KELLY-MOORE PAINT COMPANY, INC.

May 2, 2000

Don Hwang, HazMat Specialist
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

Re.: 969 San Pablo Avenue, Albany California
ProTech Project #107-OH99

Dear Mr. Hwang,

Please accept this letter as acknowledgement that I have read the enclosed report, dated April 2000, and agree with the recommendations as stated in section 3-2.

Please do not hesitate to contact me with any questions or concerns regarding the above.

Sincerely,

W. E. Berry
Real Estate Manager
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email bberry@kellymoore.com

cc: Woody Lovejoy

Pro Tech
CONSULTING & ENGINEERING ENVIRONMENTAL SERVICES

QUARTERLY GROUNDWATER MONITORING REPORT

CONDUCTED AT

KELLY-MOORE PAINT STORE
969 SAN PABLO AVENUE
ALBANY, CALIFORNIA

PREPARED FOR

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987 COMMERCIAL STREET
SAN CARLOS, CALIFORNIA 94070

APRIL 2000

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APRIL 2000

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1.0 - PROJECT BACKGROUND

1.1 - INTRODUCTION

ProTech Consulting & Engineering, Inc. (ProTech) was retained by Kelly-Moore Paint Company (K/M) to perform quarterly groundwater monitoring and reporting at 969 San Pablo Avenue, Albany, California (site). ProTech has performed multiple tasks on this site, including: Phase I - Environmental Site Assessment, hydraulic lift removal, soil boring and groundwater monitor well installation, and groundwater monitoring. The last groundwater monitoring was performed in December 1999. The work reported here was required and/or approved by the Alameda County Health Agency (ACHA).

1.2 - SITE DESCRIPTION

The site is located in Albany, at the junction of San Pablo Avenue and Buchanan Street (Figure 1). It is a commercial building that will be converted from a vehicle maintenance operation to a retail paint store. The site consists of one building that is L-shaped and parking lots both in front and behind the building (Figure 2). The existing groundwater monitor wells are located along the east side of the building (front) and on the north side of the building, along San Pablo Avenue (Figures 2 and 3).

1.3 - SITE BACKGROUND

The site is a former vehicle repair facility which was operated by Firestone Tire and Rubber until the early 1990 when it was sold to Super Shops, Inc. that operated it as vehicle repair and modification shop. Firestone operated a waste oil tank on the site until they removed it in May 1990 (ERM, 1990a).

Initially, chemicals of concern included: [total extractible petroleum hydrocarbons, characterized as diesel (TEPH-d); oil and grease (O&G); benzene, toluene, ethyl-benzene, and xylenes (BTEX); 1,2-dichloroethane (1,2-DCA), 1,1-dichloroethane (1,1-DCA), 1,1,1-trichloroethane (1,1,1-TCA), and tetrachloroethylene (PCE); chromium Cr), lead (Pb), and nickel (Ni)] were found during the tank removal (ERM, 1990a).

Four groundwater monitor wells (MW-1, MW-2, MW-3, and MW-4) were installed to monitor groundwater conditions. The soil samples from the boring for MW-1 contained TEPH-d in the three samples collected (Table 1) between 5.5 ft and 10.5 ft below grade (fbg). The 10.5 fbg sample also contained benzene, xylenes, 1,1-DCA, 1,2-DCA, 1,1,1-TCA, and PCE. The soil sample collected 16 fbg in the boring for MW-2 contained ethyl-benzene and xylenes. Soil samples from the other two soil borings for monitor wells MW-3 and MW-4 were below method detection limits (MDLs) for the compounds tested for (Table 2). The groundwater sample from monitor well MW-1 contained benzene, 1,1-DCA, 1,1,1-TCA, trichloroethylene (TCE), and PCE, while the groundwater samples from MW-2 and MW-3 were below method detection limits (MDLs) for all compounds tested for. The groundwater sample from monitor well MW-4 contained TCE (ERM, 1990a). ERM reported a apparent mounding of groundwater in the vicinity of the former tankpit. They attributed this mounding to infiltration of surface water through the tankpit backfill.

Based on the results of soil sampling and groundwater results, Firestone decided to remove additional soil from the excavation in an attempt to remove the source. During this removal, monitor well MW-1 was destroyed. Results of confirmatory soil sampling indicated that TEPH-d was only detected in one of the sidewall samples (CS-3) at 8 fbg at 3.8 ppm (ERM, 1990b).

Recommendations were made to perform quarterly groundwater monitoring for one year and then to re-evaluate the site conditions (ERM, 1990b). According to County personnel (Susan Hugo)[1] this work was never done.

ProTech performed a Phase I - Environmental Site Assessment (Phase I) in April 1998 on the property for K/M prior to their purchase of the property. During this task, ProTech located two of the three remaining groundwater monitor wells (MW-3 and MW-4), while well MW-2 was not evident during site reconnaissance activities. ProTech also identified 5 hydraulic lifts (Figure 2) that were present in the garage portion of the building (ProTech, 1998a).

After review of the Phase I report, K/M instructed ProTech to develop and sample the two groundwater monitor wells (MW-3 and MW-4). In April 1998, ProTech developed the two groundwater monitor wells and collected groundwater samples for analysis for total petroleum hydrocarbons, characterized as gasoline (TPH-g), TEPH-d, TEPH, characterized as kerosene (TEPH-k), TEPH, characterized as motor oil (TEPH-mo), BTEX, O&G, and volatile organic compounds (VOCs). Results of the groundwater analyses (Figure 3) indicated that monitor well MW-3 was

[1] Personal communication with Susan Hugo, June 1998.

below MDLs for the compounds tested for, while monitor well MW-4 contained 1,1-DCA, cis-1,2-Dichloroethylene (cis-1,2-DCE), and PCE (ProTech, 1998b) at levels of interest. With the Phase I report and these groundwater results in-hand, K/M purchased the property.

In September 1998, K/M began removal of the 5 hydraulic lifts. ProTech witnessed the removal of all 5 lifts and collected soil samples from three of the pits (Pit #s 1, 4, and 5) where the rams were compromised and/or soil staining was evident. The soil samples were collected after soil was excavated to a point where contamination was no longer evident. The analyses, which were specified by ACHA, were for total extractable petroleum hydrocarbons, characterized as hydraulic oil (TEPH-ho), VOCs, and LUFT Manual metals. Results from two of the pits (Pit #s 4, and 5) were below the MDLs of the analyses or present below regulated concentrations. Results from the third pit (Pit #1) indicated that TEPH-ho was detected at 500 ppm. Additional soil was excavated from this pit (approximately 3 ft below the groundwater table) and a second soil sample was collected for analysis. Results (Figure 2) indicated that TEPH-ho was still present at 1,400 ppm (ProTech, 1998c).

Results of soil samples were collected from "likely dirty" stockpiled soil indicated that petroleum hydrocarbons (TEPH-ho) required regulated disposal. This stockpiled soil was disposed of as a Class II - designated waste at Forward Landfill (ProTech, 1998c).

The County agreed that the "likely clean" soil, which came from the upper 3 feet of material in each pit and exhibited no evidence of contamination, could be re-used on-site as backfill above the water table. They further agreed that further assessment of the site would be through groundwater monitoring and the installation of two additional groundwater monitor wells (ACHA, 1999).

ProTech prepared a Workplan for the installation of the two additional groundwater monitor wells that the County requested plus a survey for top-of-casing (TOC) elevations of the new and existing wells (ProTech, 1999a).

Two groundwater monitor wells (MW-5 and MW-6) were installed March 1999. Soil samples were collected from the two soil borings for analysis for petroleum products, aromatic hydrocarbons, the fuel additive: methyl tert-butyl ether (MTBE), volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs). The results indicated that only the soil samples from the boring for well MW-6contained any compounds analyzed for above their method detection limits (MDLs). The only compound found was TEPH-d at 1.9 ppm (8 fbg) and 3.8 ppm (18 fbg). The two new wells (MW-5 and MW-6) were developed and purged, and the existing two wells (MW-3 and MW-4) were purged prior to collecting groundwater samples. The results of groundwater sampling indicate that

none of the wells contain measurable petroleum hydrocarbons (TPH-g or TEPH-d), aromatic hydrocarbons (BTEX), MTBE, or SVOCs. All four wells contained 1,1-DCA, and PCE, while wells MW-5 and MW-6 also contained chloroform, and TCE, and well MW-4 also contained 1,1-DCE, cis-1,2-DCE, and vinyl chloride.[2] California maximum contaminant levels (MCLs) have been exceeded for 1,1-DCA, cis-1,2-DCE, PCE, and vinyl chloride. The four monitor wells (MW3 through MW-6 were surveyed TOC elevations. Monitor well MW-2 was not located during this field effort. ProTech recommended that the TPH-g, TEPH-d, BTEX, and MTBE, be removed from the analyte list for quarterly monitoring (ProTech, 1999b).

1.4 - PRESENT CONCERNS

The County reviewed the ProTech report and prepared a comment letter. In this letter they expressed concern about:

- the concentrations of the VOCs that exceed California MCLs.
- the status of well MW-2, and
- the limits of the former waste oil tank excavation with regard to wells MW-5 and MW-6.

They directed K/M to:

- continue quarterly groundwater monitoring, with approval to remove TPH-g, TEPH-d, BTEX, and MTBE from the analyte list;
- locate MW-2 or its remnants prior to resurfacing of the parking lot; and
- plot the limits of the excavation on the site plan (ACHA, 1999b).

ProTech requested in a letter that the drill cuttings be used on-site as fill material due to the lack of compounds of concern (ProTech, 1999c). The County agreed to allow this re-use of soil cuttings (ACHA, 1999b).

The second quarter of groundwater monitoring was performed on 16 June 1999. During reconnaissance and setup for sampling the four wells (MW-3, MW-4, MW-5, and MW-6) we discovered well MW-2. It had been buried under the planter along the north end of the building. We sampled all five wells. Well MW-2 did not contain any of the compounds tested for. The other four wells (MW-3, MW-4, MW-5, and MW-6) contained 1,1-DCA, and PCE, while wells MW-5 and

[2] 1,1-DCA was improperly reported as 1,2-DCA in the April 1999 well installation report. All data tables have been corrected for this report. 1,2-DCA has not been detected by ProTech in its three sampling efforts, while 1,1-DCA has.

MW-6 also contained chloroform, and TCE. Well MW-4 also contained 1,1-DCE, cis-1,2-DCE, and vinyl chloride. California MCLs continue to be exceeded in well MW-4 for 1,1-DCA, cis-1,2-DCE , PCE, TCE and vinyl chloride, and in well MW-5 for 1,1-DCA. Well MW-2 was surveyed for TOC elevation. ProTech requested verbally that SVOCs be removed from the analyte list for quarterly monitoring since they had not been detected in previous monitoring events (ProTech, 1999c).

The County reviewed the ProTech QMR, including a proposed risk management assessment to close the site, and prepared a comment letter (ACHA, 1999c). In this letter they expressed concern:

- that a "risk management plan (RMP) may essentially allow for a reduced frequency in groundwater monitoring, however it would not include closure for the site" based on fact that concentrations of VOCs continue to exceed California MCLs.
- that "analysis for SVOCs may be discontinued due to Non Detect results from past sampling event. It appears that you have already taken the initiative to discontinue the analysis for SVOCs, based on the fact that this monitoring event did not include the analysis for these constituents";
- "future groundwater monitoring reports, and any additional reports or workplans, shall include an attached cover letter, signed by a representative of your company (Kelly-Moore) acknowledging that the company has read the report and agrees to any recommendations or proposals; and
- that future groundwater monitoring reports include copies of field data sheets showing levels of turbidity, noting odors, percent recharge in wells hen samples were collected, pH, temperature, etc."

The third quarter of groundwater monitoring was performed on 15 September1999. We sampled all five wells. Well MW-2 did not contain any of the compounds tested for. The other four wells (MW-3, MW-4, MW-5, and MW-6) contained 1,1-DCA, PCE, and TCE, while MW-4 also contained 1,1-DCE, cis-1,2-DCE, and vinyl chloride. California MCLs continue to be exceeded in well MW-4 for 1,1-DCA, cis-1,2-DCE , PCE, and vinyl chloride, while in well MW-5 1,1-DCA is above its MCL, and in well MW-6 PCE is above its MCL (ProTech, 1999d).

The County did not prepare a response letter to the third quarter monitoring report.

The fourth quarter of groundwater monitoring was performed on 15 December 1999. We sampled all five wells. Well MW-2 did not contain any of the compounds tested for. The other four wells (MW-3, MW-4, MW-5, and MW-6) contained 1,1-DCA, PCE, and TCE, while MW-4 also contained cis-1,2-DCE. California MCLs continue to be exceeded in well MW-4 for 1,1-DCA, cis-1,2-DCE,

and PCE, while in well MW-5 1,1-DCA is above its MCL, and in well MW-6 PCE is above its MCL (ProTech, 2000a).

