA in 1st Water Wells
70000
60000
50000
40000
30000
20000
10000
0
ppb
Jun-02
Sep-02
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-9
MW-10
MW-11
MW-12
MW-16
MW-18
MW-19
MW-22
MW-26

ANCHEM0559

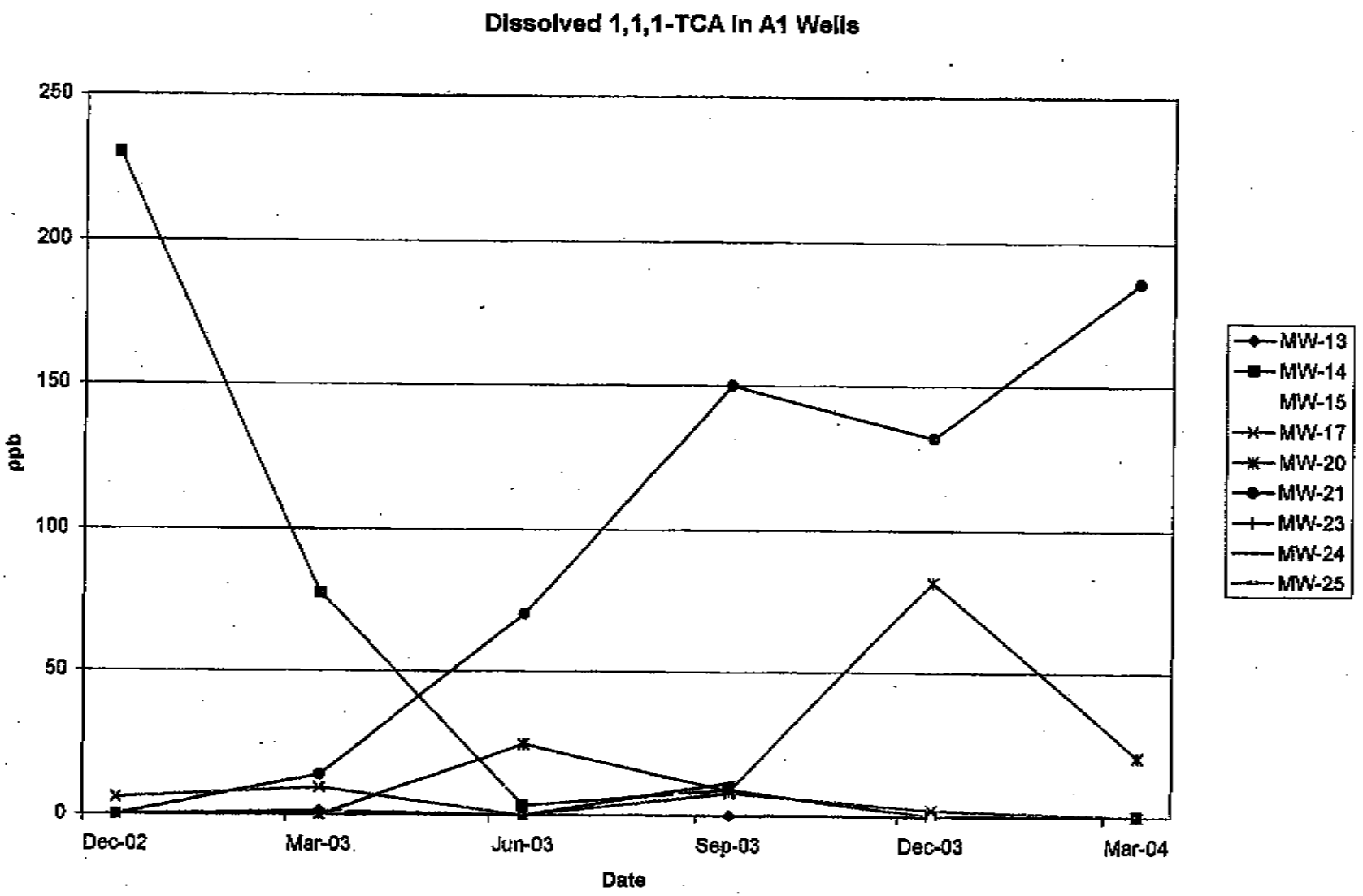

Dissolved 1,1,1-TCA in 1st Water Wells
(excluding MW-10, MW-19 and MW-26 for smaller scale)
1200
1000
800
600
400
200
0
ppb
Jun-02
Sep-02
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-9
MW-11
MW-12
MW-16
MW-18
MW-22

ANCHEM0560

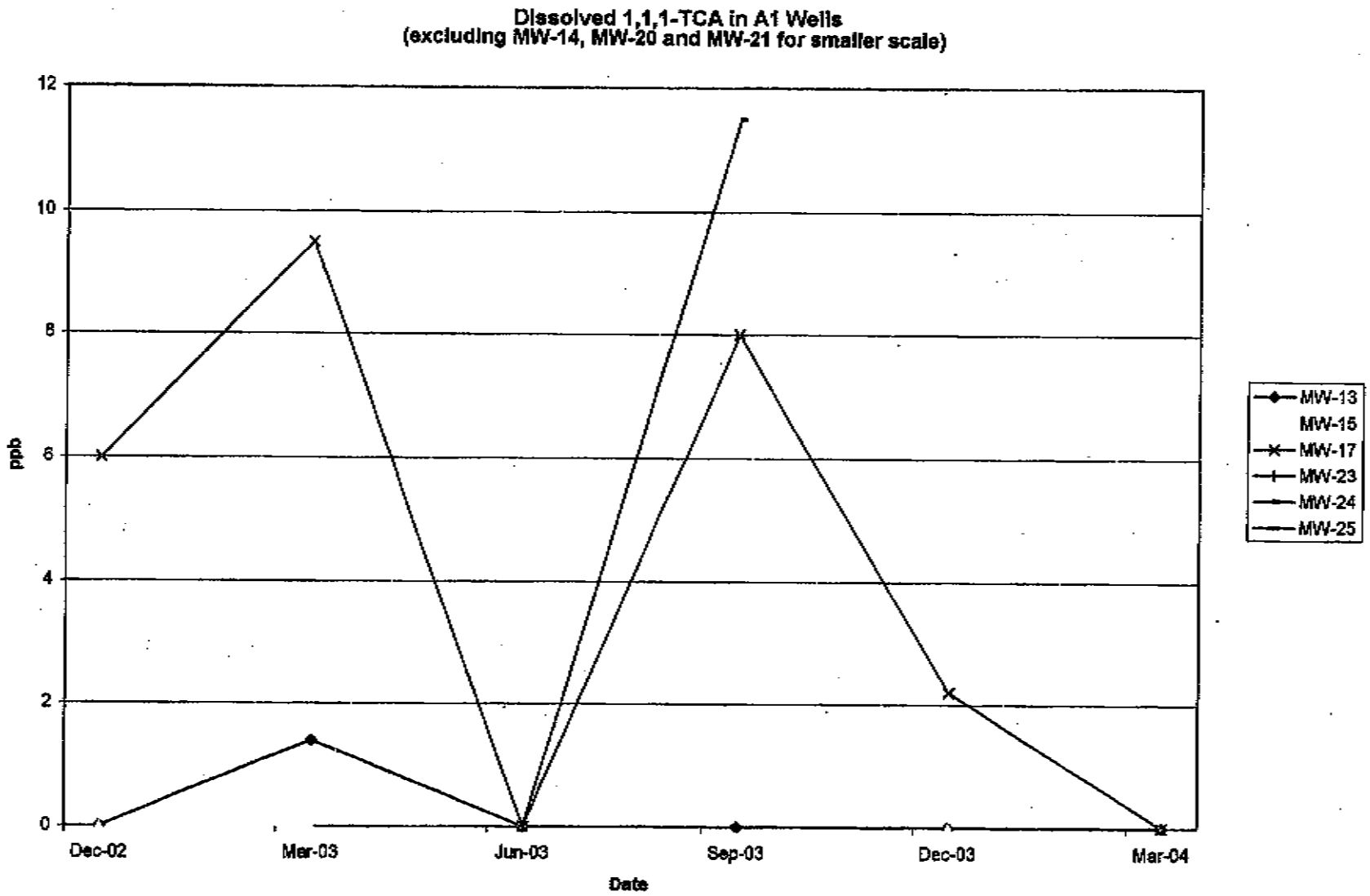
Dissolved 1,1,1-TCA in 1st Water Wells
(excluding MW-10, MW-11, MW-18, MW-19 and MW-26 for smaller scale)



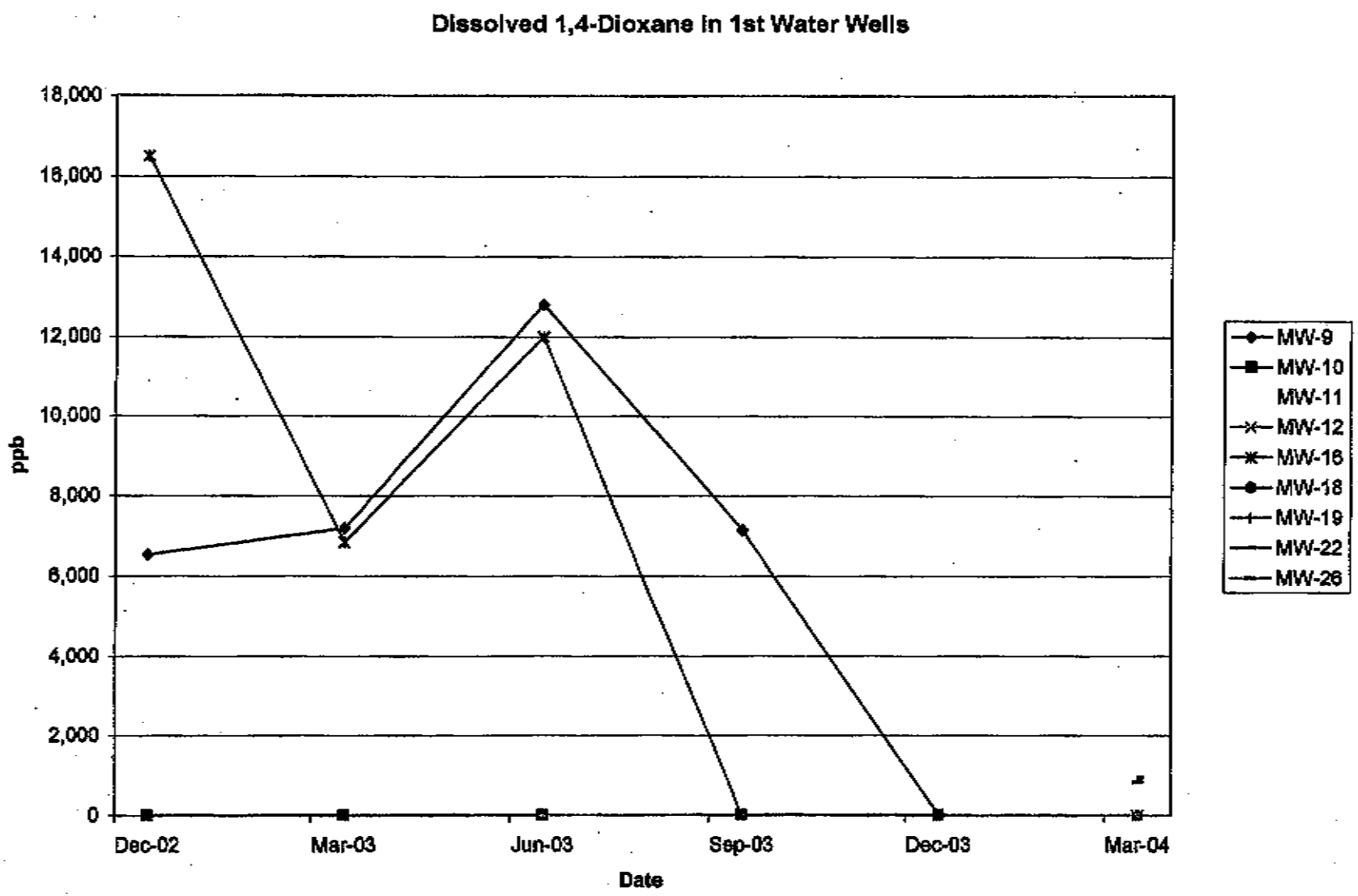

ANCHEM0561


Dissolved 1,1,1-TCA in A1 Wells
250
200
150
100
50
0
ppb
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-13
MW-14
MW-15
MW-17
MW-20
MW-21
MW-23
MW-24
MW-25

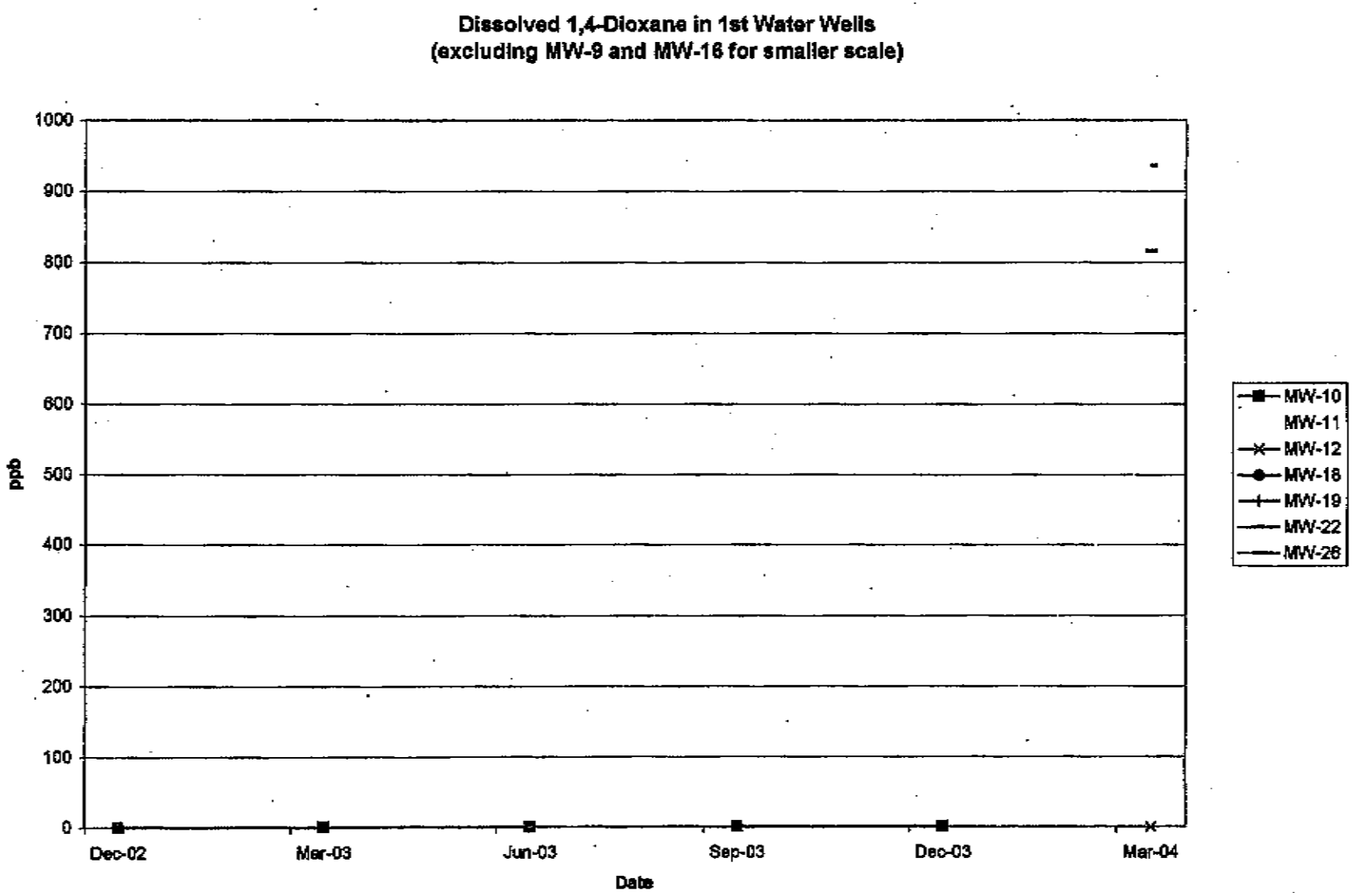
ANCHEM0562


Dissolved 1,1,1-TCA in A1 Wells
(excluding MW-14, MW-20 and MW-21 for smaller scale)
12
10
8
6
4
2
0
ppb
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-13
MW-15
MW-17
MW-23
MW-24
MW-25