The County did not prepare a response letter to the fourth quarter monitoring report. We contacted the County a week before the March 2000 monitoring was scheduled and learned that the case officer had changed for this project. During this teleconference, and several more over the next week, we also negotiated the method of purging that we could use, as had been requested in the fourth quarter 1999 monitoring report. The negotiated method was a slow purge effort ensuring the wells were not dewatered during the removal of one wellbore volume from each well.

This report presents the results of the first quarter of groundwater monitoring (16 March 2000) as requested by County.

2.0 - SCOPE-OF-WORK

2.1 - INTRODUCTION

On 16 march 2000, ProTech performed the first quarterly monitoring at the site for 2000. The scope-of-work performed is outlined below:

1. Measure the depth-to-groundwater (DTW) in each of the groundwater monitor wells;
2. Purge each well prior to collecting a groundwater sample for analysis;
3. Analyze each of the groundwater samples for VOCs; and
4. Prepare a quarterly groundwater monitoring report that includes the results of groundwater DTW measurements, and groundwater sample analysis. The report will include:
   - Tables showing tabulated DTW, development and purge parameters, groundwater elevations, and analytical results;
   - Figures illustrating groundwater flow direction and analytical results; and
   - Appendices including laboratory reports and chain-of-custody forms.

The fieldwork and laboratory analysis tasks are complete. This document represents the report task of the project.

2.2 - GROUNDWATER MEASUREMENTS

On 16 March 2000, we measured the total depth (TD) of each of the wells to determine their status prior to purging for analysis. Monitor well MW-2 measured a TD of 14.53 feet below grade (fbg), MW-3 measured a TD of 14.43 fbg, MW-4 measured a TD of 14.68, MW-5 measured a TD of 20.08 fbg, and MW-6 measured a TD of 19.84. The TDs for the monitor wells were the same as those previously measured (September 1999).

On 16 March 2000, ProTech also measured the depth-to-water (DTW) in each of the groundwater monitor wells (MW-2 through, MW-6). The results of these measurements are tabulated on Table 1, along with the converted groundwater elevations. The groundwater gradient was calculated to be 0.149. Figure 3 illustrates the current groundwater elevations and estimated flow direction, while

Figure 4 illustrates the historical groundwater elevations over time in each of the wells.[3] The groundwater elevations rose an average of 1.76 feet (3.18 feet for MW-2, 3.31 feet for MW-3, 0.15 feet for MW-4, 0.56 feet for MW-5, and 1.62 feet for MW-6). This rise in elevation is related to recent rainfall in the area, the dirt driveway condition that still existed until early March.

2.3 - WELL PURGING AND SAMPLING

The total wellbore water volume was calculated using the DTW and TD measurements to calculate the wellbore volume of each well so we could determine the volume of groundwater that would need to be removed. Usually it is between 3 and 10 wellbore volumes. These calculations are shown on Table 2. These wells are very low producers and removal of more than two wellbore volumes is very difficult without dewatering the wells. We changed our purging approach during this monitoring event: the wells were purged using a low-flow approach so as not to dewater the wells. We also limited the groundwater removal to approximately 1 wellbore volume in each of the wells, as shown on Table 2.

The wells were purged by using either a downhole submersible pump (MW-2, MW-5, and MW-6) or a peristaltic pump (MW-3 and MW-4). During purging, the parameters: pH, conductivity, and temperature were monitored, while clarity or turbidity of water was observed. They were monitored at the commencement of pumping, after the well had dewatered.[4] The parameter testing results are shown on Table 3. ProTech continued to compare the parameter testing from all monitoring events. This comparison, which is shown on Table 4, indicates that the measured parameters are stabilizing during purging, using this new approach of not allowing the wells to dewater.[5] The field data sheets are included in Appendix 1.

While presented in ascending numerical order below, the wells were purged in order from historically

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3 Graphs of historical groundwater levels and historical chemical data are drawn to show trends and patterns, and they are used as a tool to explain anomalies in data.

4 Once the well has dewatered, it is allowed to recover for approximately 1 minute to allow sufficient water to enter the well for collection for parameter testing.

5 Very little study has been performed on low-flow wells and parameter measurements. Current industry practice calls for either the removal of between 3 and 10 wellbore volumes or the measurement and stabilization of pH, conductivity, and temperature, but this is for wells capable of producing sufficient water to avoid dewatering. For low-flow wells that dewater, industry practice is purging the well dry and allowing groundwater to recover to approximately 80% of its initial or static water level.

cleanest to historically dirtiest to reduce the potential of cross-contamination. The submersible pump and associated electrical cord were decontaminated in a triple rinse setup[6] between wells and new tubing was used in each well.[7] The peristaltic pump does not come directly in contact with the groundwater so only the tubing was changed. The order of submersible pump purging and sampling was MW-2, MW-6, and MW-5. The order of peristaltic pump purging was MW-3, and MW-4.

2.3.1 - Monitor Well MW-2

Approximately 6 gallons (0.98 wellbore volumes) was removed from this well during purging. The pump was turned on and left running until the required volume of water had been removed. At the time the pump was started some fine sand was removed, but it cleared up in less than one minute. The purgewater was collected in a 55 gallon drum on-site for temporary storage pending disposal.

Once purged, the groundwater was sampled using a 3 foot, dedicated Teflon bailer.[8] The water collected in the bailer was transferred to the appropriate sample containers (3 40-mil VOA vials). The containers were sealed, checked for air bubbles, labeled, and placed on ice pending transport to ChromaLab, Inc. of Pleasanton, California, a California-certified laboratory (ChromaLab) for analysis.

2.3.2 - Monitor Well MW-3

Approximately 6 gallons (0.98 wellbore volumes) was removed from this well during purging. The pump was turned on and left running until the required volume of water had been removed. At the time the pump was started some fine sand was removed, but it cleared up in less than one minute. The purgewater was collected in a 55 gallon drum on-site for temporary storage pending disposal.

Once purged, the groundwater was sampled using a 3 foot, dedicated Teflon bailer. The water collected in the bailer was transferred to the appropriate sample containers (3 40-mil VOA vials). The containers were sealed, checked for air bubbles, labeled, and placed on ice pending transport to

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6 A triple rinse setup is three buckets, the first with water and TSP, the second with water, and the third with DI water. The pump is soaked and scrubbed with a scrub brush in the first bucket to remove contaminants. It is then rinsed vigorously in the second bucket, and rinsed again in the third bucket. The buckets are rinsed and refilled after each decontamination event.

7 The tubing for each well is decontaminated using the triple rinse setup and then bagged for re-use in the designated well during future quarterly sampling.

8 The bailer for each well is decontaminated using the triple rinse setup and then bagged for re-use in the designated well during future quarterly sampling.

ChromaLab for analysis.

2.3.3 - Monitor Well MW-4

Approximately 4 gallons (1.04 wellbore volumes) was removed from this well during purging. The pump was turned on and left running until the required volume of water had been removed. At the time the pump was started some fine sand was removed, but it cleared up in less than one minute. The purgewater was collected in a 55 gallon drum on-site for temporary storage pending disposal.

Once purged, the groundwater was sampled using a 3 foot, dedicated Teflon bailer. The water collected in the bailer was transferred to the appropriate sample containers (3 40-mil VOA vials). The containers were sealed, checked for air bubbles, labeled, and placed on ice pending transport to ChromaLab for analysis.

2.3.4 - Monitor Well MW-5

Approximately 8 gallons (1.04 wellbore volumes) was removed from this well during purging. The pump was turned on and left running until the required volume of water had been removed. At the time the pump was started some fine sand was removed, but it cleared up in less than one minute. The purgewater was collected in a 55 gallon drum on-site for temporary storage pending disposal.

Once purged, the groundwater was sampled using a 3 foot, dedicated Teflon bailer. The water collected in the bailer was transferred to the appropriate sample containers (3 40-mil VOA vials). The containers were sealed, checked for air bubbles, labeled, and placed on ice pending transport to ChromaLab for analysis.

2.3.5 - Monitor Well MW-6

Approximately 8 gallons (0.98 wellbore volumes) was removed from this well during purging. The pump was turned on and left running until the required volume of water had been removed. At the time the pump was started some fine sand was removed, but it cleared up in less than one minute. The purgewater was collected in a 55 gallon drum on-site for temporary storage pending disposal.

Once purged, the groundwater was sampled using a 3 foot, dedicated Teflon bailer. The water collected in the bailer was transferred to the appropriate sample containers (3 40-mil VOA vials). The containers were sealed, checked for air bubbles, labeled, and placed on ice pending transport to

ChromaLab for analysis.

2.4 - ANALYTICAL RESULTS

The groundwater samples were transported to ChromaLab by a ChromaLab courier on 16 March 2000 for analysis. The groundwater samples were analyzed for VOCs. The results are discussed below, and tabulated in Table 1. Figures 5 through 8 illustrate the historical results for monitor wells MW-3 through MW-6, respectively. No figures have been prepared for MW-2 since it was below method detection limits (MDLs) for the compounds tested for. The laboratory results and chain-of-custody (COC) forms are included as Appendix 2.

2.4.1 - Monitor Well MW-2

All compounds tested for were below their respective MDLs (ranging between 0.5 ppb and 50 ppb depending on compound) during this sampling and analysis effort.

2.4.2 - Monitor Well MW-3

The results of the VOCs analyses indicated that 1,1-DCA was detected at 1.20 ppb (MDL of 0.5 ppb), PCE was detected at 1.60 ppb (MDL of 0.5 ppb), and TCE was detected at 2 ppb (MDL of 0.5 ppb). All other compounds tested for were below their MDLs (ranging between 0.5 ppb and 50 ppb depending on compound).

2.4.3 - Monitor Well MW-4

The results of the VOCs analyses indicated that 1,1-DCA was detected at 58 ppb (MDL of 0.5 ppb), 1,1-DCE was detected at 0.84 ppb, cis-1,2-DCE was detected at 18 ppb (MDL of 0.5 ppb), PCE was detected at 10 ppb (MDL of 0.5 ppb), TCE was detected at 44 ppb (MDL of 0.5 ppb), and vinyl chloride was detected at 1.20 ppb (MDL of 0.5 ppb). All other compounds tested for were below their MDLs (ranging between 0.5 ppb and 50 ppb depending on compound).

2.4.4 - Monitor Well MW-5

The results of the VOCs analyses indicated that chloroform was detected at 0.61 ppb (MDL of 0.5 ppb), 1,1-DCA was detected at 5.30 ppb (MDL of 0.5 ppb), PCE was detected at 1.30 ppb (MDL

of 0.5 ppb), and TCE was detected at 1.10 ppb (MDL of 0.5 ppb). All other compounds tested for were below their MDLs (ranging between 0.5 ppb and 50 ppb depending on compound).

2.4.5 - Monitor Well MW-6

The results of the VOCs analyses indicated that 1,1-DCA was detected at 1.30 ppb (MDL of 0.5 ppb), PCE was detected at 5.60 ppb (MDL of 0.5 ppb), and TCE was detected at 0.74 ppb (MDL of 0.5 ppb). All other compounds tested for were below their MDLs (ranging between 0.5 ppb and 50 ppb depending on compound).

3.0 - OBSERVATIONS AND RECOMMENDATIONS

3.1 - OBSERVATIONS

Groundwater elevations have risen further since December. All wells rose with the average increase calculated at 1.76 ft.

Groundwater flow direction continues to be to the southwest, and its calculated gradient has steepened, particularly in the vicinity of MW-3 and MW-4, from December to approximately 0.149.

The parameters of pH, temperature, and conductivity that are checked during well purging are stabilizing most probably due to the new low-flow purge technique applied to the wells. ProTech will continue to monitor these parameters during purging to see if any patterns develop.

Results of groundwater sample analysis indicate that 1,1-DCA, PCE and TCE continue to be detected above their MDLs in wells MW-3 through MW-6, while cis-1,2-DCE, continues to be detected in well MW-4. 1,1-DCE and vinyl chloride were again detected in MW-4 after no being detected in December, and chloroform was again detected in MW-5 after not being detected in the previous 2 quarters.

The concentrations seen during this groundwater monitoring effort indicate that concentrations continue in the same range as the previous quarterly monitoring, with some increasing and some decreasing.

1,1-DCA (58 ppb), cis-1,2-DCE (18 ppb), PCE (5.7 ppb), TCE (44 ppb), and vinyl chloride (1.20 ppb), were again detected above their California MCLs (1,1-DCA - 5 ppb, cis-1,2-DCE - 6 ppb, PCE - 5 ppb, and TCE - 5 ppb,) in MW-4, while 1,1-DCA continues to be detected above its California MCL in MW-5, and PCE (5.60 ppb) was above its California MCL in MW-6. Under the Safe Drinking Water Act, an MCL is defined as a limitation to be placed upon a piped, public drinking water. The relevance and applicability of MCLs at this site is not clear in that shallow groundwater (<50 fbg) is prohibited from use as a drinking water source due to sanitary requirements.