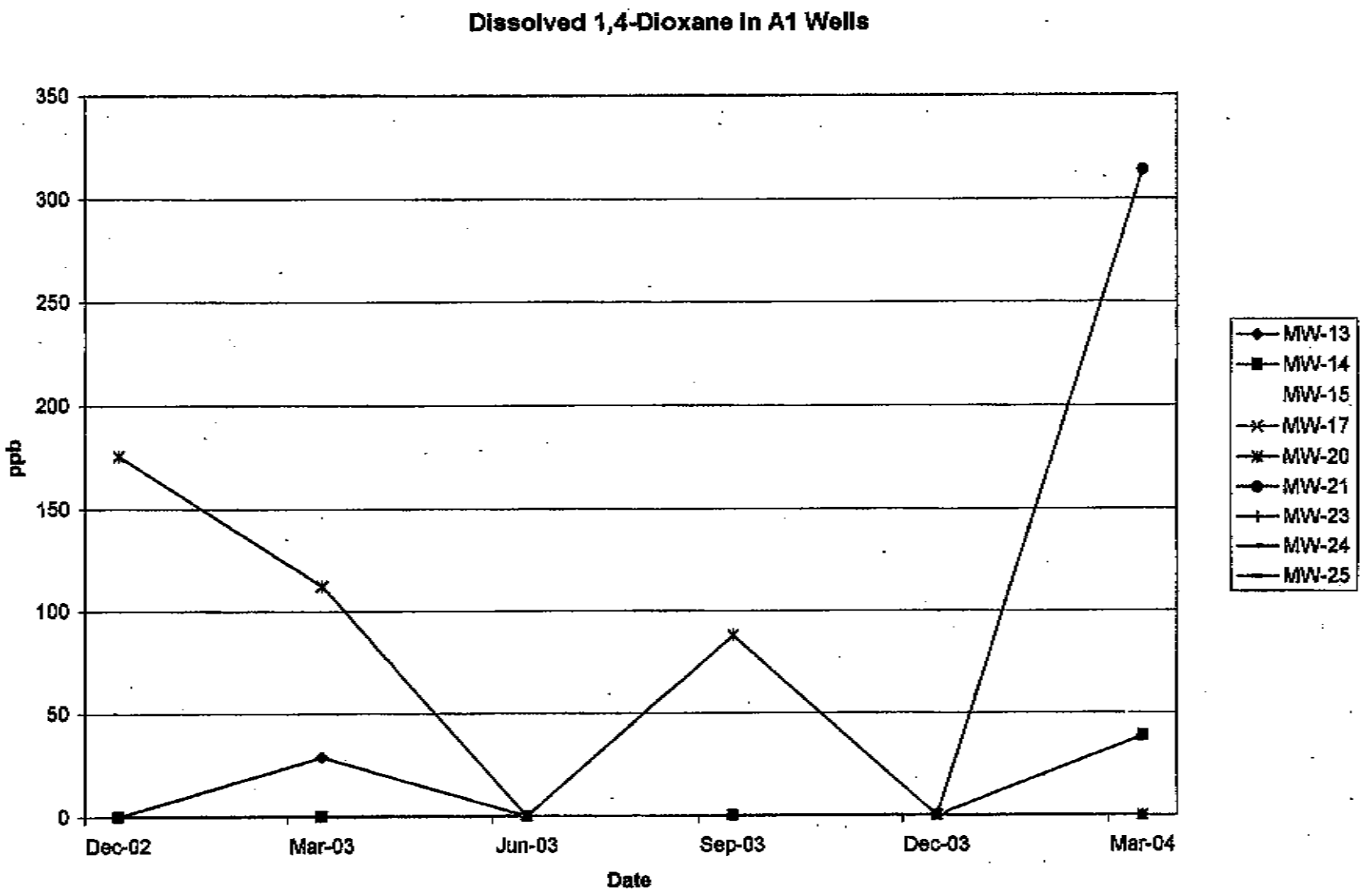
ANCHEM0563


Dissolved 1,4-Dioxane in 1st Water Wells
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
ppb
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-9
MW-10
MW-11
MW-12
MW-16
MW-18
MW-19
MW-22
MW-26

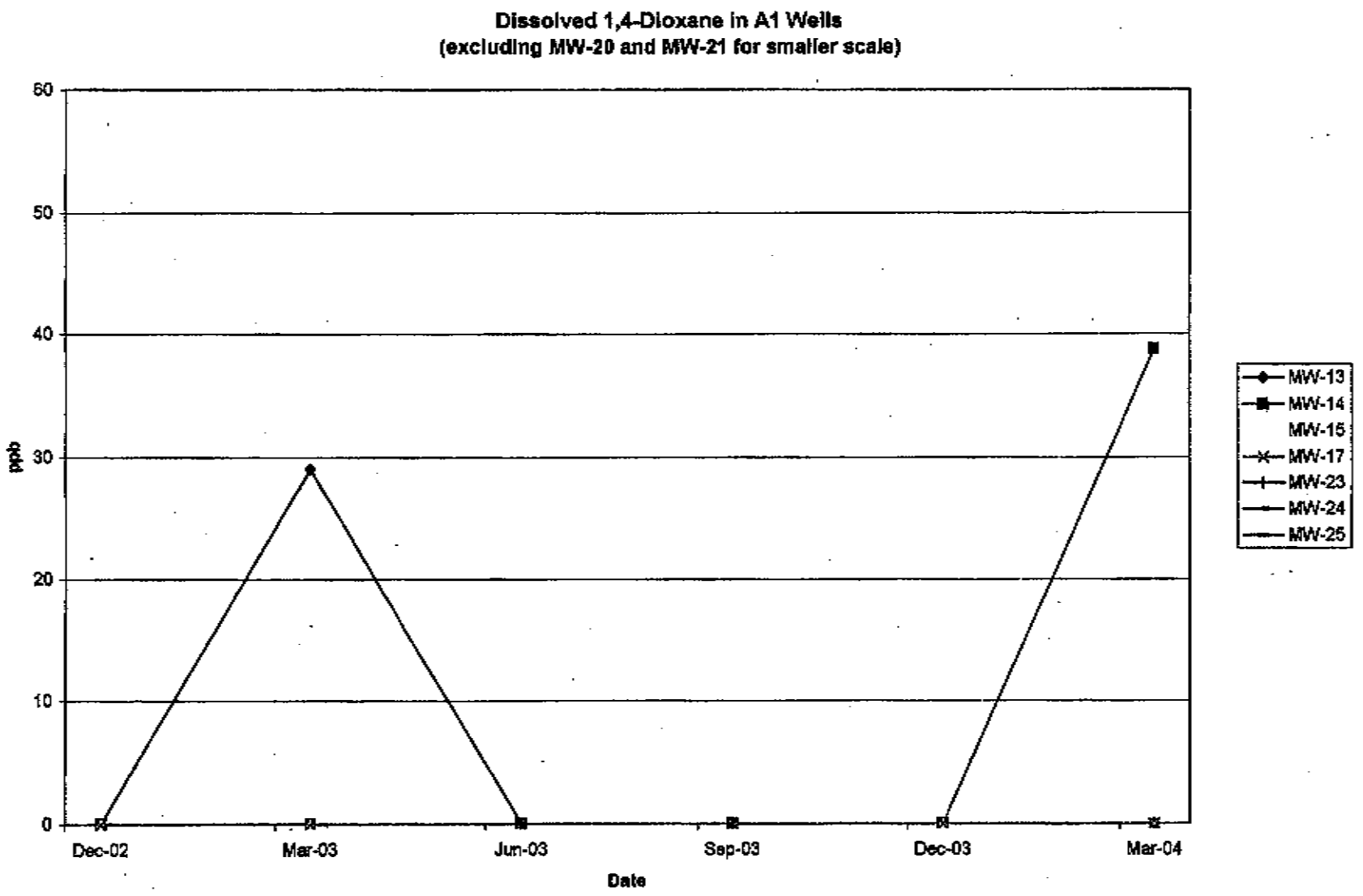
ANCHEM0564


Dissolved 1,4-Dioxane in 1st Water Wells
(excluding MW-9 and MW-16 for smaller scale)
1000
900
800
700
600
500
400
300
200
100
0
ppb
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-10
MW-11
MW-12
MW-18
MW-19
MW-22
MW-26

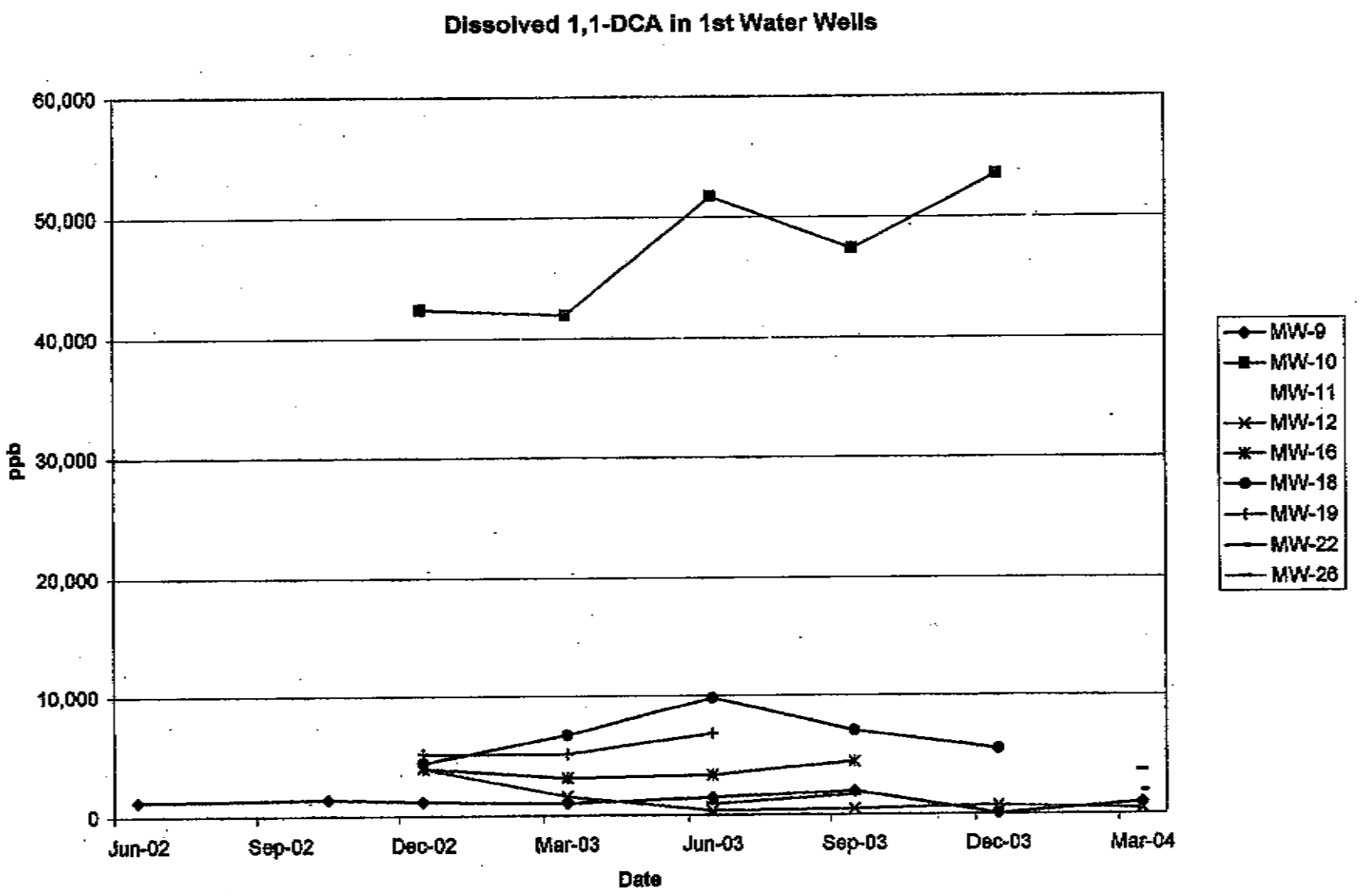
ANCHEM0565


Dissolved 1,4-Dioxane in A1 Wells
350
300
250
200
150
100
50
0
ppb
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-13
MW-14
MW-15
MW-17
MW-20
MW-21
MW-23
MW-24
MW-25

ANCHEM0566

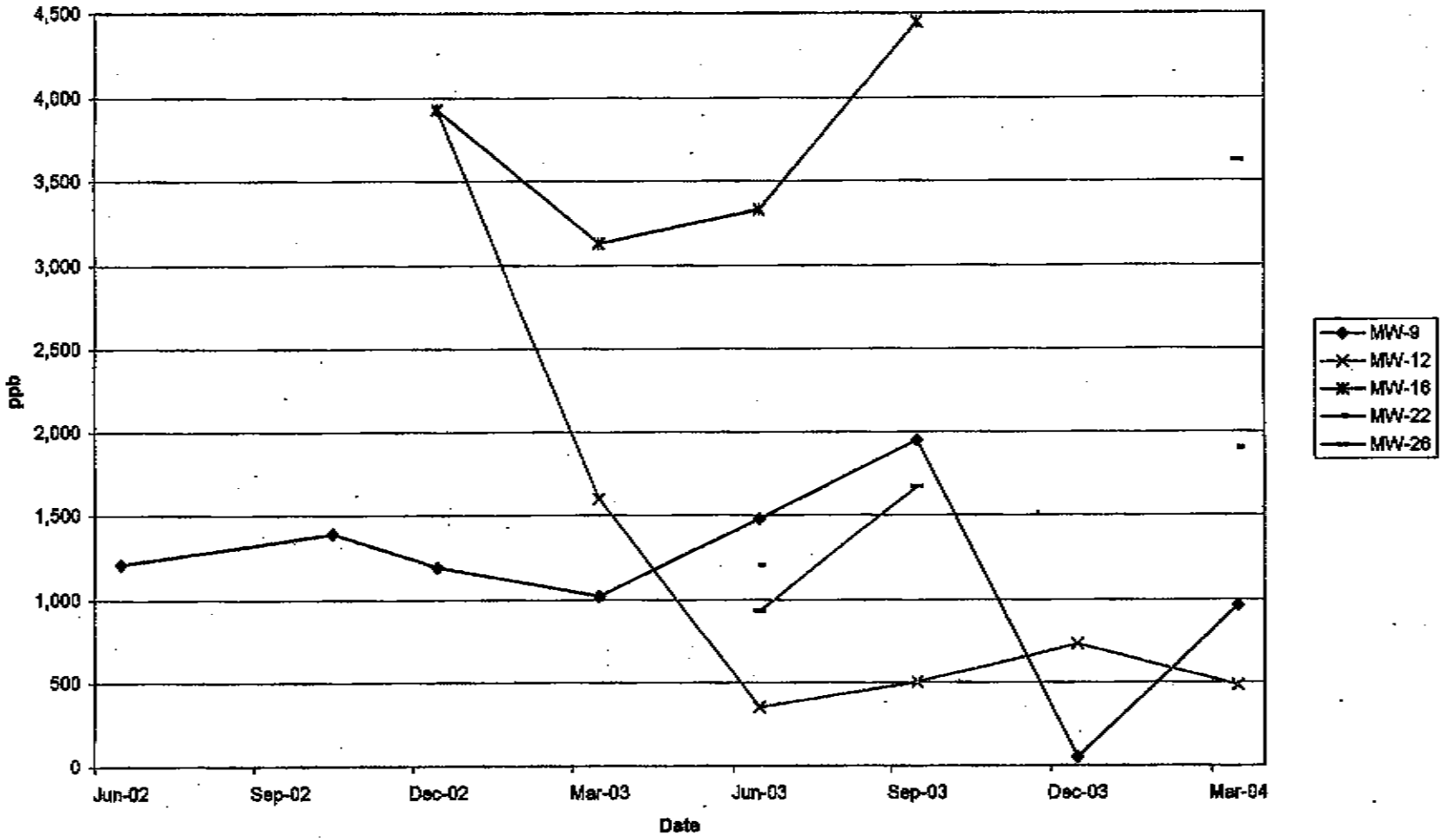

Dissolved 1,4-Dioxane in A1 Wells
(excluding MW-20 and MW-21 for smaller scale)
60
50
40
30
20
10
0
ppb
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-13
MW-14
MW-15
MW-17
MW-23
MW-24
MW-25

ANCHEM0567

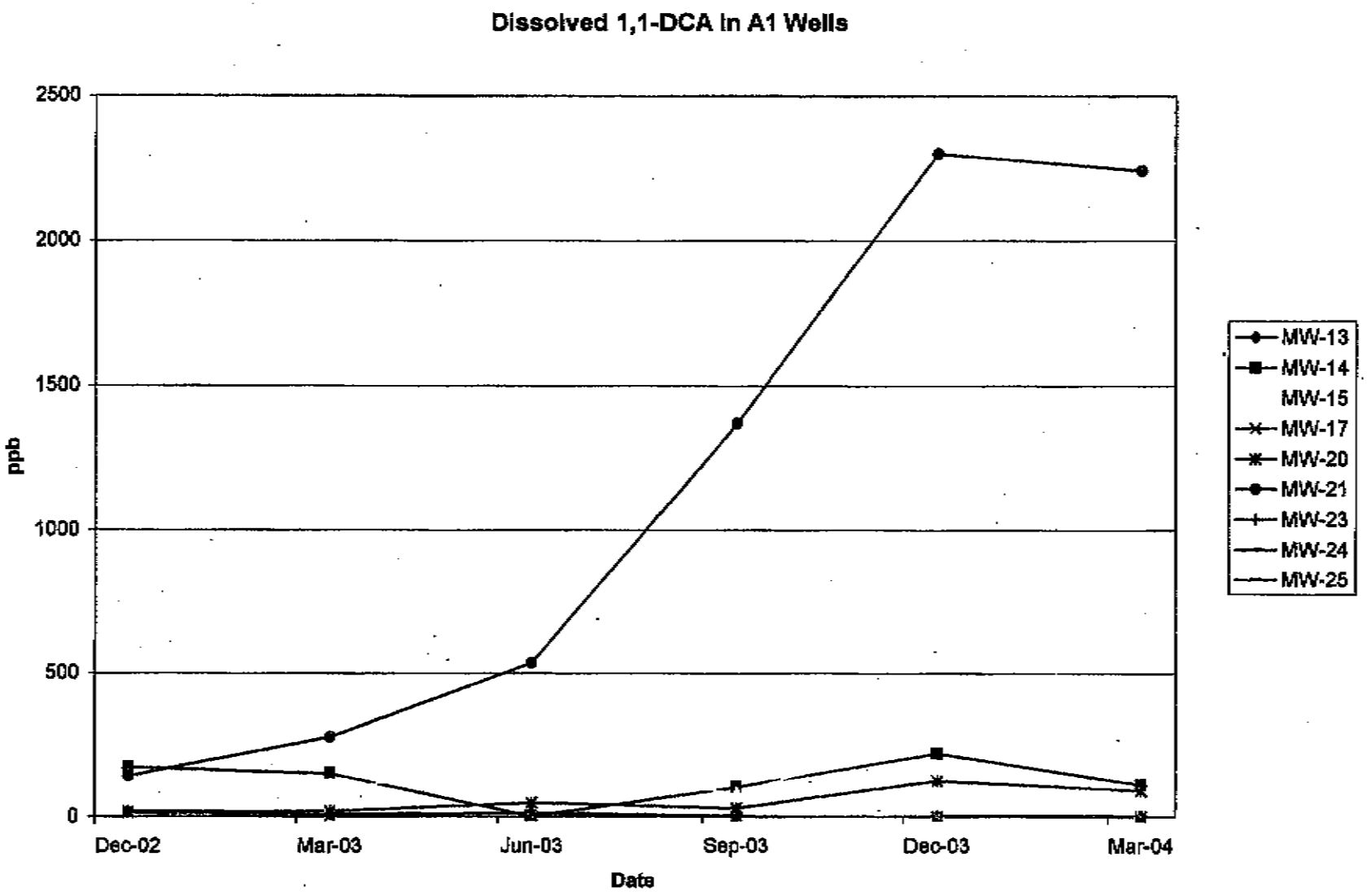

Dissolved 1,1-DCA in 1st Water Wells
60,000
50,000
40,000
30,000
20,000
10,000
0
ppb
Jun-02
Sep-02
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-9
MW-10
MW-11
MW-12
MW-16
MW-18
MW-19
MW-22
MW-26

ANCHEM0568

**Dissolved 1,1-DCA in 1st Water Wells**
**(excluding MW-10, MW-11, MW-18 and MW-19 for smaller scale)**

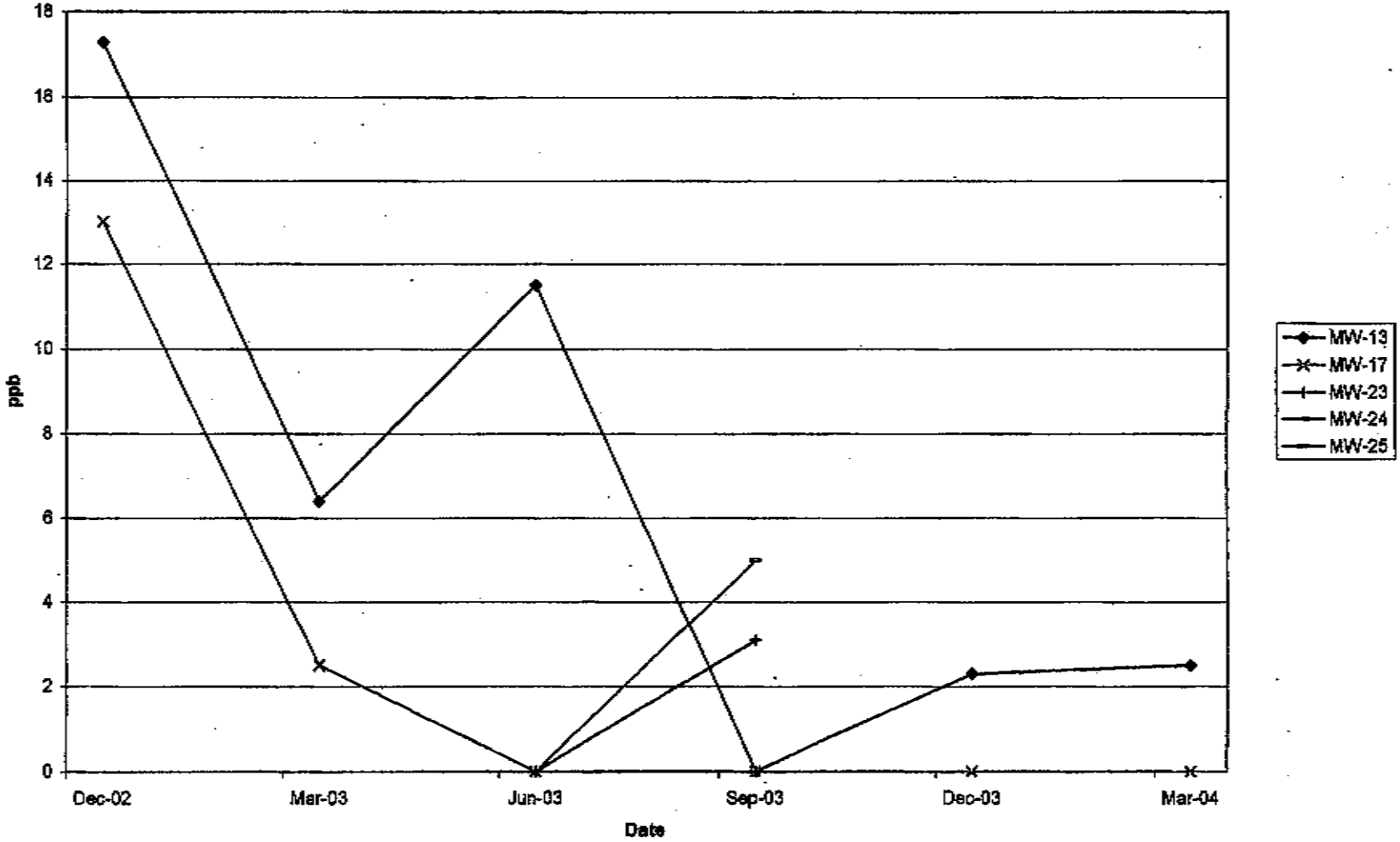



ANCHEM0569

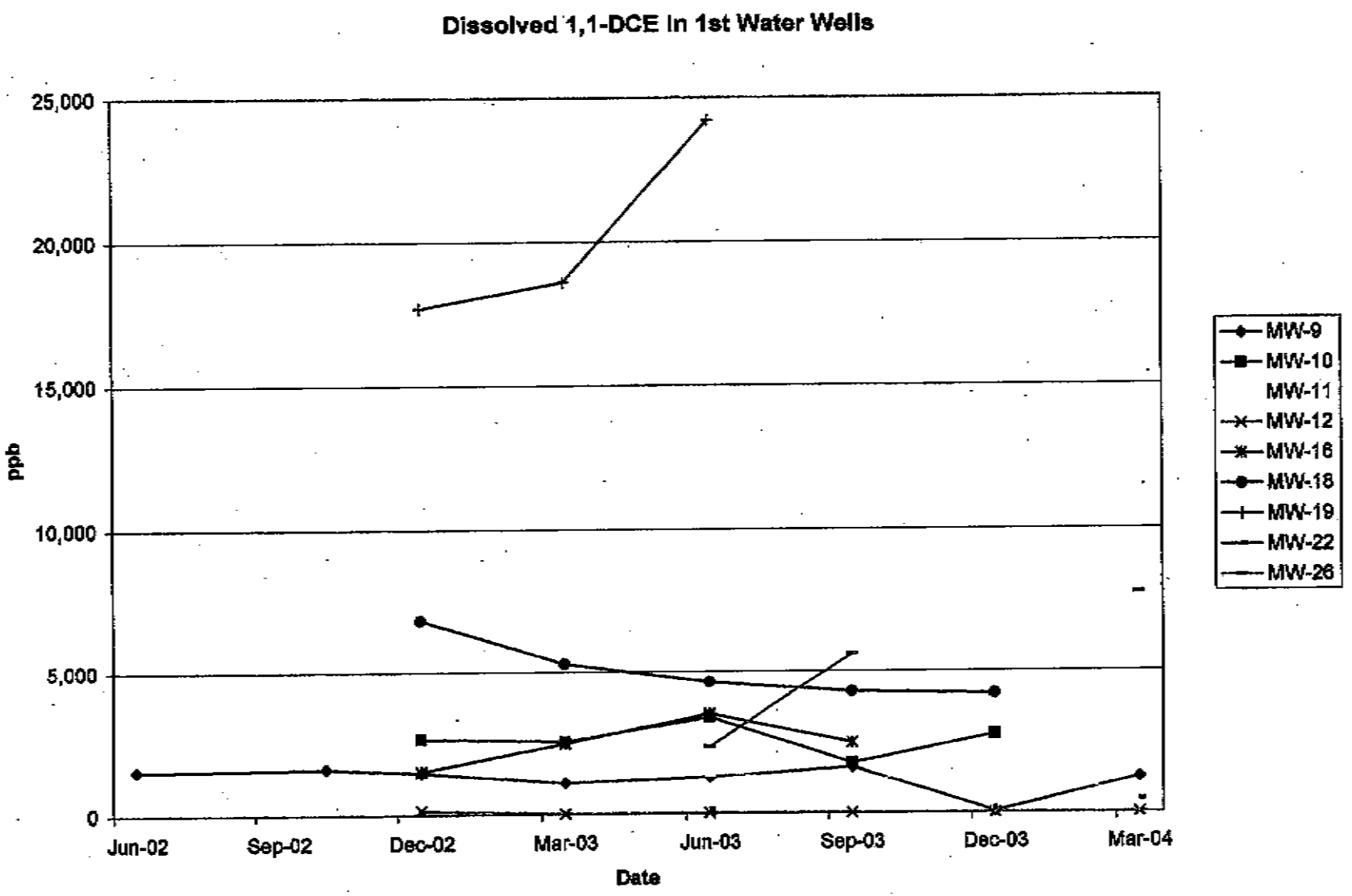

Dissolved 1,1-DCA in A1 Wells
2500
2000
1500
1000
500
0
ppb
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-13
MW-14
MW-15
MW-17
MW-20
MW-21
MW-23
MW-24
MW-25