3.2 - RECOMMENDATIONS

The groundwater contamination on-site appears to be contained, with no up-gradient source (the UST was removed in 1990), subsurface lithology that is not conducive to groundwater flow and may actually retard contaminant movement, and a possible down-gradient barrier to shallow groundwater flow in the form of sewer trenches that run in San Pablo Avenue. The County should consider the applicability of the Containment Zone Concept for this site.

It would appear that the new purging method has shown that previous groundwater results may have been lowered by the effect of cascading on groundwater entering a dewatered well. However, it is too early to tell if this is the case or if it is simply due to the rising water table. The parameter monitoring indicates that the wells stabilize better during this low-flow effort than when the wells are dewatered. We recommend continuing this new method of purging for at least the next quarter to see if a pattern develops.

The next quarterly monitoring is tentatively scheduled for the week of 5 June 2000.

This report should be sent to:

Don Hwang, HazMat Specialist
Alameda County Health Agency - Department of Environmental Health
1131 Harbor Bay Parkway, 2nd floor
Alameda, CA 94502

4.0 - REFERENCES

Alameda County Health Agency, 1999a, *Workplan Approval Letter*, 2 March 1999.

_____, 1999b, *Groundwater Well Installation Report Comment Letter*, 27 May 1999.

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Table 1 - Groundwater Elevation Measurement and Analytical Results
Kelly-Moore Paint Company
969 San Pablo Avenue, Albany, CA
ProTech Project #124-OH00

WELL #	DATE	TOC	DTW	GW-ELEV	Chlfrm	1,1-DCA	1,1-DCE	c1,2-DCE	PCE	TCE	VC
MW-2	16-Jun-99	42.14	8.36	33.78	ND	ND	ND	ND	ND	ND	ND
	15-Sep-99	42.14	9.25	32.89	ND	ND	ND	ND	ND	ND	ND
	15-Dec-99	42.14	8.36	33.78	ND	ND	ND	ND	ND	ND	ND
	16-Mar-00	42.14	5.18	36.96	ND	ND	ND	ND	ND	ND	ND
MW-3	21-Apr-98	41.49	7.33	34.16	ND	ND	ND	ND	ND	ND	ND
	29-Mar-99	41.49	5.60	35.89	ND	1.20	ND	ND	1.70	1.60	ND
	16-Jun-99	41.49	7.95	33.54	ND	1.30	ND	ND	1.70	2.30	ND
	15-Sep-99	41.49	8.73	32.76	ND	1.40	ND	ND	1.60	1.90	ND
	15-Dec-99	41.49	8.36	33.13	ND	0.97	ND	ND	1.00	0.98	ND
	16-Mar-00	41.49	5.05	36.44	ND	1.20	ND	ND	1.60	2.00	ND
MW-4	21-Apr-98	41.15	7.52	33.63	ND	**34.00**	ND	5.30	3.60	ND	ND
	29-Mar-99	41.15	7.50	33.65	ND	**84.00**	1.50	**25.00**	**18.00**	**6.50**	**3.10**
	16-Jun-99	41.15	8.73	32.42	ND	**76.00**	1.30	**23.00**	**20.00**	**6.40**	**2.40**
	15-Sep-99	41.15	9.18	31.97	ND	**61.00**	0.74	**18.00**	**16.00**	4.40	**0.91**
	15-Dec-99	41.15	8.95	32.20	ND	**37.00**	ND	**11.00**	**5.70**	2.50	ND
	16-Mar-00	41.15	8.80	32.35	ND	**58.00**	0.84	**18.00**	**10.00**	**44.00**	**1.20**
MW-5	29-Mar-99	41.71	8.14	33.57	0.97	**5.30**	ND	ND	1.60	1.60	ND
	16-Jun-99	41.71	8.91	32.80	0.63	4.80	ND	ND	1.50	1.80	ND
	15-Sep-99	41.71	9.20	32.51	ND	**6.40**	ND	ND	1.80	1.80	ND
	15-Dec-99	41.71	8.86	32.85	ND	**6.70**	ND	ND	1.50	1.40	ND
	16-Mar-00	41.71	8.30	33.41	0.61	**5.30**	ND	ND	1.30	1.10	ND

Table 1 - Groundwater Elevation Measurement and Analytical Results
Kelly-Moore Paint Company
969 San Pablo Avenue, Albany, CA
ProTech Project #124-OH00

WELL #	DATE	TOC	DTW	GW-ELEV	Chlfrm	1,1-DCA	1,1-DCE	c1,2-DCE	PCE	TCE	VC
MW-6	29-Mar-99	42.04	7.74	34.30	0.78	1.40	ND	ND	**6.80**	0.80	ND
	16-Jun-99	42.04	9.25	32.79	ND	1.40	ND	ND	**5.30**	0.80	ND
	15-Sep-99	42.04	9.71	32.33	ND	1.80	ND	ND	**6.20**	0.87	ND
	15-Dec-99	42.04	9.00	33.04	ND	1.20	ND	ND	4.80	0.56	ND
	16-Mar-00	42.04	7.38	34.66	ND	1.30	ND	ND	**5.60**	0.74	ND

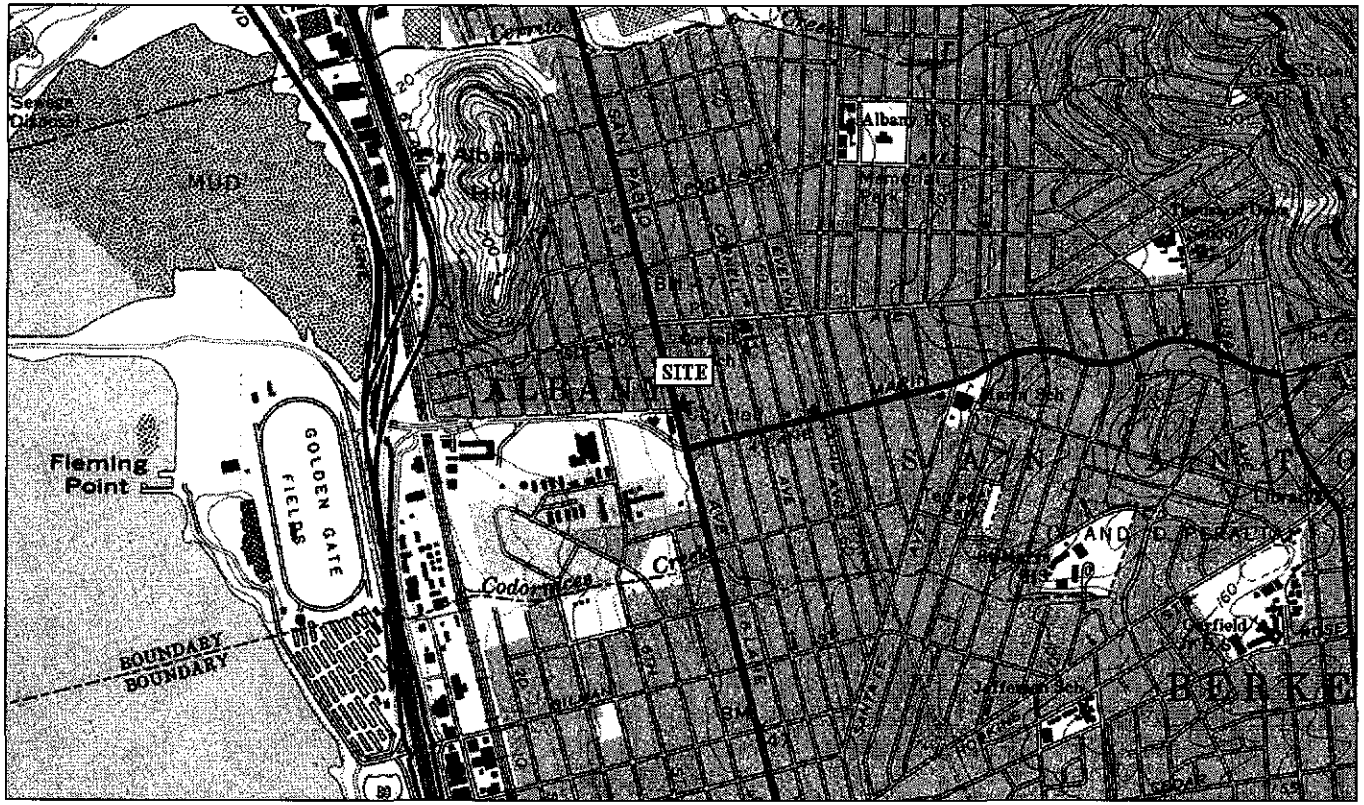
Notes:
TOC = top of casing elevation (ft above mean sea level - [ft-amsl])
DTW = depth to water (ft below TOC)
GW-ELEV = groundwater elevation (ft-amsl)
All results reported in parts-per-billion (ppb)
MDL = method detection limit
MCL = maximum contaminant level (EPA and California cited)
Chlfrm = Chloroform (MDL-0.5 ppb) (MCL-80 ppb)
1,1-DCA = 1,1-dichloroethane (MDL-0.5 ppb) (MCL-5 ppb [California])
1,1-DCE = 1,1-dichloroethylene (MDL-0.5 ppb) (MCL-7 ppb [EPA] 6 ppb [California])
c1,2-DCE = cis 1,2-dichloroethylene (MDL-0.5 ppb) (MCL-70 ppb [EPA] 6 ppb [California])
PCE = tetrachloroethylene (MDL-0.5 ppb) (MCL-5 ppb [EPA & California])
TCE = trichloroethylene (MDL-0.5 ppb) (MCL-5 ppb [EPA & California)
VC = vinyl chloride (MDL-0.5 ppb) (MCL-2 ppb [EPA] 0.5 ppb [California])
NA = not analyzed for
ND = not detected above method detection limit
Bold =greater than California MCL

Table 4 - Comparison of Parameter Testing Results
Kelly-Moore Paint company
969 San Pablo Avenue, Albany, CA
ProTech Project #124-OH00

Well #	GR	Date	pH	ΔpH	Cond	ΔCond	Temp	ΔTemp
	0.00	15-Dec-1999	7.47		2.00		58.10	
	7.00		7.54	0.07	1.52	0.48	61.60	3.50
	15.00		7.46	0.08	1.54	0.02	62.20	0.60
	0.00	16-Mar-2000	7.51		1.59		61.00	
	4.00		7.49	0.02	1.56	0.03	62.40	1.40
	8.00		7.49	0.00	1.54	0.02	62.40	0.00
MW-6	0.00	29-Mar-1999	7.24		1.19		66.40	
	8.00		7.32	0.08	1.30	0.11	63.80	2.60
	17.00		7.31	0.01	1.27	0.03	63.20	0.60
	28.00		7.36	0.05	1.26	0.01	63.60	0.40
	0.00	16-Jun-1999	7.29		1.28		62.20	
	14.00		7.55	0.26	1.26	0.02	61.80	0.40
	29.00		7.48	0.07	1.29	0.03	63.00	1.20
	0.00	15-Sep-1999	7.40		1.34		63.40	
	13.00		7.73	0.33	1.31	0.03	64.20	0.80
	0.00	15-Dec-1999	7.59		1.69		57.80	
	7.00		7.51	0.08	1.60	0.09	60.80	3.00
	13.00		7.47	0.04	1.34	0.26	61.00	0.20
	0.00	16-Mar-2000	7.65		1.58		61.60	
	4.00		7.64	0.01	1.60	0.02	61.40	0.20
	8.00		7.58	0.06	1.61	0.01	61.20	0.20

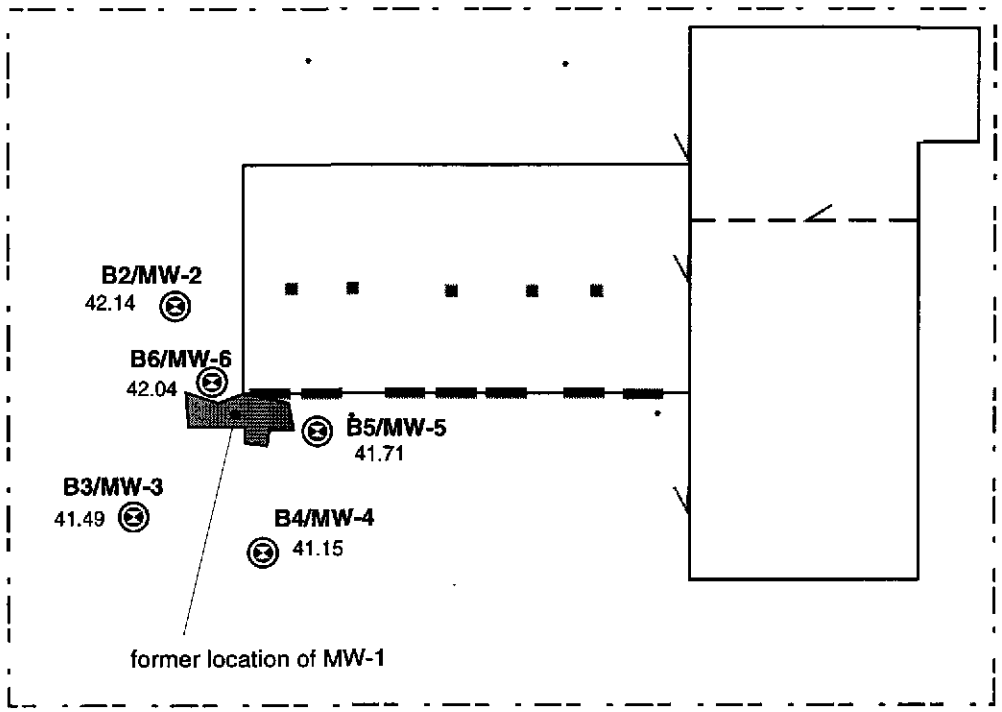
Notes: GR = approximate gallons removed at time of measurement
pH in standard units
Cond = Conductivity (µmho/cm)
Temp = temperature (º F)