ANCHEM0570

**Dissolved 1,1-DCA in A1 Wells**
**(excluding MW-14, MW-15, MW-20 and MW-21 for smaller scale)**

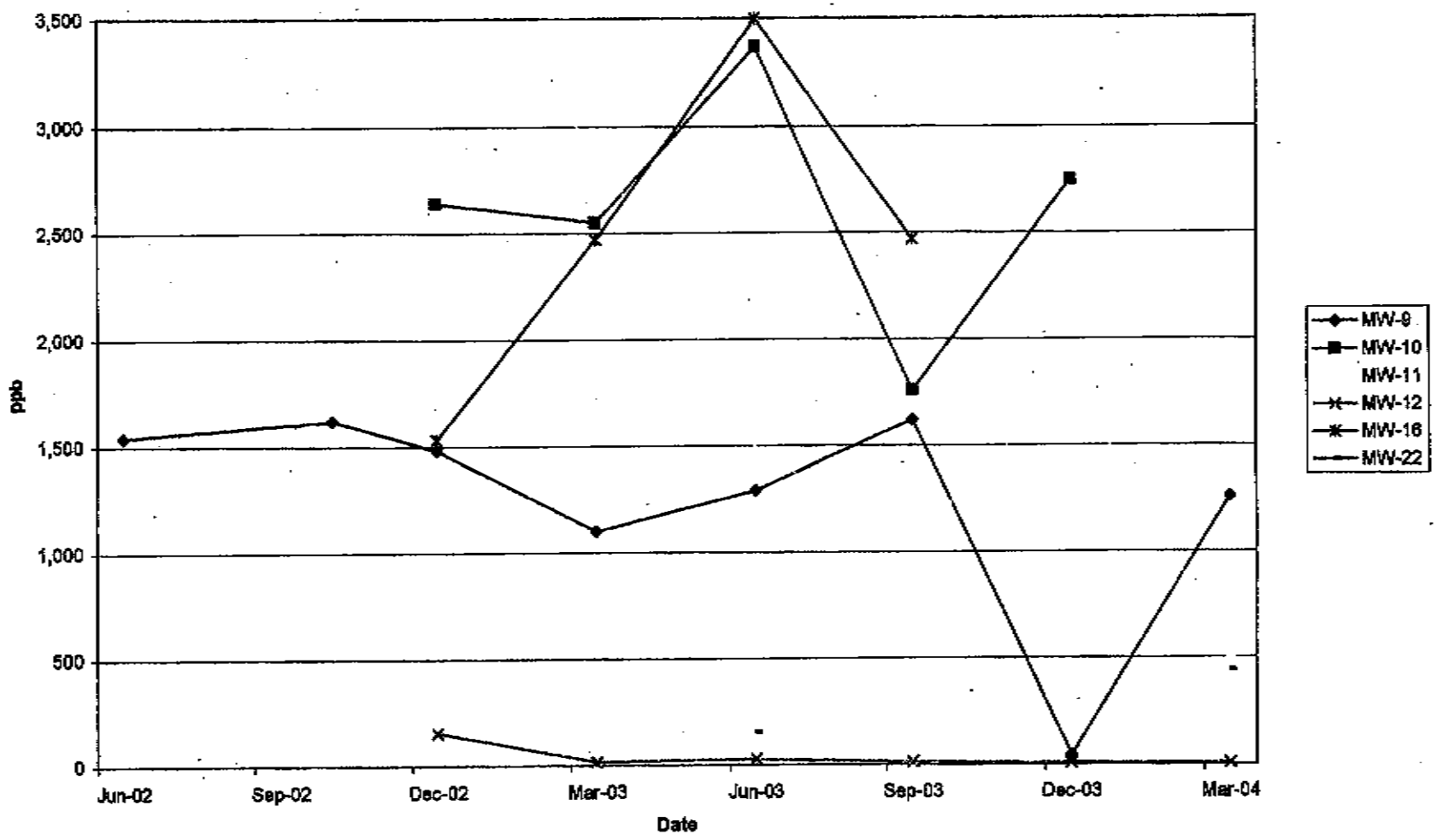



ANCHEM0571

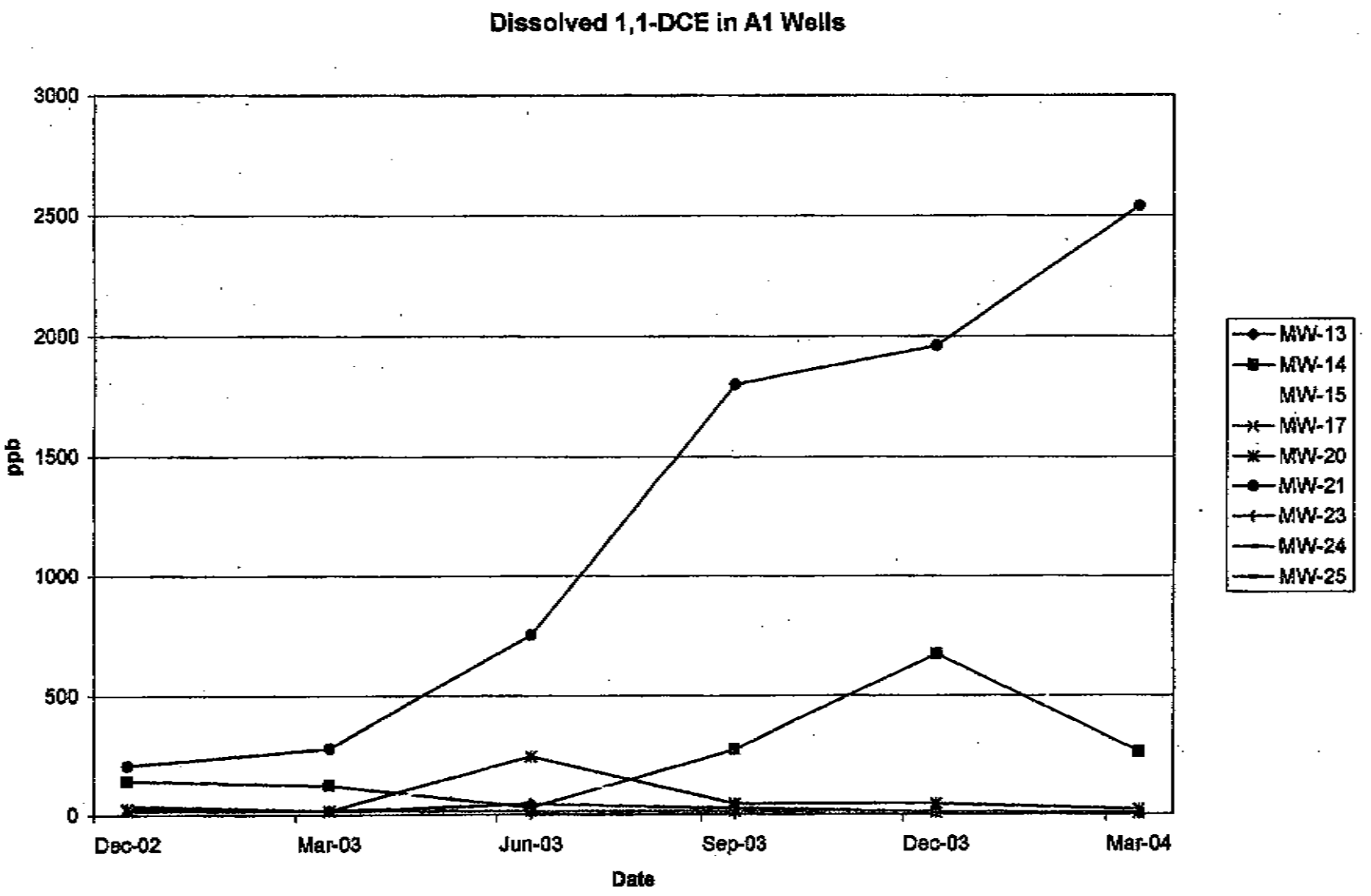

Dissolved 1,1-DCE In 1st Water Wells
25,000
20,000
15,000
10,000
5,000
0
ppb
Jun-02
Sep-02
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-9
MW-10
MW-11
MW-12
MW-16
MW-18
MW-19
MW-22
MW-26

ANCHEM0572

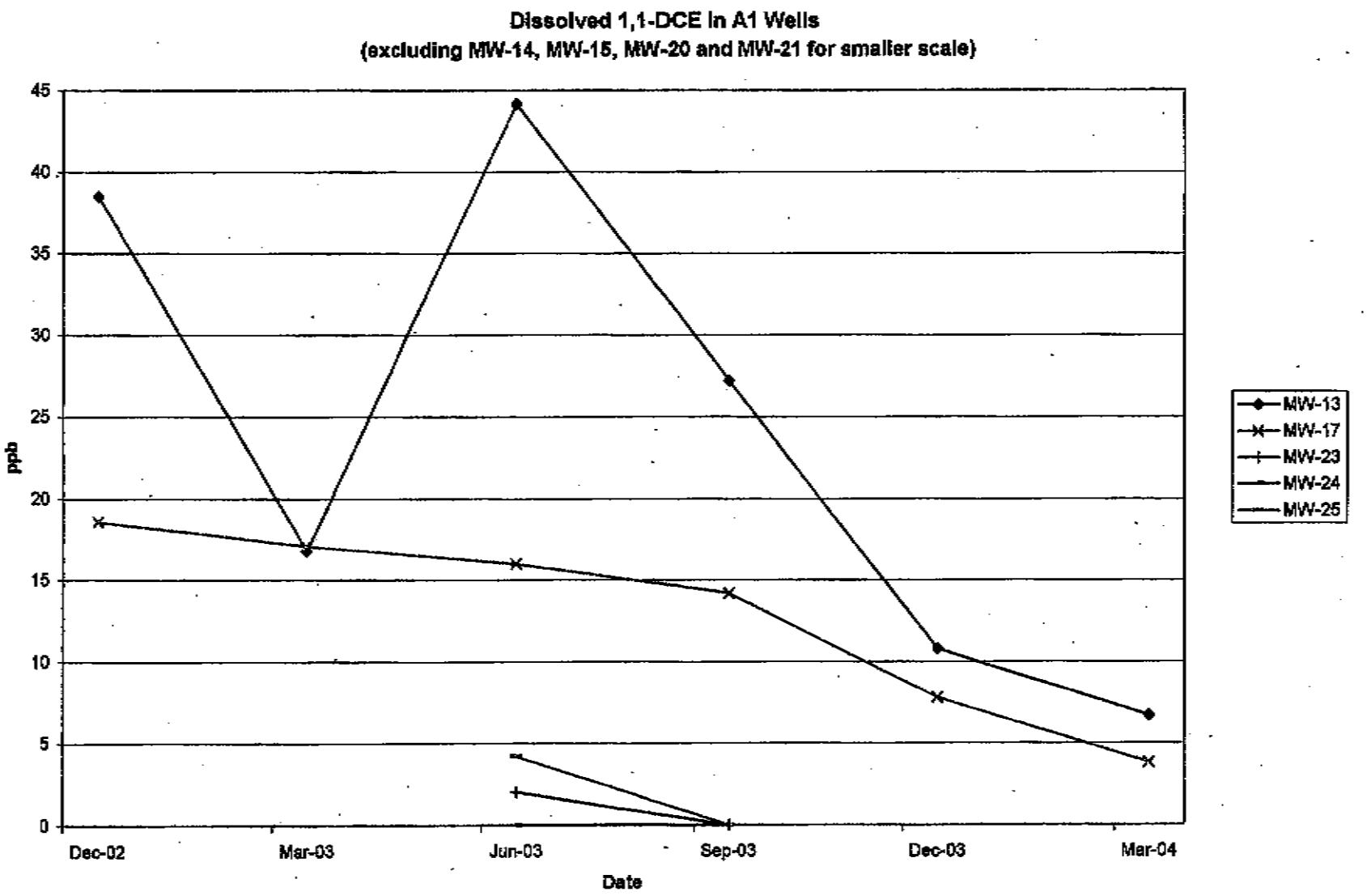
**Dissolved 1,1-DCE in 1st Water Wells**
**(excluding MW-18, MW-19 and MW-26 for smaller scale)**



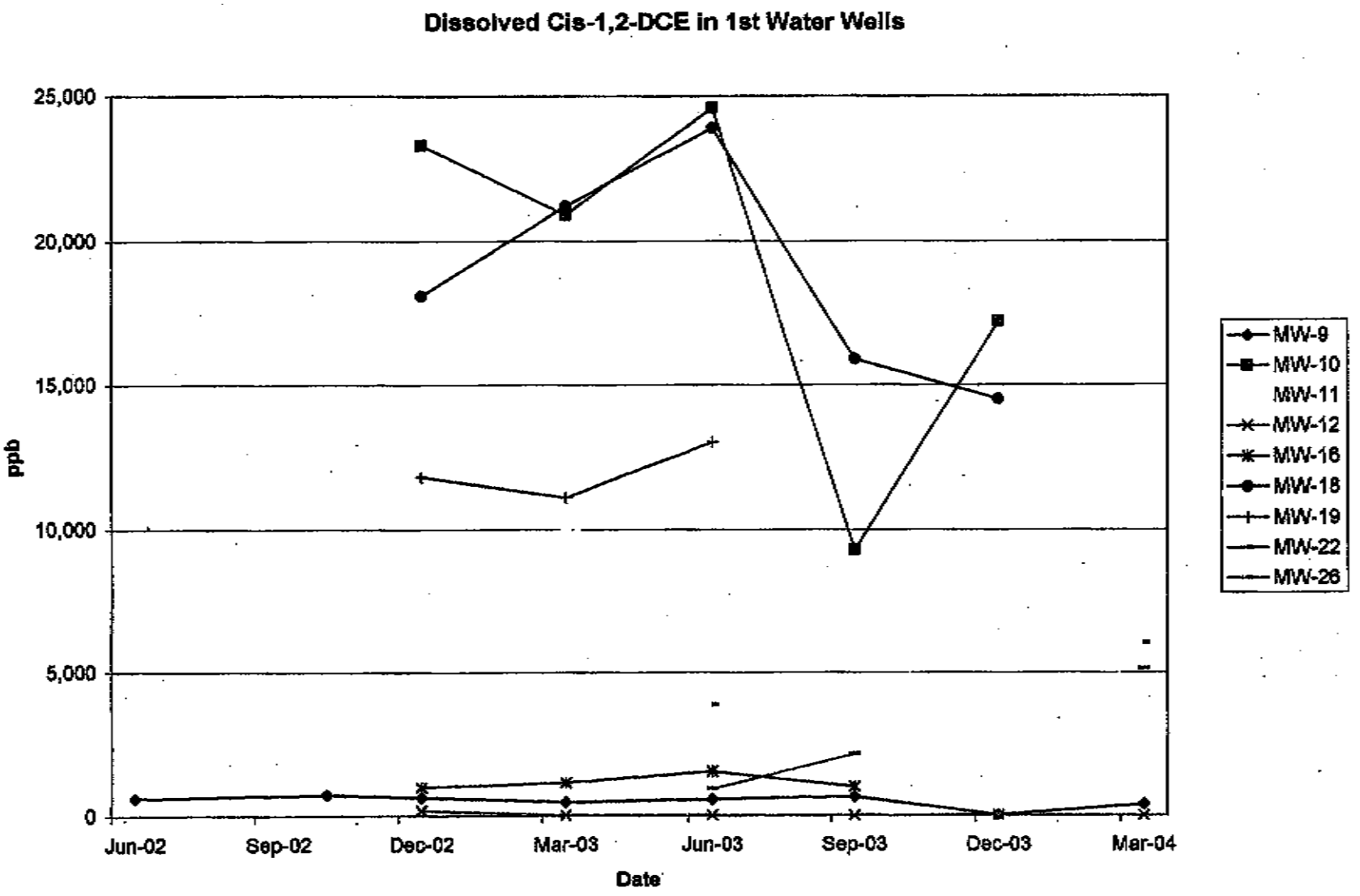

ANCHEM0573


Dissolved 1,1-DCE in A1 Wells
3000
2500
2000
1500
1000
500
0
ppb
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-13
MW-14
MW-15
MW-17
MW-20
MW-21
MW-23
MW-24
MW-25