ProTech



ProTech Consulting & Engineering	Job No. 000104		**Site Location Map** Groundwater Sampling Program Kelly-Moore Paint Company 969 San Pablo Avenue, Albany, CA	N	Figure 1
	Date 16 March 2000				
	Drawn by WL				
	Rev CHT	Apprvd WL			

Project



San Pablo Avenue

Legend

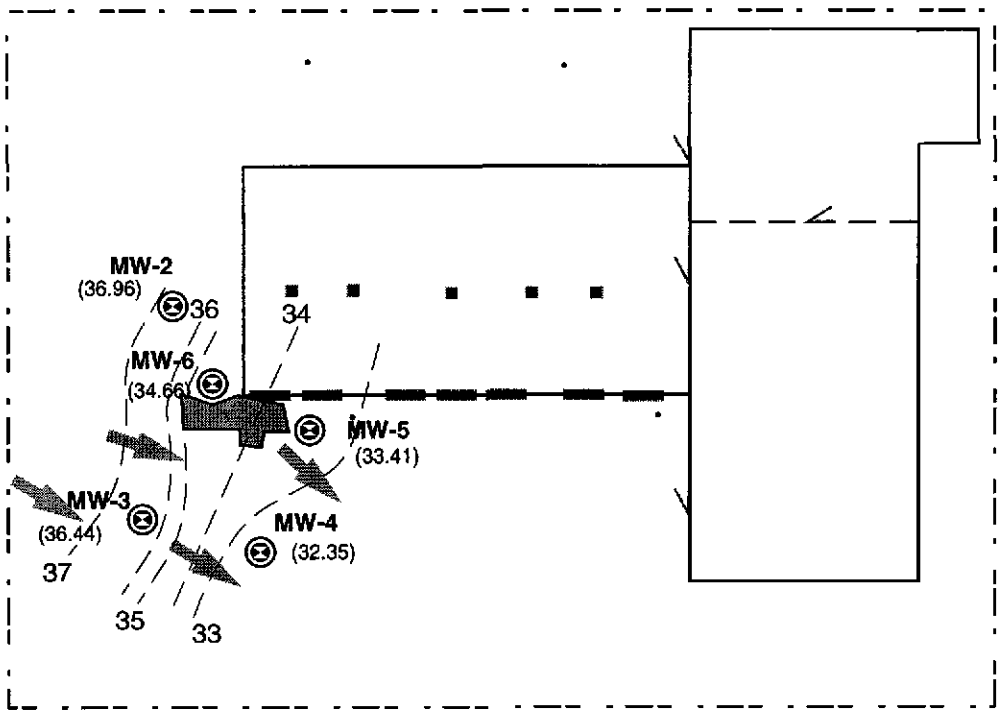
- Property Boundary
- B3/MW-3 41.49 — Boring/Groundwater Monitoring Well ID# w/TOC elevation (ft-AMSL)
- Doorway
- Sewer Cleanout
- Garage Doors
- Former hydraulic Lifts
- Former waste oil tank excavation limits

Approx scale

0 44

(feet)

ProTech Consulting & Engineering	Job No. 000104 Date 16 March 2000 Drawn by WL Rev CHT Apprvd WL	Project **Site Plan w/ Well Locations** Groundwater Sampling Program Kelly-Moore Paint Company 969 San Pablo Avenue, Albany, California	N	Figure **2**



San Pablo Avenue

Legend

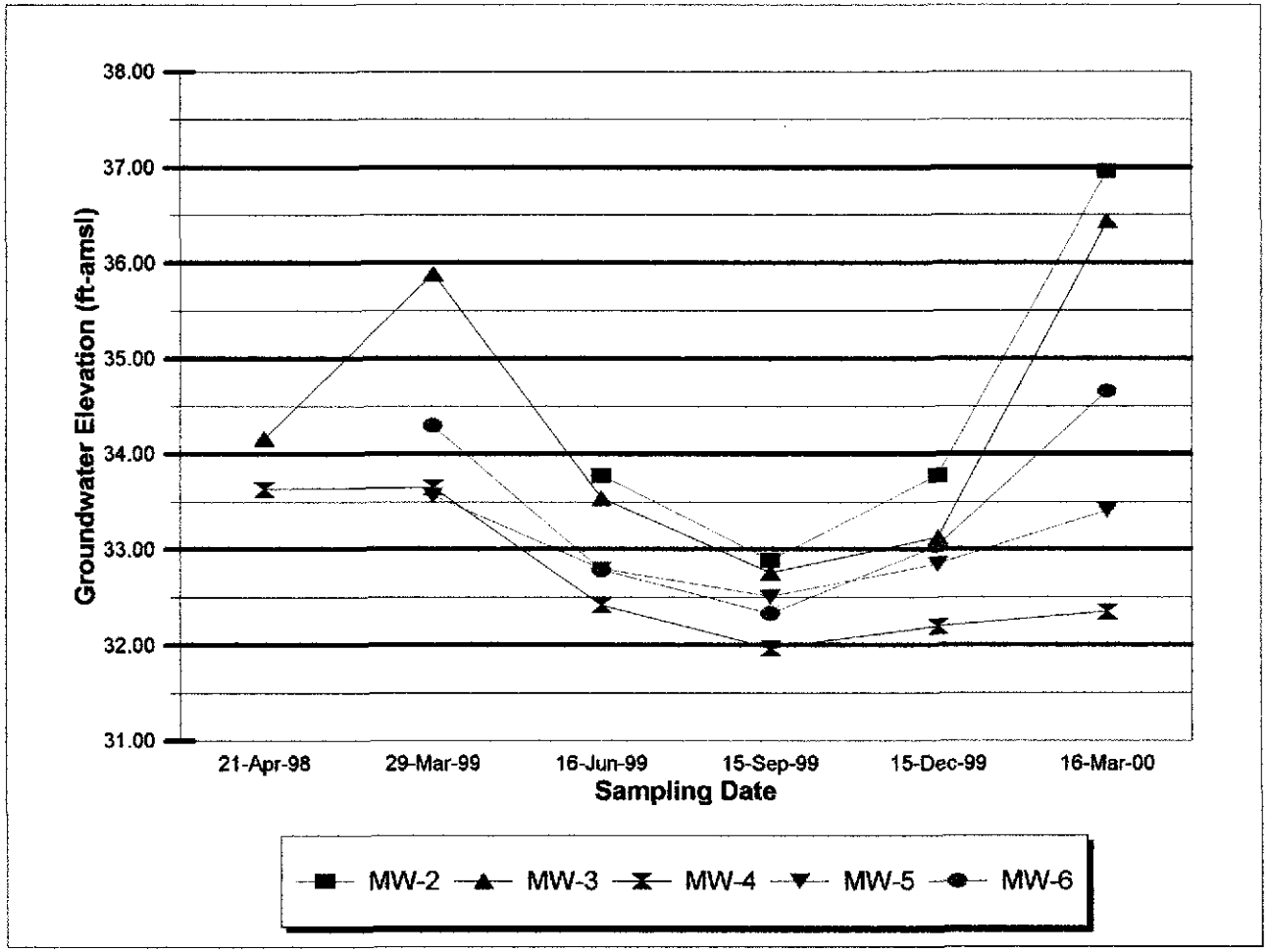
- Property Boundary
- MW-3 (36.44) — Groundwater Monitoring Well w/groundwater elevation (ft-AMSL)
- Doorway
- Sewer Cleanout
- Garage Doors
- Former Hydraulic Lifts
- Former waste oil tank excavation limits
- 0.149 — Estimated Groundwater Flow Direction & Estimated Gradient (between MW-3 and MW-4)
- 33 — Groundwater contour Line w/elevation (ft-AMSL)

Approx scale

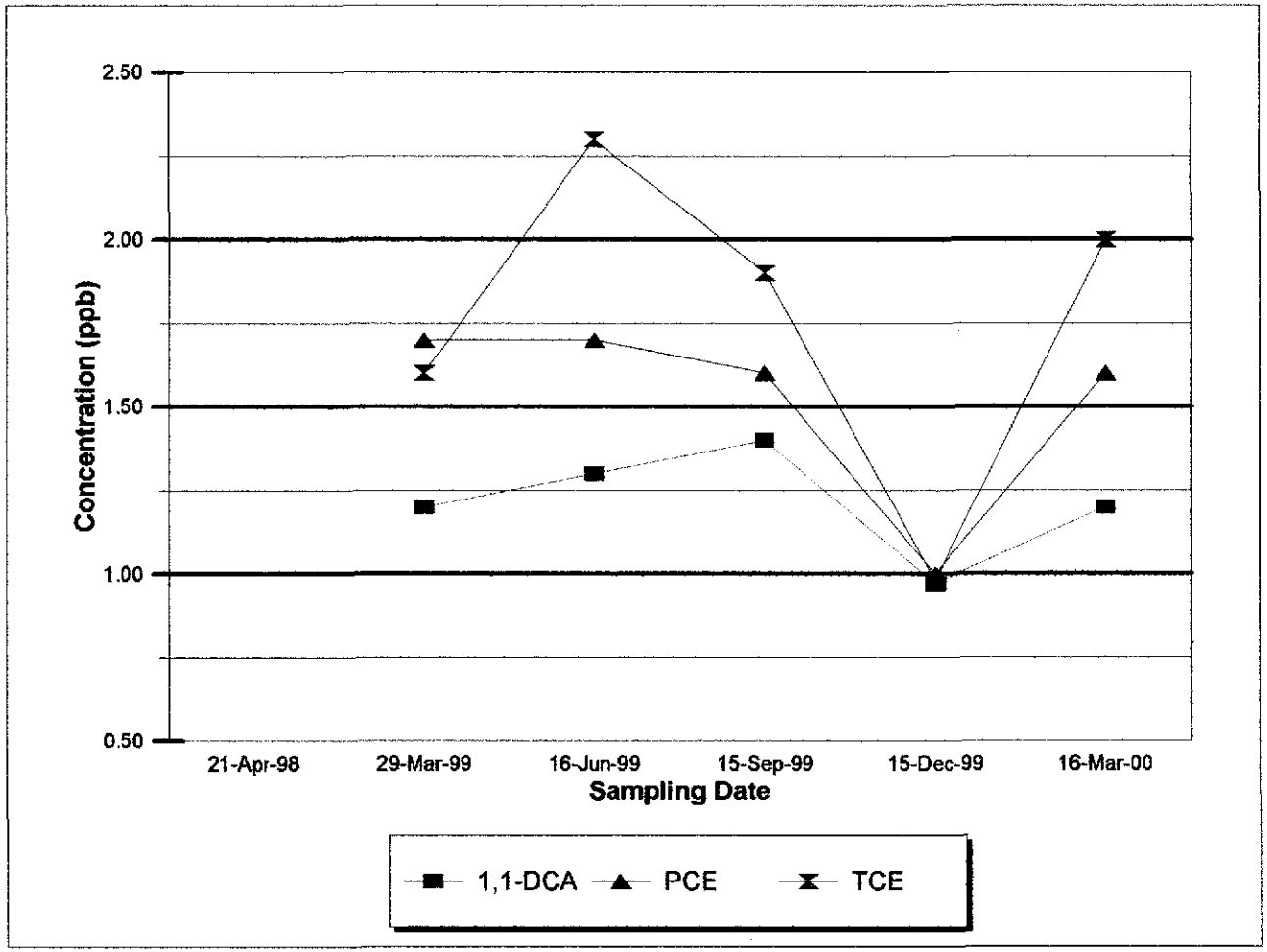
0 44

(feet)

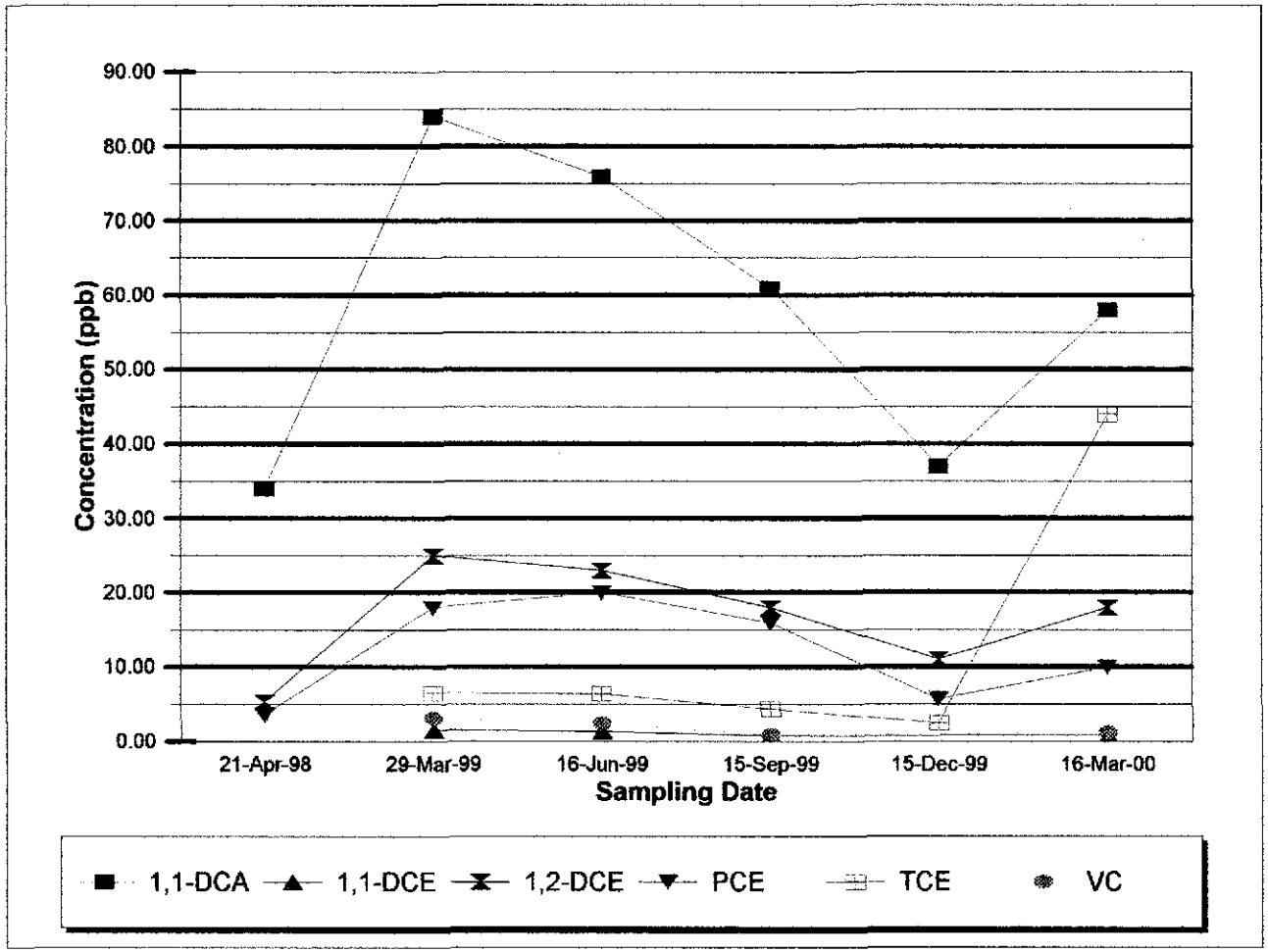
ProTech Consulting & Engineering	Job No. 000104 Date 16 Mar 2000 Drawn by WL Rev CHT Apprvd WL	**Site Plan w/ Groundwater Elevations** Groundwater Sampling Program Kelly-Moore Paint Company 969 San Pablo Avenue, Albany, California	Project	N	Figure 3



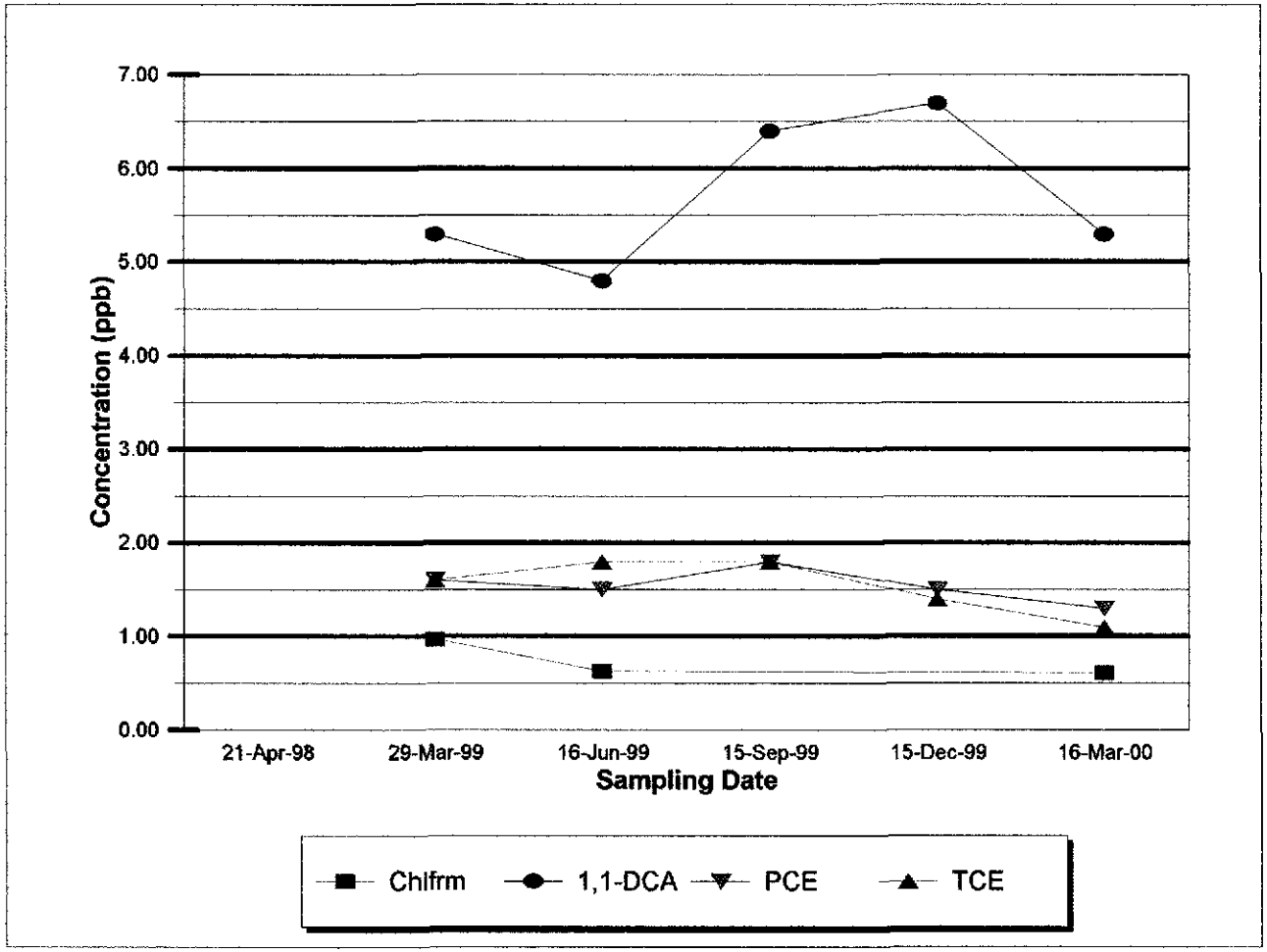
ProTech Consulting & Engineering	Job No. 000104 Date 16 Mar 2000 Drawn by WL Rev CHT / Apprvd WL	Project **Historic Groundwater Elevations** Groundwater Sampling Program Kelly-Moore Paint Company 969 San Pablo Avenue, Albany, California	Figure **4**



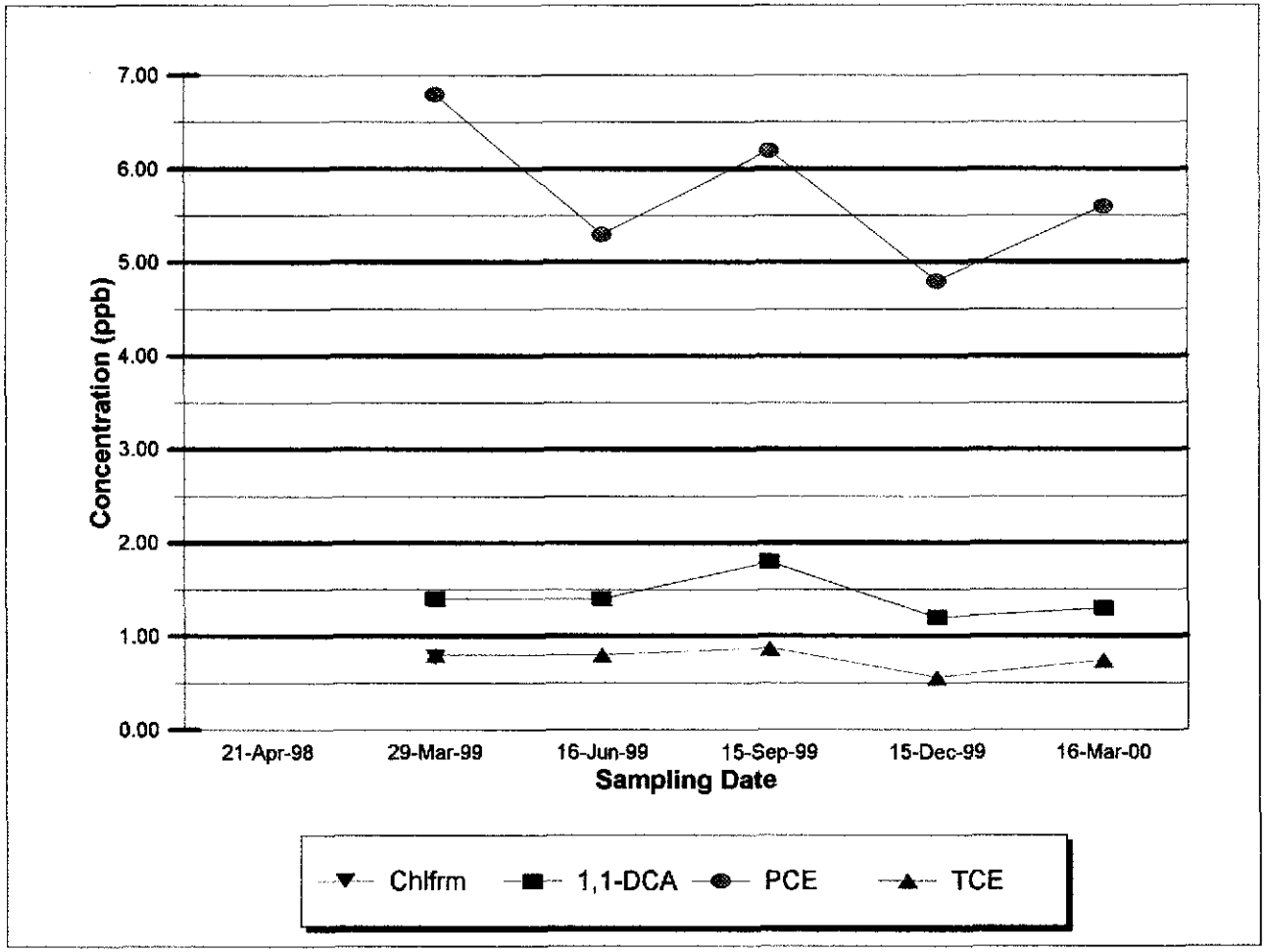
ProTech Consulting & Engineering	Job No. 000104 Date 15 Mar 2000 Drawn by WL Rev CHT Apprvd WL	Project **Historic VOC Results - MW-3** Groundwater Sampling Program Kelly-Moore Paint Company 969 San Pablo Avenue, Albany, California		Figure **5**



ProTech Consulting & Engineering	Job No. 000104 Date 16 Mar 2000 Drawn by WL Rev CHT Apprvd WL	Project **Historic VOC Results - MW-4** Groundwater Sampling Program Kelly-Moore Paint Company 969 San Pablo Avenue, Albany, California	Figure **6**



ProTech Consulting & Engineering	Job No. 000104 Date 16 Mar 2000 Drawn by WL Rev CHT Apprvd WL	Project **Historic VOC Results - MW-5** Groundwater Sampling Program Kelly-Moore Paint Company 969 San Pablo Avenue, Albany, California		Figure **7**