ANCHEM0574

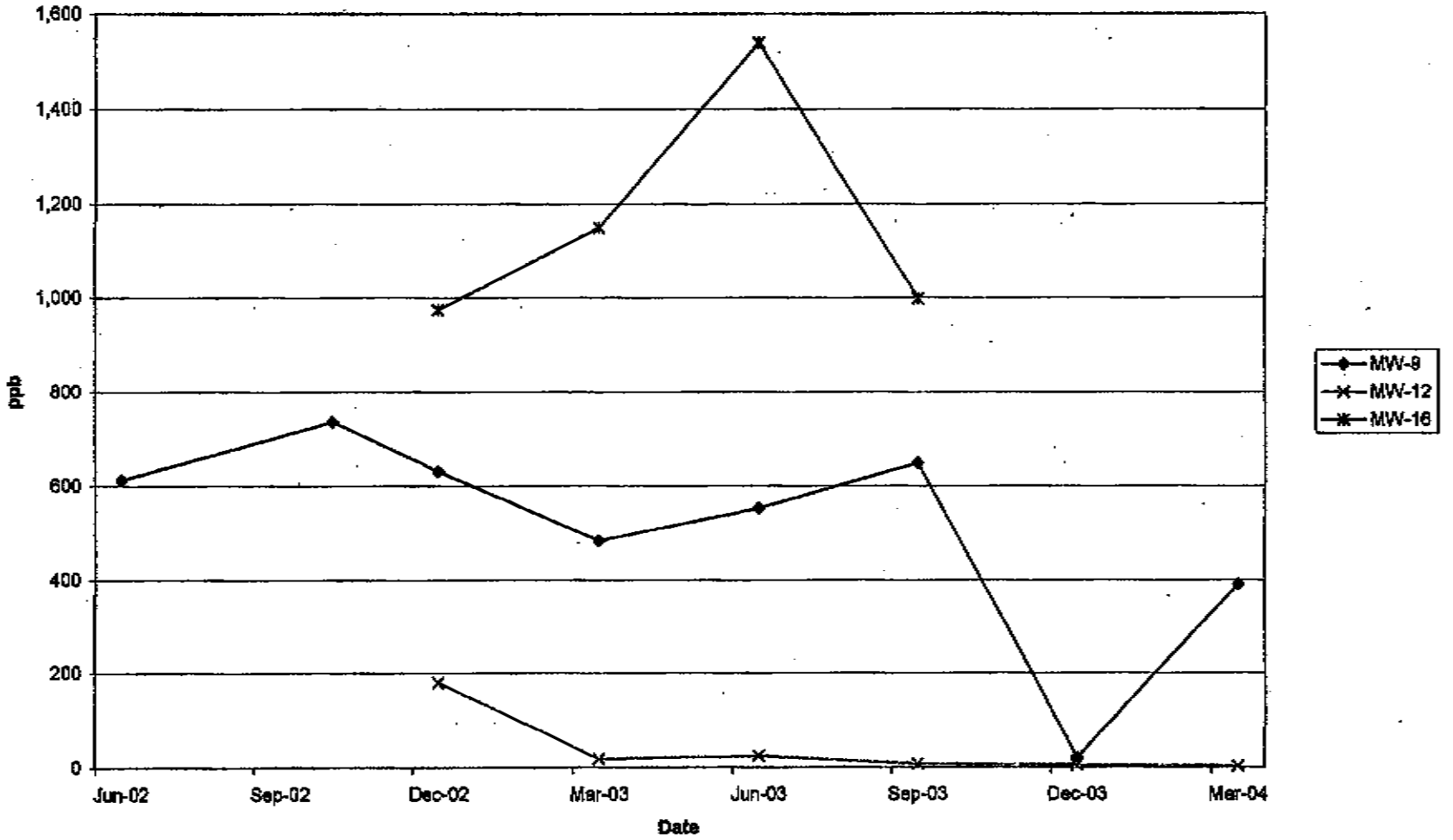

Dissolved 1,1-DCE in A1 Wells
(excluding MW-14, MW-15, MW-20 and MW-21 for smaller scale)
ppb
45
40
35
30
25
20
15
10
5
0
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-13
MW-17
MW-23
MW-24
MW-25

ANCHEM0575

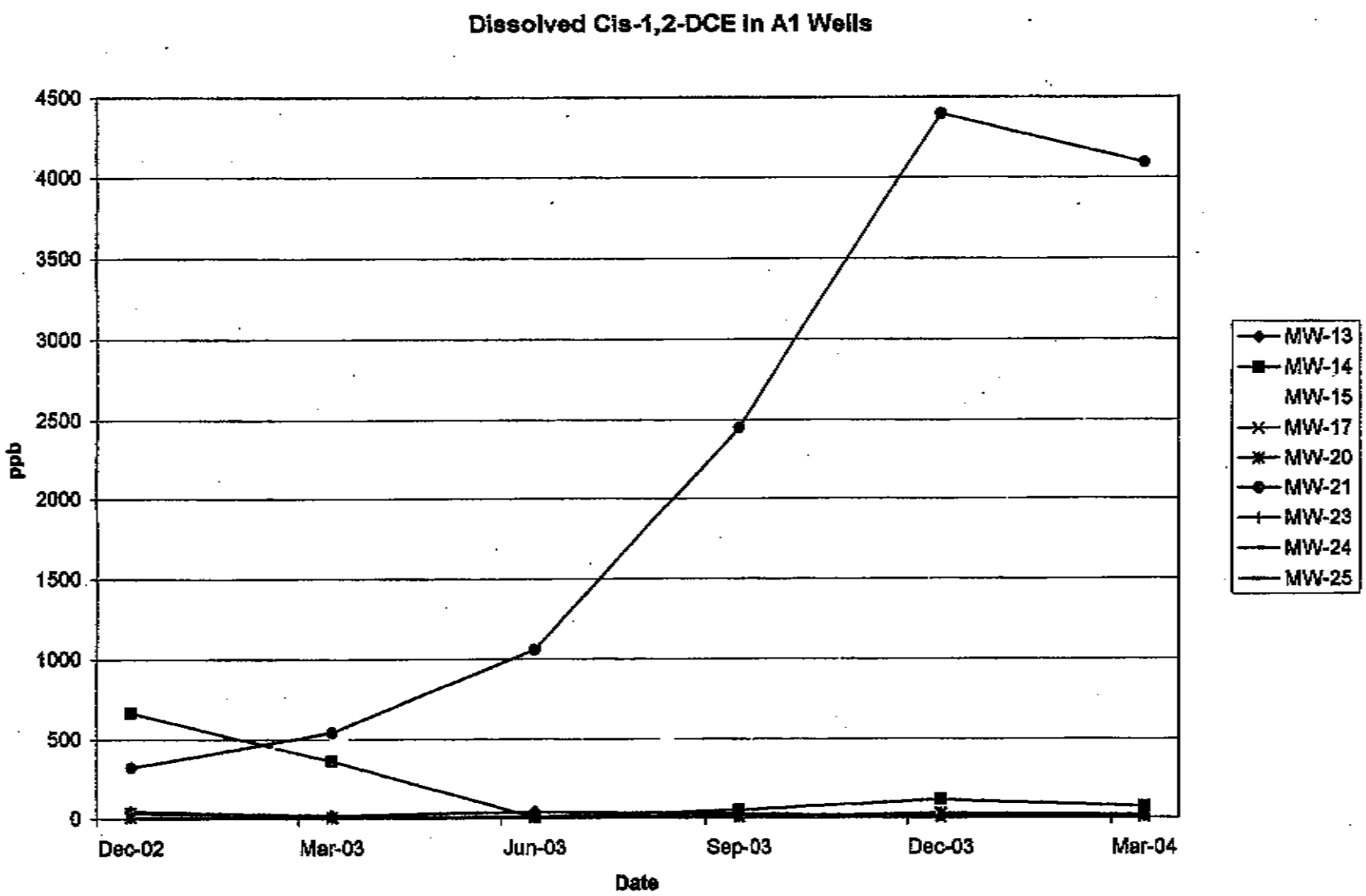

Dissolved Cis-1,2-DCE in 1st Water Wells
25,000
20,000
15,000
10,000
5,000
0
ppb
Jun-02
Sep-02
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-9
MW-10
MW-11
MW-12
MW-16
MW-18
MW-19
MW-22
MW-26

ANCHEM0576

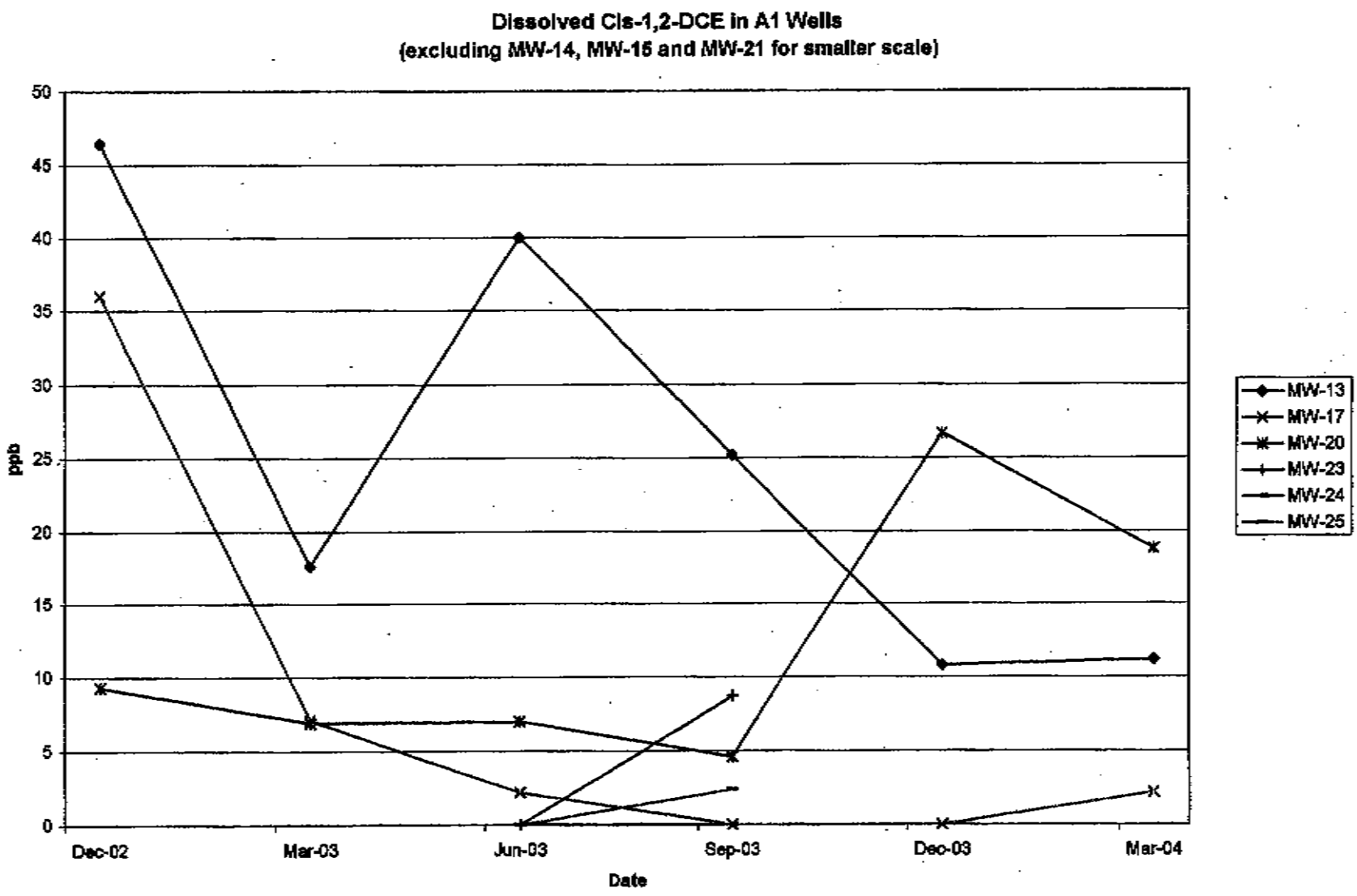
**Dissolved Cis-1,2-DCE in 1st Water Wells**
**(excluding MW-10, MW-11, MW-18, MW-19, MW-22 and MW-26 for smaller scale)**



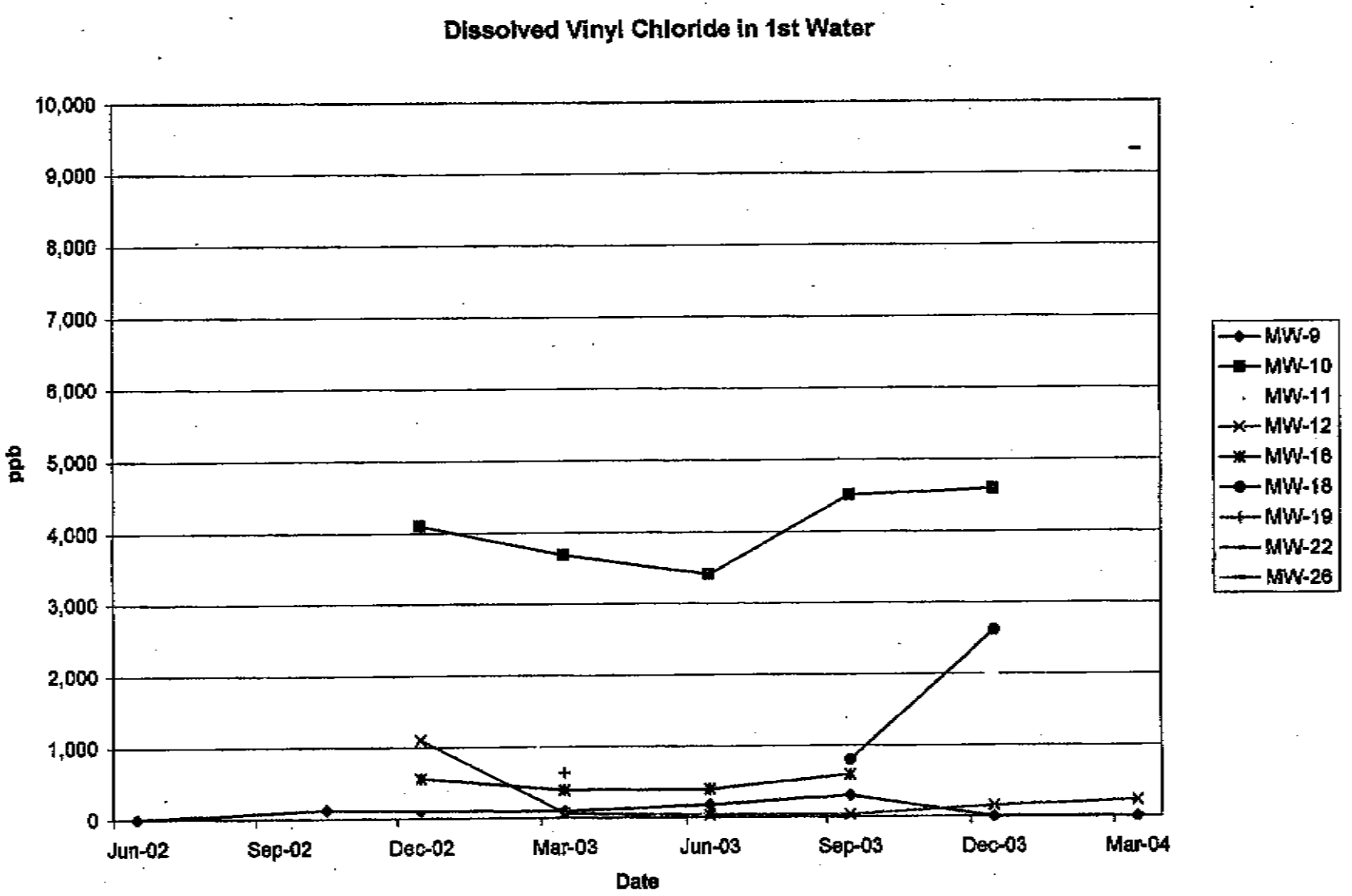

ANCHEM0577


Dissolved Cis-1,2-DCE In A1 Wells
4500
4000
3500
3000
2500
2000
1500
1000
500
0
ppb
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-13
MW-14
MW-15
MW-17
MW-20
MW-21
MW-23
MW-24
MW-25

ANCHEM0578

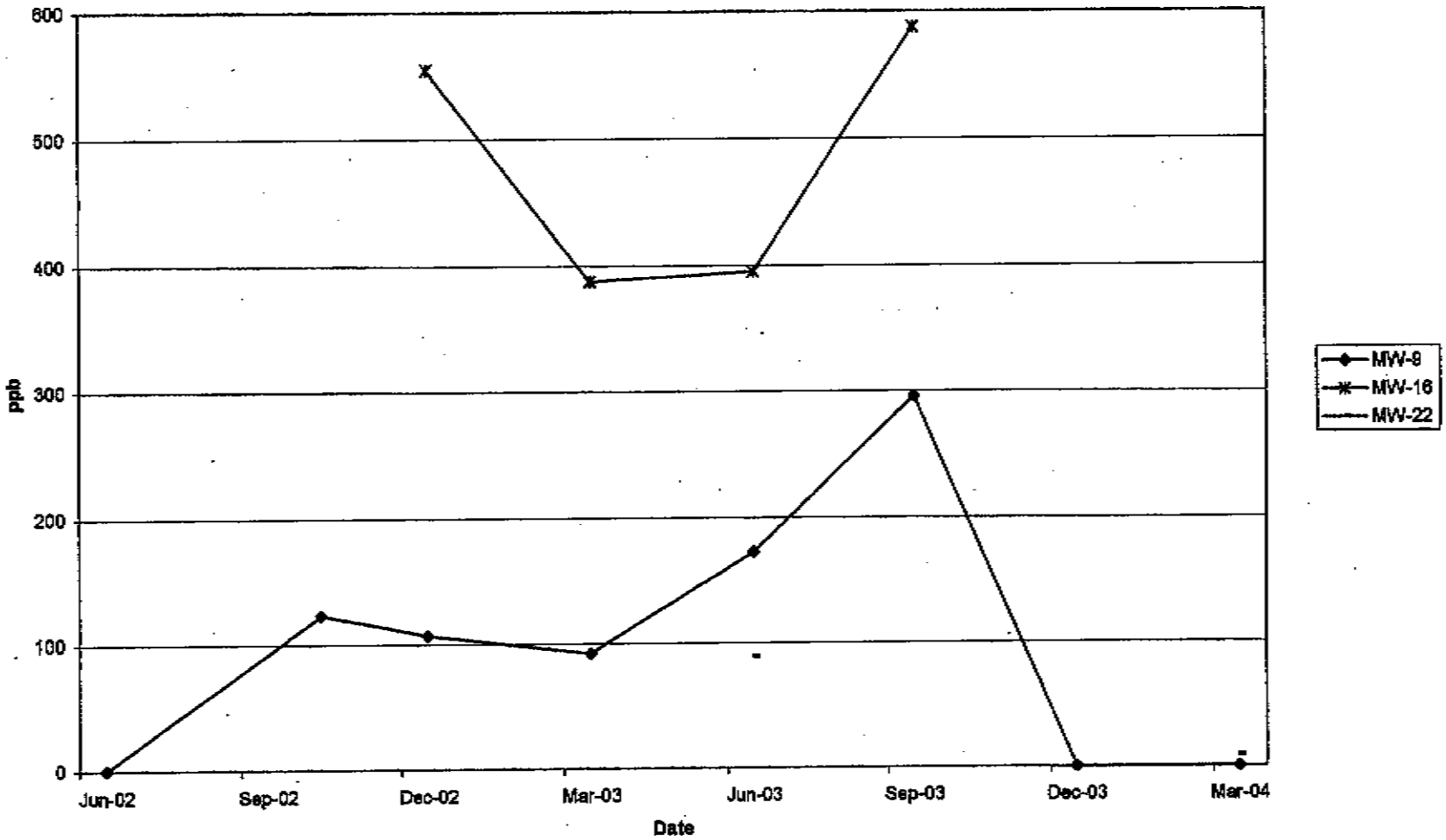

Dissolved Cis-1,2-DCE in A1 Wells
(excluding MW-14, MW-15 and MW-21 for smaller scale)
ppb
50
45
40
35
30
25
20
15
10
5
0
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-13
MW-17
MW-20
MW-23
MW-24
MW-25

ANCHEM0579

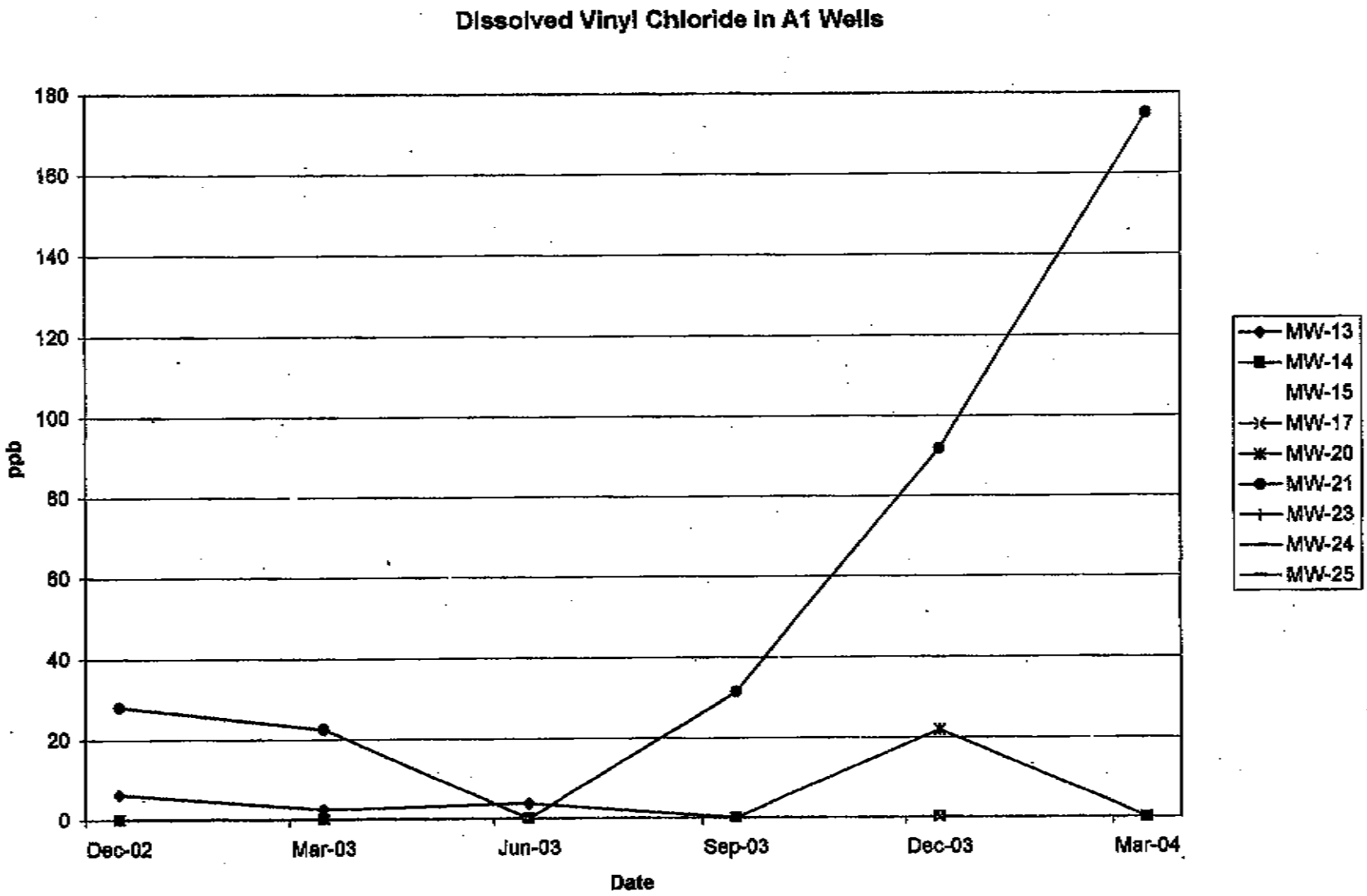

Dissolved Vinyl Chloride in 1st Water
10,000
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
ppb
Jun-02
Sep-02
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-9
MW-10
MW-11
MW-12
MW-16
MW-18
MW-19
MW-22
MW-26

ANCHEM0580

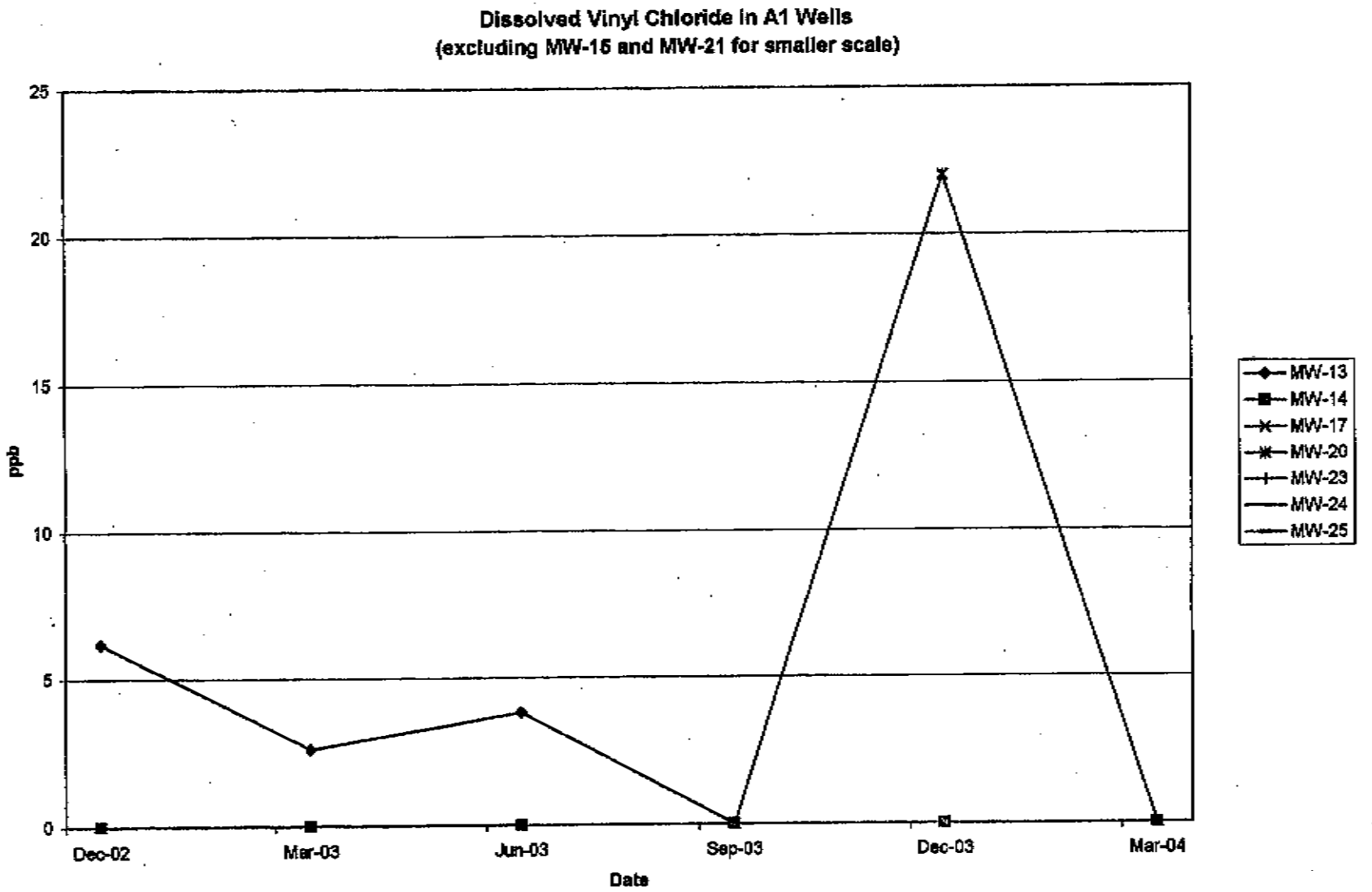
**Dissolved Vinyl Chloride in 1st Water**
**(excluding MW-10, MW-11, MW-12, MW-18, MW-19 and MW-26 for smaller scale)**