ProTech Consulting & Engineering	Job No. 000104 Date 16 Mar 2000 Drawn by WL Rev CHT Apprvd WL	Project **Historic VOC Results - MW-6** Groundwater Sampling Program Kelly-Moore Paint Company 969 San Pablo Avenue, Albany, California	Figure **8**

GROUNDWATER PARAMETERS MONITORING SHEET

Project Name: Kelly Moore Project #: 124-0H00 Well #: 2

DATE	STAGE	GALLONS	PARAMETERS			NOTES
			pH	Temp	Cond	
16 Mar 00	~~D~~	0	8.29	60.7	1.32	purged Gallons - 6.5 gallons
	M	3	8.15	60.5	1.36	Down Hole Purge Pump used
	E	6	7.95	60.5	1.37	Start pumping 0810
						End pumping 0915
						1 Well bore Volume Removed
						as agreed w/ ACHD

Notes: pH = pH (Standard Units)
Temp = temperature (°F)
Cond = conductivity (μmho/cm)

GROUNDWATER PARAMETERS MONITORING SHEET

Project Name: Kelly | Moore Project #: 124 - 0100 Well #: 3

DATE	STAGE	GALLONS	PARAMETERS			NOTES
			pH	Temp	Cond	
16 March 00	I	0	6.42	62.5	1.25	Purged Gallons - 6.25 gallons
	M	3	7.57	60.5	1.29	Peristaltic Pump used
	E	6	7.58	61.2	1.30	
						Start Purging 0800
						End Purging 1000
						1 Wellbore Volume Removed

Notes: pH = pH (Standard Units)
Temp = temperature (°F)
Cond = conductivity (μmho/cm)

GROUNDWATER PARAMETERS MONITORING SHEET

Project Name: Kelly Moore Project #: 124-0400 Well #: 4

DATE	STAGE	GALLONS	PARAMETERS			NOTES
			pH	Temp	Cond	
1/6/00	I	0	7.59	60.5	1.46	Purged Gallons - 4.25 gallons
	M	2	7.56	61.2	1.52	Peristaltic Pump Used
	E	4	7.28	61.5	1.55	
						Start Purging - 1105
						End Purging - 1250
						1 Well bore Volume Removed
						as agreed

Notes: pH = pH (Standard Units)
Temp = temperature (°F)
Cond = conductivity (μmho/cm)

GROUNDWATER PARAMETERS MONITORING SHEET

Project Name: Belly/Moore Project #: 124-0H00 Well #: 5

DATE	STAGE	GALLONS	PARAMETERS			NOTES
			pH	Temp	Cond	
11 Mar 00	1	0	7.51	61.0	1.59	Purged Gallons - 6 gallons
	m	4	7.49	62.4	1.56	Purge Pump used
	6	8	7.49	62.4	1.54	
						Start 0950
						End 1055
						1 well bore Volum Purged
						as agreed

Notes: pH = pH (Standard Units)
Temp = temperature (°F)
Cond = conductivity (μmho/cm)

GROUNDWATER PARAMETERS MONITORING SHEET

Project Name: Kelly Moore Project #: 124-0400 Well #: 6

DATE	STAGE	GALLONS	PARAMETERS			NOTES
			pH	Temp	Cond	
14 Mar 00	I	0	7.65	61.6	1.58	Purged Gallons - 8.5 gallons
	M	4	7.64	61.4	1.60	Pump Temp used
	E	8	7.58	61.2	1.61	
						St-0 0940
						E-2 1030
						1 well bore Volume Removed
						as required

Notes: pH = pH (Standard Units)
Temp = temperature (°F)
Cond = conductivity (μmho/cm)

Protech Consulting
1755 E. Bayshore RD, Suite 14B
Redwood City, CA 94063

Attn.: Mr. Woody Lovejoy

Project: 124-OHOO
K/M

Dear Mr. Lovejoy,

Attached is our report for your samples received on Thursday March 16, 2000
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after April 15, 2000 unless you have requested otherwise. We appreciate the opportunity to be of service to you.
If you have any questions, please call me at (925) 484-1919. You can also contact me via email.
My email address is: gcook@chromalab.com

Sincerely,

Gary Cook

Volatile Organic Compounds

Protech Consulting

Attn: Woody Lovejoy

Project #: 124-OHOO

1755 E. Bayshore RD, Suite 14B
Redwood City, CA 94063

Phone: (650) 569-4020 Fax: (415) 381-1741

Project: K/M

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW 2	Water	03/16/2000	1
MW 3	Water	03/16/2000	2
MW 4	Water	03/16/2000	3
MW 5	Water	03/16/2000	4
MW 6	Water	03/16/2000	5

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-03-0319

To: **Protech Consulting**
Attn.: Woody Lovejoy

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds

Sample ID:	**MW 2**	Lab Sample ID:	**2000-03-0319-001**
Project:	124-OHOO K/M	Received:	03/16/2000 09:04
		Extracted:	03/20/2000 16:20
Sampled:	03/16/2000	QC-Batch:	2000/03/20-01.27
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	ND	50	ug/L	1.00	03/20/2000 16:20	
Benzene	ND	0.50	ug/L	1.00	03/20/2000 16:20	
Bromodichloromethane	ND	0.50	ug/L	1.00	03/20/2000 16:20	
Bromoform	ND	0.50	ug/L	1.00	03/20/2000 16:20	
Bromomethane	ND	1.0	ug/L	1.00	03/20/2000 16:20	
Carbon tetrachloride	ND	0.50	ug/L	1.00	03/20/2000 16:20	
Chlorobenzene	ND	0.50	ug/L	1.00	03/20/2000 16:20	
Chloroethane	ND	1.0	ug/L	1.00	03/20/2000 16:20	
2-Butanone(MEK)	ND	50	ug/L	1.00	03/20/2000 16:20	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	03/20/2000 16:20	
Chloroform	ND	0.50	ug/L	1.00	03/20/2000 16:20	
Chloromethane	ND	1.0	ug/L	1.00	03/20/2000 16:20	
Dibromochloromethane	ND	0.50	ug/L	1.00	03/20/2000 16:20	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	03/20/2000 16:20	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	03/20/2000 16:20	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	03/20/2000 16:20	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1.00	03/20/2000 16:20	
1,2-Dibromoethane	ND	0.50	ug/L	1.00	03/20/2000 16:20	
Dibromomethane	ND	0.50	ug/L	1.00	03/20/2000 16:20	
Dichlorodifluoromethane	ND	0.50	ug/L	1.00	03/20/2000 16:20	
1,1-Dichloroethane	ND	0.50	ug/L	1.00	03/20/2000 16:20	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	03/20/2000 16:20	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	03/20/2000 16:20	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	03/20/2000 16:20	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	03/20/2000 16:20	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	03/20/2000 16:20	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	03/20/2000 16:20	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	03/20/2000 16:20	
Ethylbenzene	ND	0.50	ug/L	1.00	03/20/2000 16:20	
2-Hexanone	ND	50	ug/L	1.00	03/20/2000 16:20	
Methylene chloride	ND	5.0	ug/L	1.00	03/20/2000 16:20	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	1.00	03/20/2000 16:20	
Naphthalene	ND	1.0	ug/L	1.00	03/20/2000 16:20	
Styrene	ND	0.50	ug/L	1.00	03/20/2000 16:20	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	03/20/2000 16:20	

To: **Protech Consulting**
Attn.: Woody Lovejoy

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds

Sample ID:	**MW 2**	Lab Sample ID:	**2000-03-0319-001**
Project:	124-OHOO K/M	Received:	03/16/2000 09:04
		Extracted:	03/20/2000 16:20
Sampled:	03/16/2000	QC-Batch:	2000/03/20-01.27
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Tetrachloroethene	ND	0.50	ug/L	1.00	03/20/2000 16:20	
Toluene	ND	0.50	ug/L	1.00	03/20/2000 16:20	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	03/20/2000 16:20	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	03/20/2000 16:20	
Trichloroethene	ND	0.50	ug/L	1.00	03/20/2000 16:20	
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L	1.00	03/20/2000 16:20	
Vinyl acetate	ND	5.0	ug/L	1.00	03/20/2000 16:20	
Vinyl chloride	ND	0.50	ug/L	1.00	03/20/2000 16:20	
Total xylenes	ND	1.0	ug/L	1.00	03/20/2000 16:20	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	03/20/2000 16:20	
Carbon disulfide	ND	1.0	ug/L	1.00	03/20/2000 16:20	
Isopropylbenzene	ND	0.50	ug/L	1.00	03/20/2000 16:20	
Bromobenzene	ND	0.50	ug/L	1.00	03/20/2000 16:20	
Bromochloromethane	ND	1.0	ug/L	1.00	03/20/2000 16:20	
Trichlorofluoromethane	ND	2.0	ug/L	1.00	03/20/2000 16:20	
Surrogate(s)						
4-Bromofluorobenzene	102.8	86-115	%	1.00	03/20/2000 16:20	
1,2-Dichloroethane-d4	101.6	76-114	%	1.00	03/20/2000 16:20	
Toluene-d8	98.8	88-110	%	1.00	03/20/2000 16:20	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-03-0319

To: **Protech Consulting**
Attn.: Woody Lovejoy

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds

Sample ID:	**MW 3**	Lab Sample ID:	**2000-03-0319-002**
Project:	124-OHOO K/M	Received:	03/16/2000 09:04
		Extracted:	03/20/2000 16:58
Sampled:	03/16/2000	QC-Batch:	2000/03/20-01.27
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	ND	50	ug/L	1.00	03/20/2000 16:58	
Benzene	ND	0.50	ug/L	1.00	03/20/2000 16:58	
Bromodichloromethane	ND	0.50	ug/L	1.00	03/20/2000 16:58	
Bromoform	ND	0.50	ug/L	1.00	03/20/2000 16:58	
Bromomethane	ND	1.0	ug/L	1.00	03/20/2000 16:58	
Carbon tetrachloride	ND	0.50	ug/L	1.00	03/20/2000 16:58	
Chlorobenzene	ND	0.50	ug/L	1.00	03/20/2000 16:58	
Chloroethane	ND	1.0	ug/L	1.00	03/20/2000 16:58	
2-Butanone(MEK)	ND	50	ug/L	1.00	03/20/2000 16:58	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	03/20/2000 16:58	
Chloroform	ND	0.50	ug/L	1.00	03/20/2000 16:58	
Chloromethane	ND	1.0	ug/L	1.00	03/20/2000 16:58	
Dibromochloromethane	ND	0.50	ug/L	1.00	03/20/2000 16:58	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	03/20/2000 16:58	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	03/20/2000 16:58	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	03/20/2000 16:58	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1.00	03/20/2000 16:58	
1,2-Dibromoethane	ND	0.50	ug/L	1.00	03/20/2000 16:58	
Dibromomethane	ND	0.50	ug/L	1.00	03/20/2000 16:58	
Dichlorodifluoromethane	ND	0.50	ug/L	1.00	03/20/2000 16:58	
1,1-Dichloroethane	1.2	0.50	ug/L	1.00	03/20/2000 16:58	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	03/20/2000 16:58	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	03/20/2000 16:58	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	03/20/2000 16:58	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	03/20/2000 16:58	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	03/20/2000 16:58	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	03/20/2000 16:58	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	03/20/2000 16:58	
Ethylbenzene	ND	0.50	ug/L	1.00	03/20/2000 16:58	
2-Hexanone	ND	50	ug/L	1.00	03/20/2000 16:58	
Methylene chloride	ND	5.0	ug/L	1.00	03/20/2000 16:58	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	1.00	03/20/2000 16:58	
Naphthalene	ND	1.0	ug/L	1.00	03/20/2000 16:58	
Styrene	ND	0.50	ug/L	1.00	03/20/2000 16:58	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	03/20/2000 16:58	

To: **Protech Consulting**
Attn.: Woody Lovejoy

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds

Sample ID:	**MW 3**	Lab Sample ID:	**2000-03-0319-002**
Project:	124-OHOO K/M	Received:	03/16/2000 09:04
		Extracted:	03/20/2000 16:58
Sampled:	03/16/2000	QC-Batch:	2000/03/20-01.27
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Tetrachloroethene	1.6	0.50	ug/L	1.00	03/20/2000 16:58	
Toluene	ND	0.50	ug/L	1.00	03/20/2000 16:58	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	03/20/2000 16:58	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	03/20/2000 16:58	
Trichloroethene	2.0	0.50	ug/L	1.00	03/20/2000 16:58	
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L	1.00	03/20/2000 16:58	
Vinyl acetate	ND	5.0	ug/L	1.00	03/20/2000 16:58	
Vinyl chloride	ND	0.50	ug/L	1.00	03/20/2000 16:58	
Total xylenes	ND	1.0	ug/L	1.00	03/20/2000 16:58	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	03/20/2000 16:58	
Carbon disulfide	ND	1.0	ug/L	1.00	03/20/2000 16:58	
Isopropylbenzene	ND	0.50	ug/L	1.00	03/20/2000 16:58	
Bromobenzene	ND	0.50	ug/L	1.00	03/20/2000 16:58	
Bromochloromethane	ND	1.0	ug/L	1.00	03/20/2000 16:58	
Trichlorofluoromethane	ND	2.0	ug/L	1.00	03/20/2000 16:58	
Surrogate(s)						
4-Bromofluorobenzene	99.6	86-115	%	1.00	03/20/2000 16:58	
1,2-Dichloroethane-d4	108.5	76-114	%	1.00	03/20/2000 16:58	
Toluene-d8	96.1	88-110	%	1.00	03/20/2000 16:58	

To: **Protech Consulting**
Attn.: Woody Lovejoy

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds

Sample ID:	**MW 4**	Lab Sample ID:	**2000-03-0319-003**
Project:	124-OHOO K/M	Received:	03/16/2000 09:04
		Extracted:	03/23/2000 00:01
Sampled:	03/16/2000	QC-Batch:	2000/03/22-01.27
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	ND	50	ug/L	1.00	03/23/2000 00:01	
Benzene	ND	0.50	ug/L	1.00	03/23/2000 00:01	
Bromodichloromethane	ND	0.50	ug/L	1.00	03/23/2000 00:01	
Bromoform	ND	0.50	ug/L	1.00	03/23/2000 00:01	
Bromomethane	ND	1.0	ug/L	1.00	03/23/2000 00:01	
Carbon tetrachloride	ND	0.50	ug/L	1.00	03/23/2000 00:01	
Chlorobenzene	ND	0.50	ug/L	1.00	03/23/2000 00:01	
Chloroethane	ND	1.0	ug/L	1.00	03/23/2000 00:01	
2-Butanone(MEK)	ND	50	ug/L	1.00	03/23/2000 00:01	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	03/23/2000 00:01	
Chloroform	ND	0.50	ug/L	1.00	03/23/2000 00:01	
Chloromethane	ND	1.0	ug/L	1.00	03/23/2000 00:01	
Dibromochloromethane	ND	0.50	ug/L	1.00	03/23/2000 00:01	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	03/23/2000 00:01	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	03/23/2000 00:01	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	03/23/2000 00:01	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1.00	03/23/2000 00:01	
1,2-Dibromoethane	ND	0.50	ug/L	1.00	03/23/2000 00:01	
Dibromomethane	ND	0.50	ug/L	1.00	03/23/2000 00:01	
Dichlorodifluoromethane	ND	0.50	ug/L	1.00	03/23/2000 00:01	
1,1-Dichloroethane	58	0.50	ug/L	1.00	03/23/2000 00:01	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	03/23/2000 00:01	
1,1-Dichloroethene	0.84	0.50	ug/L	1.00	03/23/2000 00:01	
cis-1,2-Dichloroethene	18	0.50	ug/L	1.00	03/23/2000 00:01	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	03/23/2000 00:01	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	03/23/2000 00:01	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	03/23/2000 00:01	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	03/23/2000 00:01	
Ethylbenzene	ND	0.50	ug/L	1.00	03/23/2000 00:01	
2-Hexanone	ND	50	ug/L	1.00	03/23/2000 00:01	
Methylene chloride	ND	5.0	ug/L	1.00	03/23/2000 00:01	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	1.00	03/23/2000 00:01	
Naphthalene	ND	1.0	ug/L	1.00	03/23/2000 00:01	
Styrene	ND	0.50	ug/L	1.00	03/23/2000 00:01	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	03/23/2000 00:01	

To: **Protech Consulting**
Attn.: Woody Lovejoy

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds

Sample ID:	**MW 4**	Lab Sample ID:	**2000-03-0319-003**
Project:	124-OHOO K/M	Received:	03/16/2000 09:04
		Extracted:	03/23/2000 00:01
Sampled:	03/16/2000	QC-Batch:	2000/03/22-01.27
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Tetrachloroethene	10	0.50	ug/L	1.00	03/23/2000 00:01	
Toluene	ND	0.50	ug/L	1.00	03/23/2000 00:01	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	03/23/2000 00:01	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	03/23/2000 00:01	
Trichloroethene	44	0.50	ug/L	1.00	03/23/2000 00:01	
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L	1.00	03/23/2000 00:01	
Vinyl acetate	ND	5.0	ug/L	1.00	03/23/2000 00:01	
Vinyl chloride	1.2	0.50	ug/L	1.00	03/23/2000 00:01	
Total xylenes	ND	1.0	ug/L	1.00	03/23/2000 00:01	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	03/23/2000 00:01	
Carbon disulfide	ND	1.0	ug/L	1.00	03/23/2000 00:01	
Isopropylbenzene	ND	0.50	ug/L	1.00	03/23/2000 00:01	
Bromobenzene	ND	0.50	ug/L	1.00	03/23/2000 00:01	
Bromochloromethane	ND	1.0	ug/L	1.00	03/23/2000 00:01	
Trichlorofluoromethane	ND	2.0	ug/L	1.00	03/23/2000 00:01	
Surrogate(s)						
4-Bromofluorobenzene	99.9	86-115	%	1.00	03/23/2000 00:01	
1,2-Dichloroethane-d4	108.3	76-114	%	1.00	03/23/2000 00:01	
Toluene-d8	97.3	88-110	%	1.00	03/23/2000 00:01	

To: **Protech Consulting**
Attn.: Woody Lovejoy

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds

Sample ID:	**MW 5**	Lab Sample ID:	**2000-03-0319-004**
Project:	124-OHOO K/M	Received:	03/16/2000 09:04
		Extracted:	03/23/2000 00:40
Sampled:	03/16/2000	QC-Batch:	2000/03/22-01.27
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	ND	50	ug/L	1.00	03/23/2000 00:40	
Benzene	ND	0.50	ug/L	1.00	03/23/2000 00:40	
Bromodichloromethane	ND	0.50	ug/L	1.00	03/23/2000 00:40	
Bromoform	ND	0.50	ug/L	1.00	03/23/2000 00:40	
Bromomethane	ND	1.0	ug/L	1.00	03/23/2000 00:40	
Carbon tetrachloride	ND	0.50	ug/L	1.00	03/23/2000 00:40	
Chlorobenzene	ND	0.50	ug/L	1.00	03/23/2000 00:40	
Chloroethane	ND	1.0	ug/L	1.00	03/23/2000 00:40	
2-Butanone(MEK)	ND	50	ug/L	1.00	03/23/2000 00:40	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	03/23/2000 00:40	
Chloroform	0.61	0.50	ug/L	1.00	03/23/2000 00:40	
Chloromethane	ND	1.0	ug/L	1.00	03/23/2000 00:40	
Dibromochloromethane	ND	0.50	ug/L	1.00	03/23/2000 00:40	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	03/23/2000 00:40	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	03/23/2000 00:40	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	03/23/2000 00:40	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1.00	03/23/2000 00:40	
1,2-Dibromoethane	ND	0.50	ug/L	1.00	03/23/2000 00:40	
Dibromomethane	ND	0.50	ug/L	1.00	03/23/2000 00:40	
Dichlorodifluoromethane	ND	0.50	ug/L	1.00	03/23/2000 00:40	
1,1-Dichloroethane	5.3	0.50	ug/L	1.00	03/23/2000 00:40	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	03/23/2000 00:40	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	03/23/2000 00:40	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	03/23/2000 00:40	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	03/23/2000 00:40	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	03/23/2000 00:40	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	03/23/2000 00:40	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	03/23/2000 00:40	
Ethylbenzene	ND	0.50	ug/L	1.00	03/23/2000 00:40	
2-Hexanone	ND	50	ug/L	1.00	03/23/2000 00:40	
Methylene chloride	ND	5.0	ug/L	1.00	03/23/2000 00:40	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	1.00	03/23/2000 00:40	
Naphthalene	ND	1.0	ug/L	1.00	03/23/2000 00:40	
Styrene	ND	0.50	ug/L	1.00	03/23/2000 00:40	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	03/23/2000 00:40	

To: **Protech Consulting**
Attn.: Woody Lovejoy

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds

Sample ID:	**MW 5**	Lab Sample ID:	**2000-03-0319-004**
Project:	124-OHOO K/M	Received:	03/16/2000 09:04
		Extracted:	03/23/2000 00:40
Sampled:	03/16/2000	QC-Batch:	2000/03/22-01.27
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Tetrachloroethene	1.3	0.50	ug/L	1.00	03/23/2000 00:40	
Toluene	ND	0.50	ug/L	1.00	03/23/2000 00:40	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	03/23/2000 00:40	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	03/23/2000 00:40	
Trichloroethene	1.1	0.50	ug/L	1.00	03/23/2000 00:40	
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L	1.00	03/23/2000 00:40	
Vinyl acetate	ND	5.0	ug/L	1.00	03/23/2000 00:40	
Vinyl chloride	ND	0.50	ug/L	1.00	03/23/2000 00:40	
Total xylenes	ND	1.0	ug/L	1.00	03/23/2000 00:40	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	03/23/2000 00:40	
Carbon disulfide	ND	1.0	ug/L	1.00	03/23/2000 00:40	
Isopropylbenzene	ND	0.50	ug/L	1.00	03/23/2000 00:40	
Bromobenzene	ND	0.50	ug/L	1.00	03/23/2000 00:40	
Bromochloromethane	ND	1.0	ug/L	1.00	03/23/2000 00:40	
Trichlorofluoromethane	ND	2.0	ug/L	1.00	03/23/2000 00:40	
Surrogate(s)						
4-Bromofluorobenzene	102.2	86-115	%	1.00	03/23/2000 00:40	
1,2-Dichloroethane-d4	98.8	76-114	%	1.00	03/23/2000 00:40	
Toluene-d8	97.6	88-110	%	1.00	03/23/2000 00:40	

To: **Protech Consulting**
Attn.: Woody Lovejoy

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds

Sample ID:	**MW 6**	Lab Sample ID:	**2000-03-0319-005**
Project:	124-OHOO K/M	Received:	03/16/2000 09:04
		Extracted:	03/23/2000 01:18
Sampled:	03/16/2000	QC-Batch:	2000/03/22-01.27
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	ND	50	ug/L	1.00	03/23/2000 01:18	
Benzene	ND	0.50	ug/L	1.00	03/23/2000 01:18	
Bromodichloromethane	ND	0.50	ug/L	1.00	03/23/2000 01:18	
Bromoform	ND	0.50	ug/L	1.00	03/23/2000 01:18	
Bromomethane	ND	1.0	ug/L	1.00	03/23/2000 01:18	
Carbon tetrachloride	ND	0.50	ug/L	1.00	03/23/2000 01:18	
Chlorobenzene	ND	0.50	ug/L	1.00	03/23/2000 01:18	
Chloroethane	ND	1.0	ug/L	1.00	03/23/2000 01:18	
2-Butanone(MEK)	ND	50	ug/L	1.00	03/23/2000 01:18	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	03/23/2000 01:18	
Chloroform	ND	0.50	ug/L	1.00	03/23/2000 01:18	
Chloromethane	ND	1.0	ug/L	1.00	03/23/2000 01:18	
Dibromochloromethane	ND	0.50	ug/L	1.00	03/23/2000 01:18	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	03/23/2000 01:18	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	03/23/2000 01:18	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	03/23/2000 01:18	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1.00	03/23/2000 01:18	
1,2-Dibromoethane	ND	0.50	ug/L	1.00	03/23/2000 01:18	
Dibromomethane	ND	0.50	ug/L	1.00	03/23/2000 01:18	
Dichlorodifluoromethane	ND	0.50	ug/L	1.00	03/23/2000 01:18	
1,1-Dichloroethane	1.3	0.50	ug/L	1.00	03/23/2000 01:18	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	03/23/2000 01:18	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	03/23/2000 01:18	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	03/23/2000 01:18	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	03/23/2000 01:18	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	03/23/2000 01:18	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	03/23/2000 01:18	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	03/23/2000 01:18	
Ethylbenzene	ND	0.50	ug/L	1.00	03/23/2000 01:18	
2-Hexanone	ND	50	ug/L	1.00	03/23/2000 01:18	
Methylene chloride	ND	5.0	ug/L	1.00	03/23/2000 01:18	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	1.00	03/23/2000 01:18	
Naphthalene	ND	1.0	ug/L	1.00	03/23/2000 01:18	
Styrene	ND	0.50	ug/L	1.00	03/23/2000 01:18	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	03/23/2000 01:18	