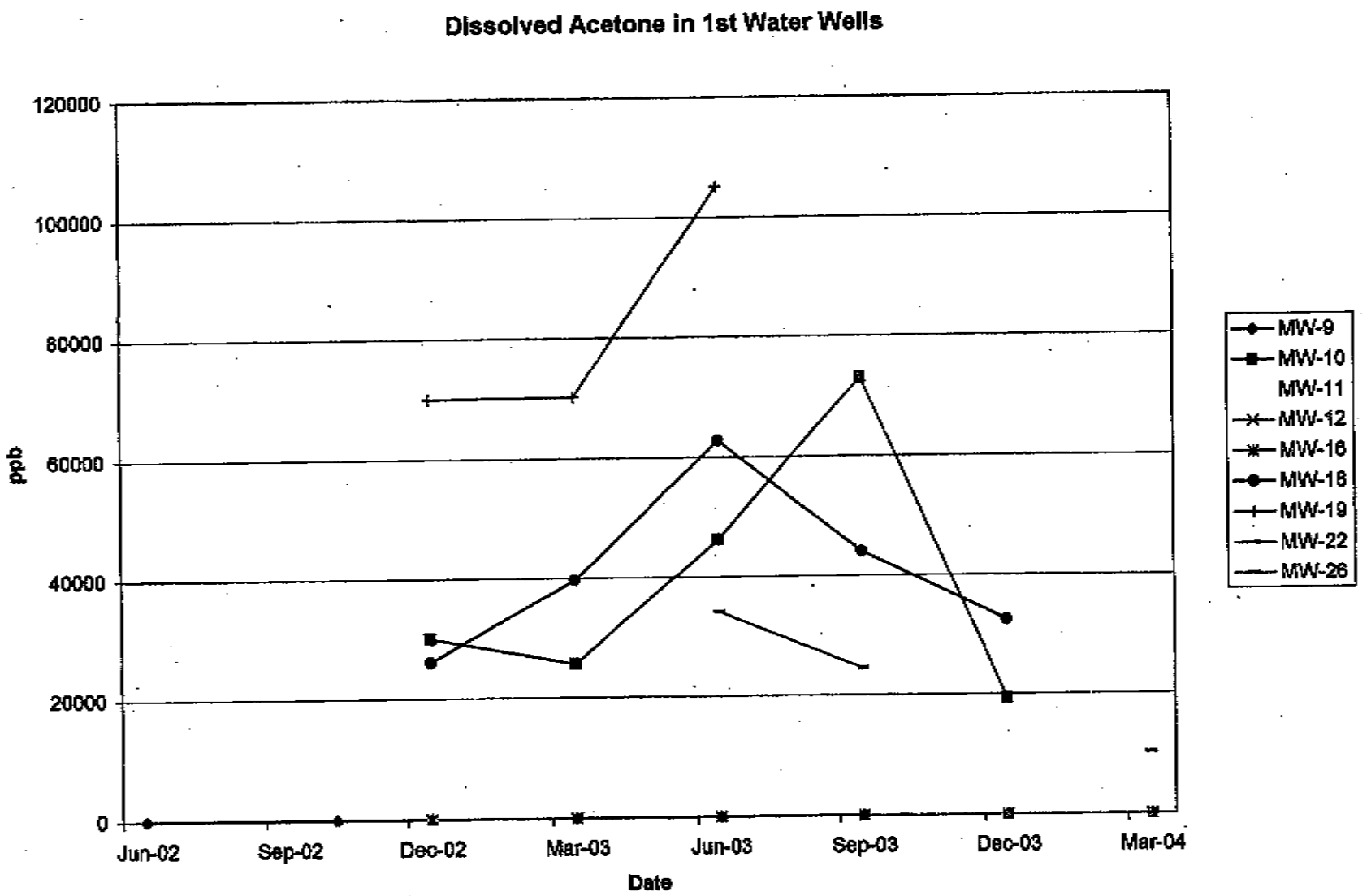

ANCHEM0581


Dissolved Vinyl Chloride in A1 Wells
ppb
180
160
140
120
100
80
60
40
20
0
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-13
MW-14
MW-15
MW-17
MW-20
MW-21
MW-23
MW-24
MW-25

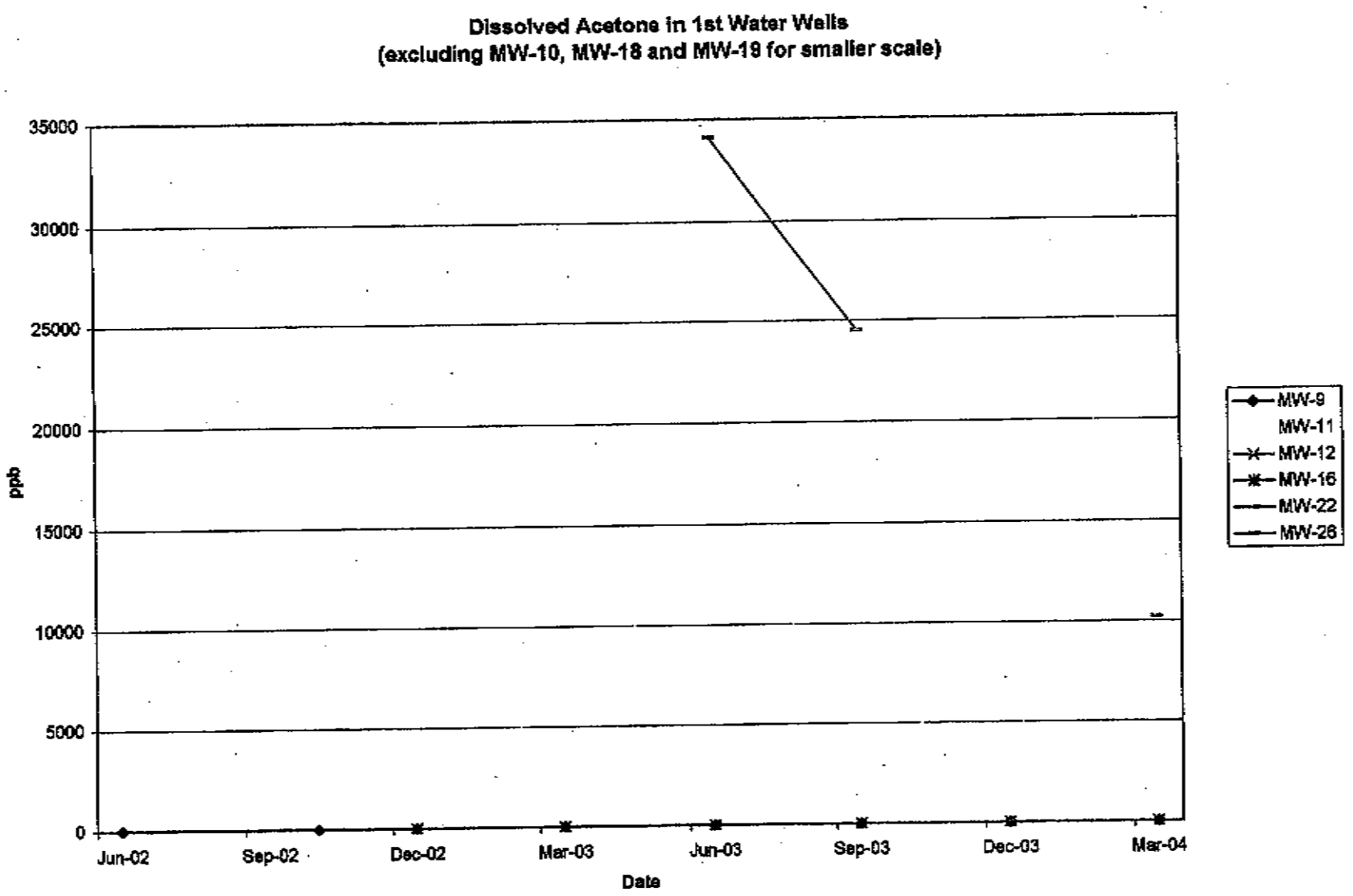
RNCHEM0582


Dissolved Vinyl Chloride in A1 Wells
(excluding MW-15 and MW-21 for smaller scale)
25
20
15
10
5
0
ppb
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-13
MW-14
MW-17
MW-20
MW-23
MW-24
MW-25

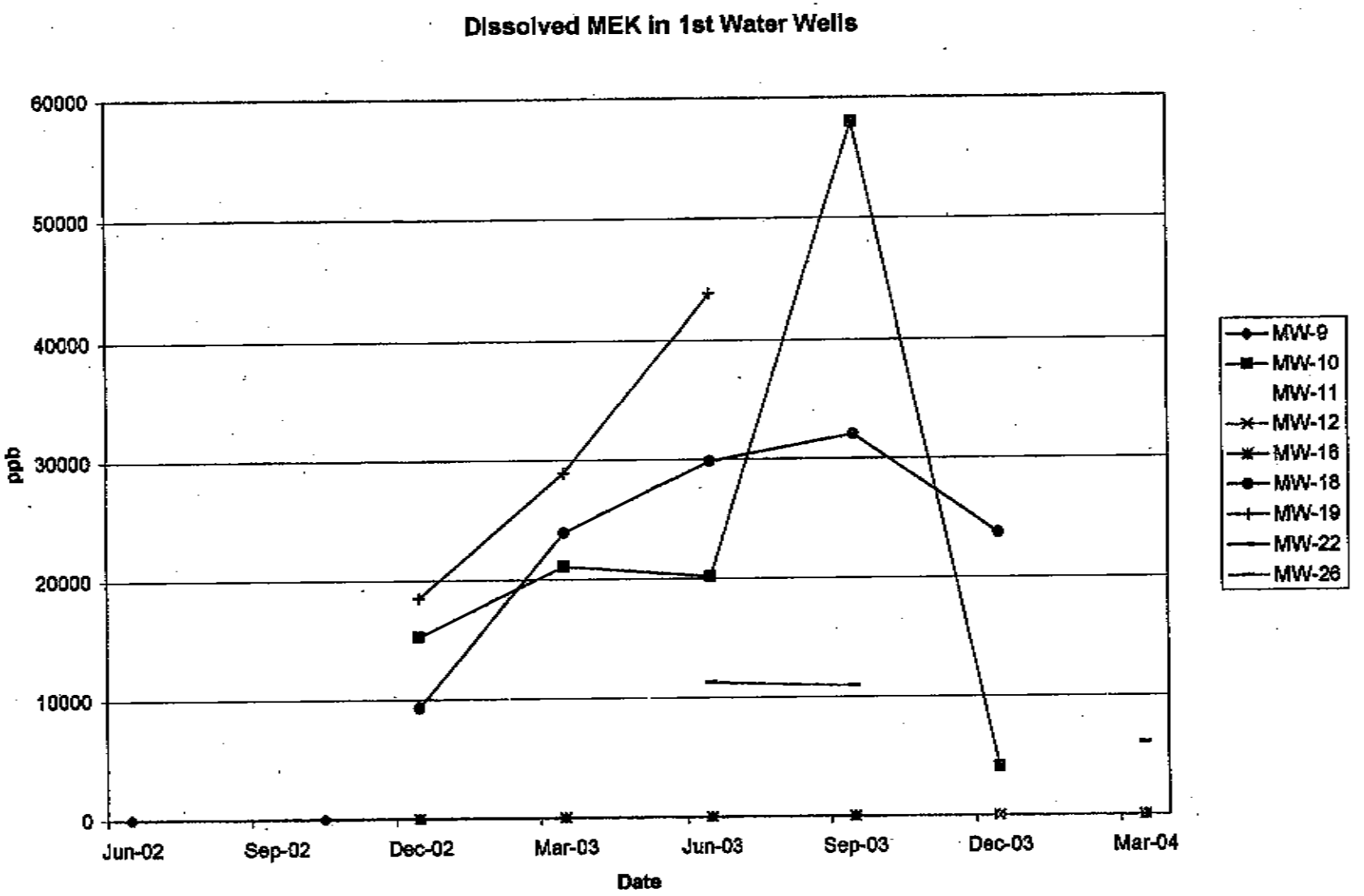
ANCHEM0583


Dissolved Acetone in 1st Water Wells
120000
100000
80000
60000
40000
20000
0
ppb
Jun-02
Sep-02
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-9
MW-10
MW-11
MW-12
MW-16
MW-18
MW-19
MW-22
MW-26

ANCHEM0584

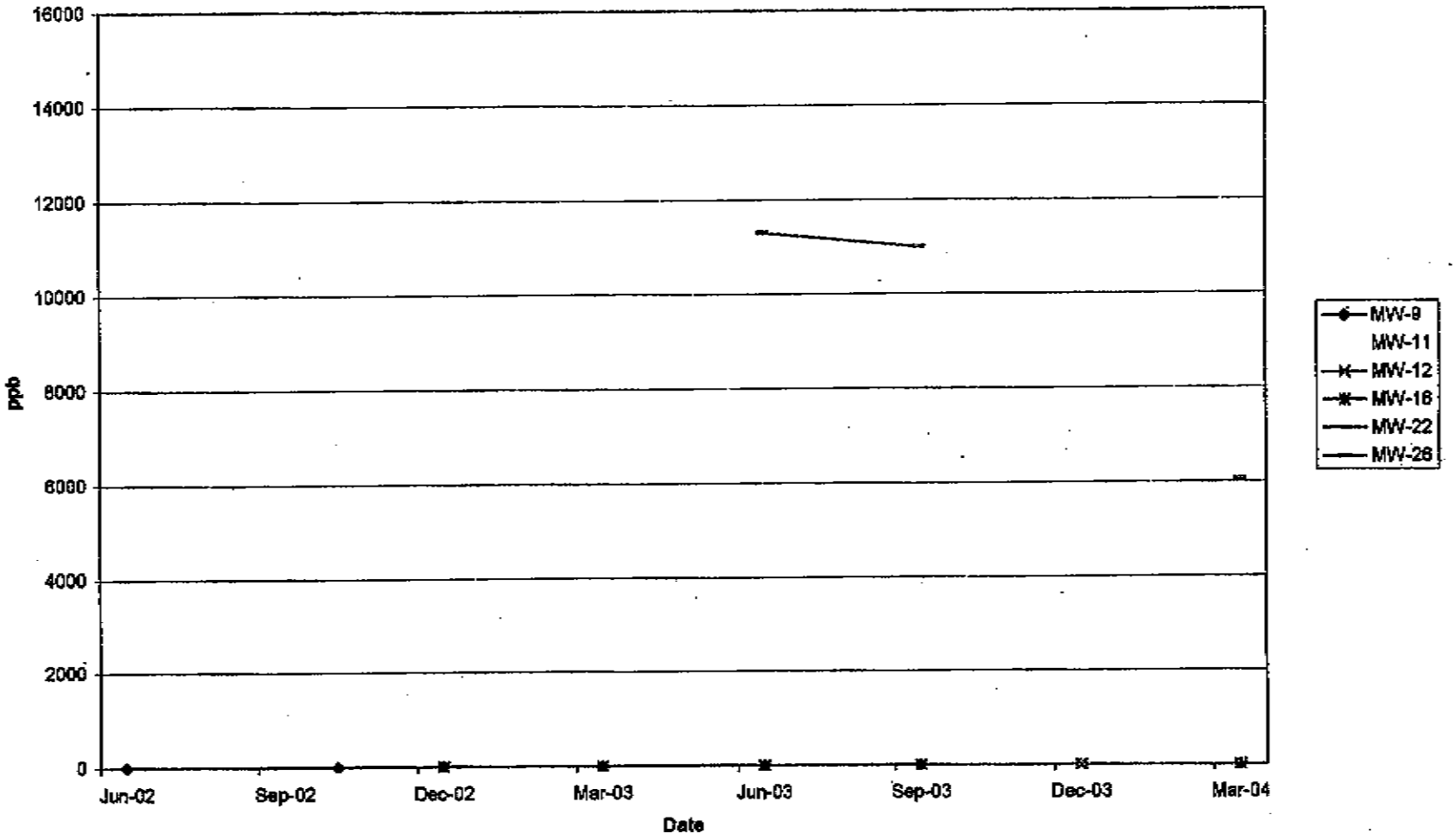

Dissolved Acetone in 1st Water Wells
(excluding MW-10, MW-18 and MW-19 for smaller scale)
35000
30000
25000
20000
15000
10000
5000
0
ppb
Jun-02
Sep-02
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-9
MW-11
MW-12
MW-16
MW-22
MW-26

ANCHEM0585


Dissolved MEK in 1st Water Wells
60000
50000
40000
30000
20000
10000
0
ppb
Jun-02
Sep-02
Dec-02
Mar-03
Jun-03
Sep-03
Dec-03
Mar-04
Date
MW-9
MW-10
MW-11
MW-12
MW-16
MW-18
MW-19
MW-22
MW-26

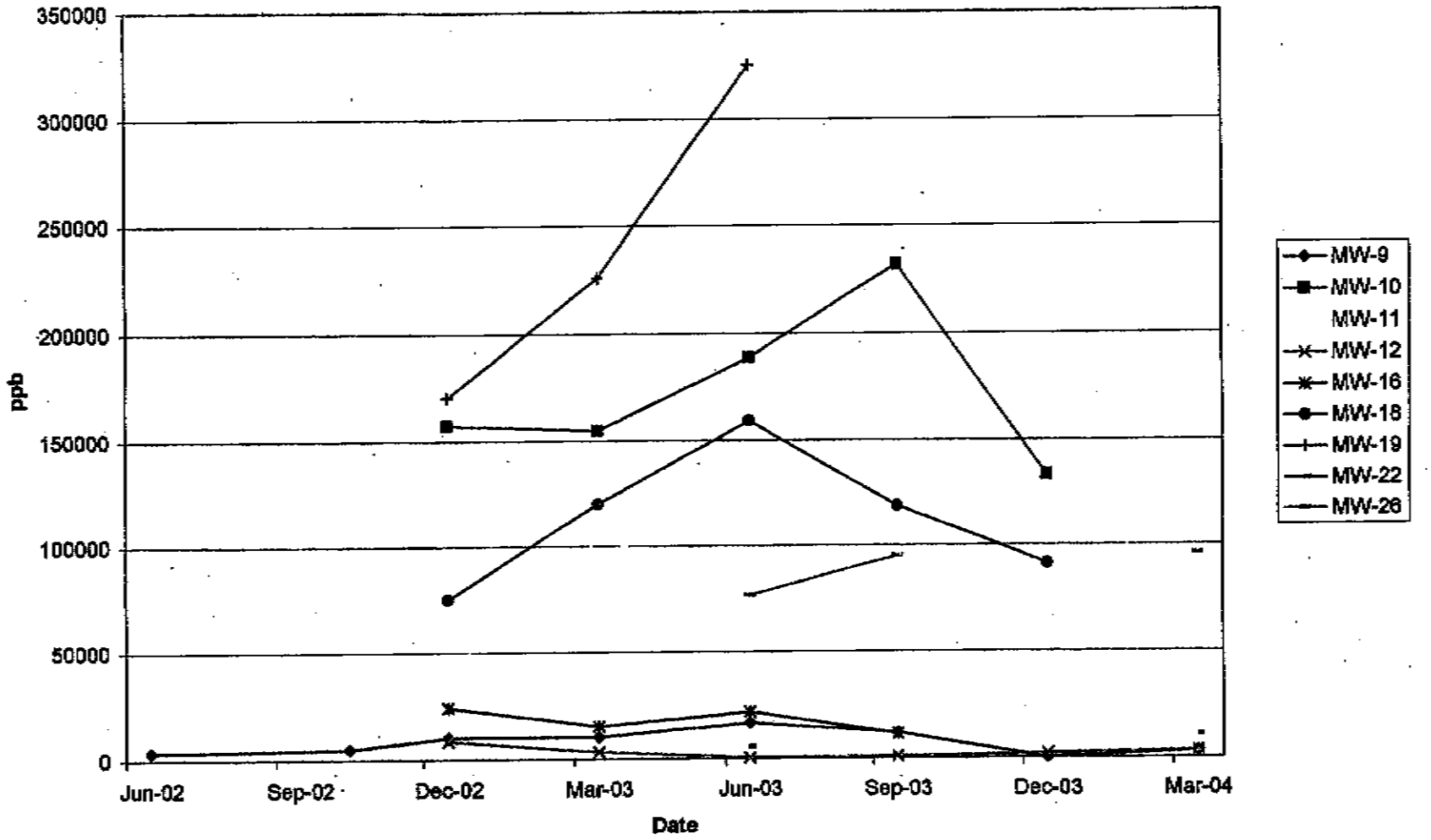
ANCHEM0586

**Dissolved MEK in 1st Water Wells**
**(excluding MW-10, MW-18 and MW-19 for smaller scale)**



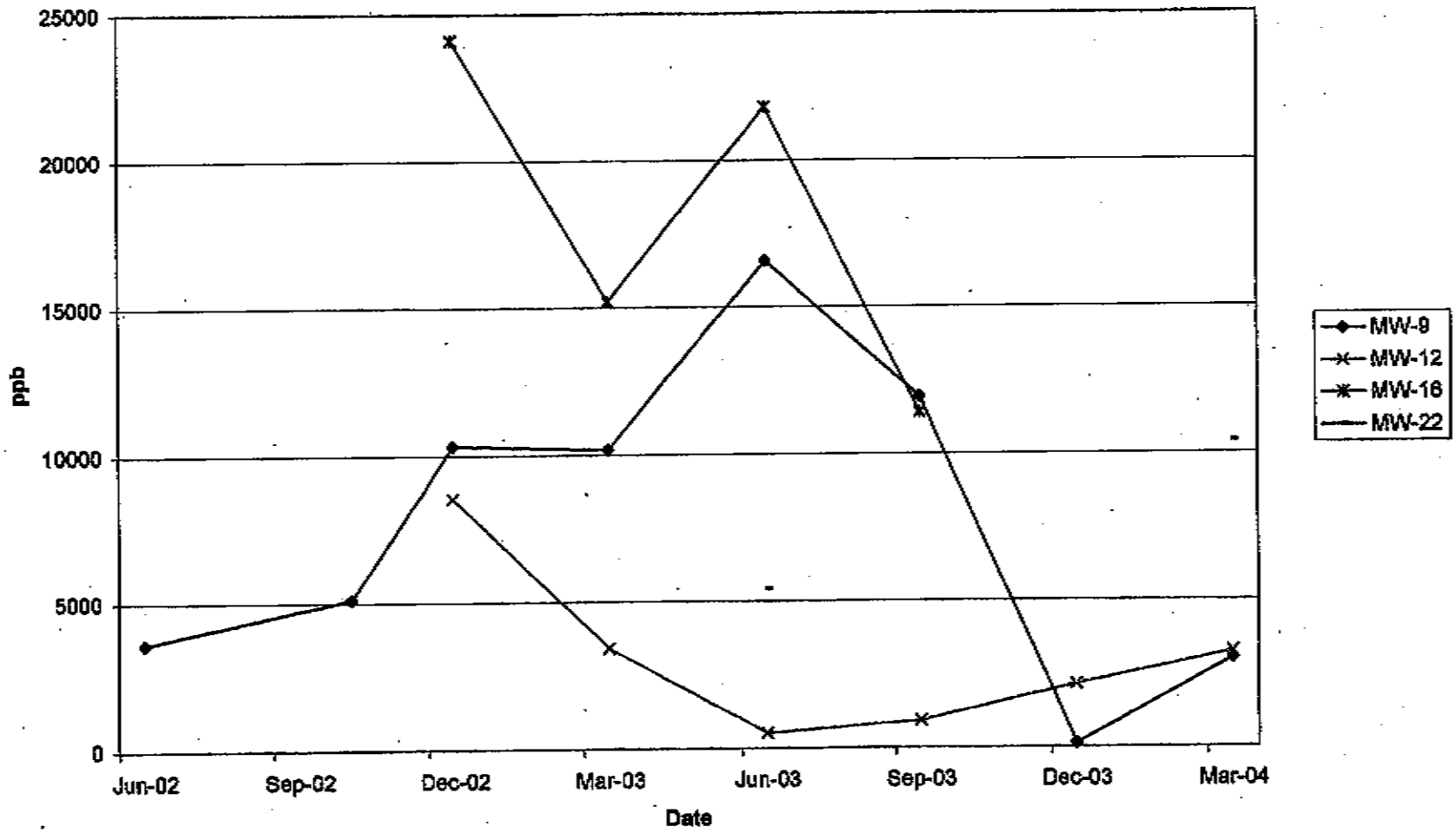

ANCHEM0587

## Total Dissolved VOCs in 1st Water Wells



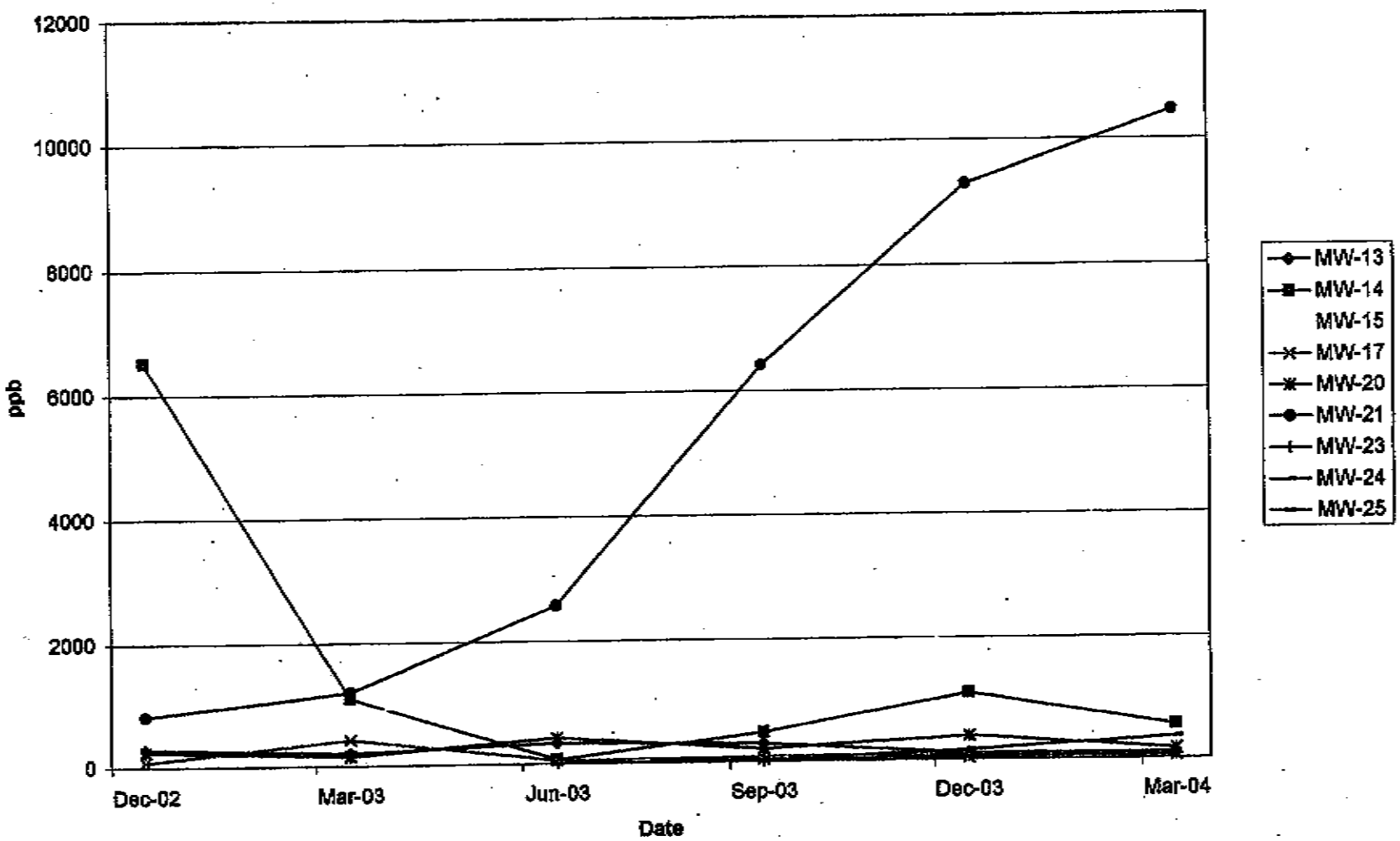

ANCHEM0588

**Total Dissolved VOCs in 1st Water Wells**
**(excluding MW-10, MW-11, MW-18, MW-19 and MW-26)**



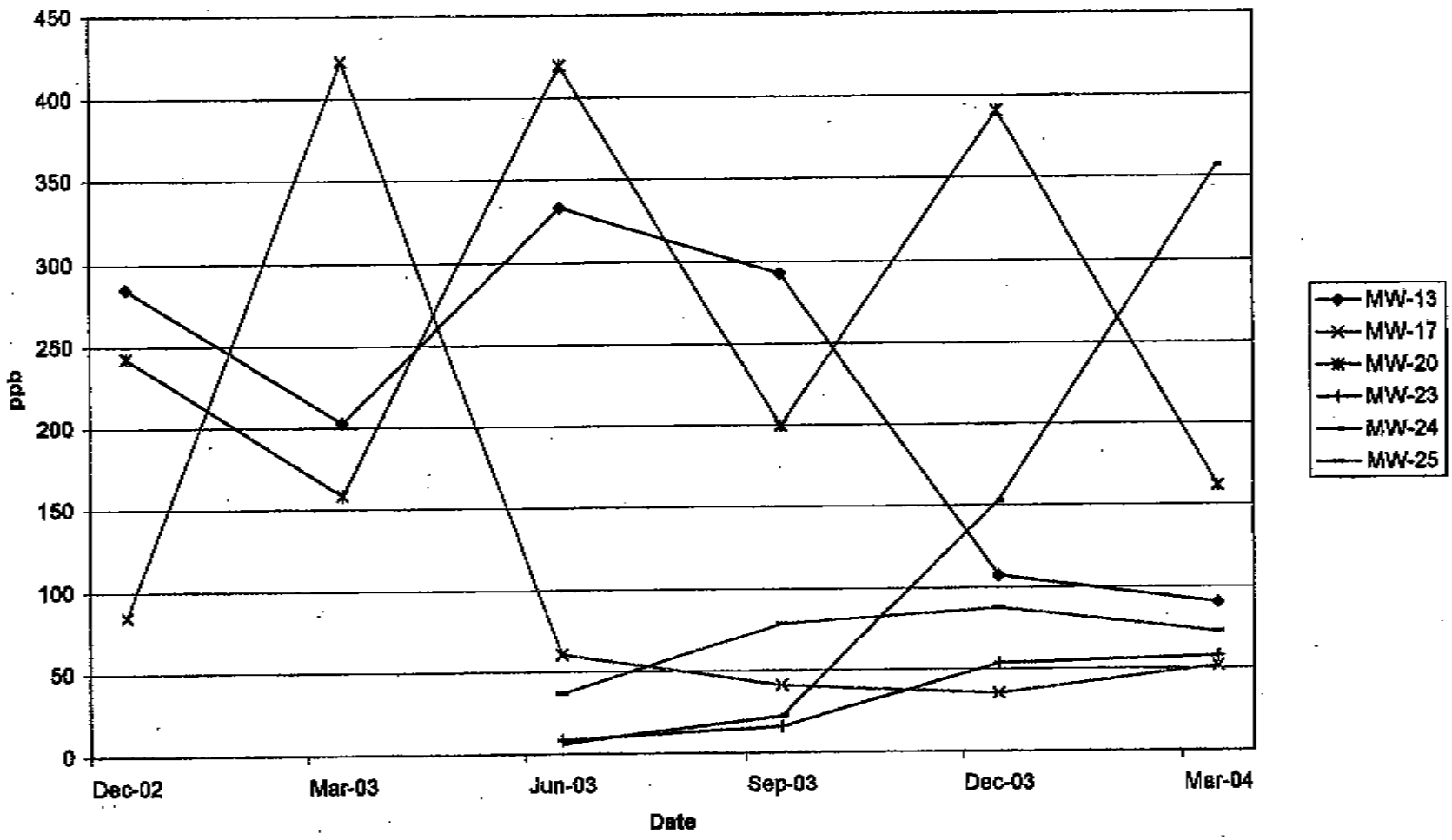

ANCHEM0589

## Total Dissolved VOCs in A1 Wells




ANCHEM0590

**Total Dissolved VOCs in A1 Wells**
**(excluding MW-14, MW-15 and MW-21 for smaller scale)**




ANCHEM0591