To: **Protech Consulting**
Attn.: Woody Lovejoy

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds

Sample ID:	**MW 6**	Lab Sample ID:	**2000-03-0319-005**
Project:	124-OHOO K/M	Received:	03/16/2000 09:04
		Extracted:	03/23/2000 01:18
Sampled:	03/16/2000	QC-Batch:	2000/03/22-01.27
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Tetrachloroethene	5.6	0.50	ug/L	1.00	03/23/2000 01:18	
Toluene	ND	0.50	ug/L	1.00	03/23/2000 01:18	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	03/23/2000 01:18	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	03/23/2000 01:18	
Trichloroethene	0.74	0.50	ug/L	1.00	03/23/2000 01:18	
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L	1.00	03/23/2000 01:18	
Vinyl acetate	ND	5.0	ug/L	1.00	03/23/2000 01:18	
Vinyl chloride	ND	0.50	ug/L	1.00	03/23/2000 01:18	
Total xylenes	ND	1.0	ug/L	1.00	03/23/2000 01:18	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	03/23/2000 01:18	
Carbon disulfide	ND	1.0	ug/L	1.00	03/23/2000 01:18	
Isopropylbenzene	ND	0.50	ug/L	1.00	03/23/2000 01:18	
Bromobenzene	ND	0.50	ug/L	1.00	03/23/2000 01:18	
Bromochloromethane	ND	1.0	ug/L	1.00	03/23/2000 01:18	
Trichlorofluoromethane	ND	2.0	ug/L	1.00	03/23/2000 01:18	
Surrogate(s)						
4-Bromofluorobenzene	101.7	86-115	%	1.00	03/23/2000 01:18	
1,2-Dichloroethane-d4	98.6	76-114	%	1.00	03/23/2000 01:18	
Toluene-d8	99.6	88-110	%	1.00	03/23/2000 01:18	

To: **Protech Consulting**
Attn.: Woody Lovejoy

Test Method: 8260A
Prep Method: 5030

Batch QC Report
Volatile Organic Compounds

Method Blank | **Water** | **QC Batch # 2000/03/22-01.27**

MB: 2000/03/22-01.27-001 | Date Extracted: 03/22/2000 16:16

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Acetone	ND	50	ug/L	03/22/2000 16:16	
Benzene	ND	0.5	ug/L	03/22/2000 16:16	
Bromodichloromethane	ND	0.5	ug/L	03/22/2000 16:16	
Bromoform	ND	0.5	ug/L	03/22/2000 16:16	
Bromomethane	ND	1.0	ug/L	03/22/2000 16:16	
Carbon tetrachloride	ND	0.5	ug/L	03/22/2000 16:16	
Chlorobenzene	ND	0.5	ug/L	03/22/2000 16:16	
Chloroethane	ND	1.0	ug/L	03/22/2000 16:16	
2-Butanone(MEK)	ND	50	ug/L	03/22/2000 16:16	
2-Chloroethylvinyl ether	ND	0.5	ug/L	03/22/2000 16:16	
Chloroform	ND	0.5	ug/L	03/22/2000 16:16	
Chloromethane	ND	1.0	ug/L	03/22/2000 16:16	
Dibromochloromethane	ND	0.5	ug/L	03/22/2000 16:16	
1,2-Dichlorobenzene	ND	0.5	ug/L	03/22/2000 16:16	
1,3-Dichlorobenzene	ND	0.5	ug/L	03/22/2000 16:16	
1,4-Dichlorobenzene	ND	0.5	ug/L	03/22/2000 16:16	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	03/22/2000 16:16	
1,2-Dibromoethane	ND	0.5	ug/L	03/22/2000 16:16	
Dibromomethane	ND	0.5	ug/L	03/22/2000 16:16	
Dichlorodifluoromethane	ND	0.5	ug/L	03/22/2000 16:16	
1,1-Dichloroethane	ND	0.5	ug/L	03/22/2000 16:16	
1,2-Dichloroethane	ND	0.5	ug/L	03/22/2000 16:16	
1,1-Dichloroethene	ND	0.5	ug/L	03/22/2000 16:16	
cis-1,2-Dichloroethene	ND	0.5	ug/L	03/22/2000 16:16	
trans-1,2-Dichloroethene	ND	0.5	ug/L	03/22/2000 16:16	
1,2-Dichloropropane	ND	0.5	ug/L	03/22/2000 16:16	
cis-1,3-Dichloropropene	ND	0.5	ug/L	03/22/2000 16:16	
trans-1,3-Dichloropropene	ND	0.5	ug/L	03/22/2000 16:16	
Ethylbenzene	ND	0.5	ug/L	03/22/2000 16:16	
2-Hexanone	ND	50	ug/L	03/22/2000 16:16	
Methylene chloride	ND	5.0	ug/L	03/22/2000 16:16	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	03/22/2000 16:16	
Naphthalene	ND	1.0	ug/L	03/22/2000 16:16	
Styrene	ND	0.5	ug/L	03/22/2000 16:16	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	03/22/2000 16:16	
Tetrachloroethene	ND	0.5	ug/L	03/22/2000 16:16	
Toluene	ND	0.5	ug/L	03/22/2000 16:16	
1,1,1-Trichloroethane	ND	0.5	ug/L	03/22/2000 16:16	
1,1,2-Trichloroethane	ND	0.5	ug/L	03/22/2000 16:16	
Trichloroethene	ND	0.5	ug/L	03/22/2000 16:16	

To: **Protech Consulting**
Attn.: Woody Lovejoy

Test Method: 8260A
Prep Method: 5030

Batch QC Report
Volatile Organic Compounds

Method Blank | **Water** | **QC Batch # 2000/03/22-01.27**

MB: 2000/03/22-01.27-001 | Date Extracted: 03/22/2000 16:16

Compound	Result	Rep.Limit	Units	Analyzed	Flag
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	03/22/2000 16:16	
Vinyl acetate	ND	5.0	ug/L	03/22/2000 16:16	
Vinyl chloride	ND	0.5	ug/L	03/22/2000 16:16	
Total xylenes	ND	1.0	ug/L	03/22/2000 16:16	
Trichlorotrifluoroethane	ND	0.5	ug/L	03/22/2000 16:16	
Carbon disulfide	ND	1.0	ug/L	03/22/2000 16:16	
Isopropylbenzene	ND	0.5	ug/L	03/22/2000 16:16	
Bromobenzene	ND	0.5	ug/L	03/22/2000 16:16	
Bromochloromethane	ND	1.0	ug/L	03/22/2000 16:16	
Trichlorofluoromethane	ND	2.0	ug/L	03/22/2000 16:16	
Surrogate(s)					
4-Bromofluorobenzene	99.0	86-115	%	03/22/2000 16:16	
1,2-Dichloroethane-d4	104.4	76-114	%	03/22/2000 16:16	
Toluene-d8	92.2	88-110	%	03/22/2000 16:16	

To: **Protech Consulting**
Attn.: Woody Lovejoy

Test Method: 8260A
Prep Method: 5030

Batch QC Report
Volatile Organic Compounds

Method Blank | **Water** | **QC Batch # 2000/03/20-01.27**

MB: 2000/03/20-01.27-001 | Date Extracted: 03/20/2000 14:32

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Acetone	ND	50	ug/L	03/20/2000 14:32	
Benzene	ND	0.5	ug/L	03/20/2000 14:32	
Bromodichloromethane	ND	0.5	ug/L	03/20/2000 14:32	
Bromoform	ND	0.5	ug/L	03/20/2000 14:32	
Bromomethane	ND	1.0	ug/L	03/20/2000 14:32	
Carbon tetrachloride	ND	0.5	ug/L	03/20/2000 14:32	
Chlorobenzene	ND	0.5	ug/L	03/20/2000 14:32	
Chloroethane	ND	1.0	ug/L	03/20/2000 14:32	
2-Butanone(MEK)	ND	50	ug/L	03/20/2000 14:32	
2-Chloroethylvinyl ether	ND	0.5	ug/L	03/20/2000 14:32	
Chloroform	ND	0.5	ug/L	03/20/2000 14:32	
Chloromethane	ND	1.0	ug/L	03/20/2000 14:32	
Dibromochloromethane	ND	0.5	ug/L	03/20/2000 14:32	
1,2-Dichlorobenzene	ND	0.5	ug/L	03/20/2000 14:32	
1,3-Dichlorobenzene	ND	0.5	ug/L	03/20/2000 14:32	
1,4-Dichlorobenzene	ND	0.5	ug/L	03/20/2000 14:32	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	03/20/2000 14:32	
1,2-Dibromoethane	ND	0.5	ug/L	03/20/2000 14:32	
Dibromomethane	ND	0.5	ug/L	03/20/2000 14:32	
Dichlorodifluoromethane	ND	0.5	ug/L	03/20/2000 14:32	
1,1-Dichloroethane	ND	0.5	ug/L	03/20/2000 14:32	
1,2-Dichloroethane	ND	0.5	ug/L	03/20/2000 14:32	
1,1-Dichloroethene	ND	0.5	ug/L	03/20/2000 14:32	
cis-1,2-Dichloroethene	ND	0.5	ug/L	03/20/2000 14:32	
trans-1,2-Dichloroethene	ND	0.5	ug/L	03/20/2000 14:32	
1,2-Dichloropropane	ND	0.5	ug/L	03/20/2000 14:32	
cis-1,3-Dichloropropene	ND	0.5	ug/L	03/20/2000 14:32	
trans-1,3-Dichloropropene	ND	0.5	ug/L	03/20/2000 14:32	
Ethylbenzene	ND	0.5	ug/L	03/20/2000 14:32	
2-Hexanone	ND	50	ug/L	03/20/2000 14:32	
Methylene chloride	ND	5.0	ug/L	03/20/2000 14:32	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	03/20/2000 14:32	
Naphthalene	ND	1.0	ug/L	03/20/2000 14:32	
Styrene	ND	0.5	ug/L	03/20/2000 14:32	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	03/20/2000 14:32	
Tetrachloroethene	ND	0.5	ug/L	03/20/2000 14:32	
Toluene	ND	0.5	ug/L	03/20/2000 14:32	
1,1,1-Trichloroethane	ND	0.5	ug/L	03/20/2000 14:32	
1,1,2-Trichloroethane	ND	0.5	ug/L	03/20/2000 14:32	
Trichloroethene	ND	0.5	ug/L	03/20/2000 14:32	
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	03/20/2000 14:32	

To: **Protech Consulting**
Attn.: Woody Lovejoy

Test Method: 8260A
Prep Method: 5030

Batch QC Report
Volatile Organic Compounds

Method Blank | **Water** | **QC Batch # 2000/03/20-01.27**

MB: 2000/03/20-01.27-001 | Date Extracted: 03/20/2000 14:32

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Vinyl acetate	ND	5.0	ug/L	03/20/2000 14:32	
Vinyl chloride	ND	0.5	ug/L	03/20/2000 14:32	
Total xylenes	ND	1.0	ug/L	03/20/2000 14:32	
Trichlorotrifluoroethane	ND	0.5	ug/L	03/20/2000 14:32	
Carbon disulfide	ND	1.0	ug/L	03/20/2000 14:32	
Isopropylbenzene	ND	0.5	ug/L	03/20/2000 14:32	
Bromobenzene	ND	0.5	ug/L	03/20/2000 14:32	
Bromochloromethane	ND	1.0	ug/L	03/20/2000 14:32	
Trichlorofluoromethane	ND	2.0	ug/L	03/20/2000 14:32	
Surrogate(s)					
4-Bromofluorobenzene	100.6	86-115	%	03/20/2000 14:32	
1,2-Dichloroethane-d4	76.0	76-114	%	03/20/2000 14:32	
Toluene-d8	99.2	88-110	%	03/20/2000 14:32	

To: **Protech Consulting**

Attn: Woody Lovejoy

Test Method: 8260A

Prep Method: 5030

Batch QC Report

Volatile Organic Compounds

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/03/22-01.27**

LCS: 2000/03/22-01.27-002 Extracted: 03/22/2000 14:52 Analyzed 03/22/2000 14:52

LCSD: 2000/03/22-01.27-003 Extracted: 03/22/2000 15:38 Analyzed 03/22/2000 15:38

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	43.8	44.8	50.0	50.0	87.6	89.6	2.3	69-129	20		
Chlorobenzene	56.5	51.5	50.0	50.0	113.0	103.0	9.3	61-121	20		
1,1-Dichloroethene	41.4	43.1	50.0	50.0	82.8	86.2	4.0	65-125	20		
Toluene	43.6	42.7	50.0	50.0	87.2	85.4	2.1	70-130	20		
Trichloroethene	39.2	40.1	50.0	50.0	78.4	80.2	2.3	74-134	20		
Surrogate(s)											
4-Bromofluorobenzene	510	506	500	500	102.0	101.2		86-115			
1,2-Dichloroethane-d4	445	475	500	500	89.0	95.0		76-114			
Toluene-d8	470	472	500	500	94.0	94.4		88-110			

To: **Protech Consulting**
Attn: Woody Lovejoy

Test Method: 8260A
Prep Method: 5030

Batch QC Report

Volatile Organic Compounds

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/03/20-01.27**

LCS: 2000/03/20-01.27-002 Extracted: 03/20/2000 13:07 Analyzed 03/20/2000 13:07
LCSD: 2000/03/20-01.27--001 Extracted: 03/20/2000 13:07 Analyzed 03/20/2000 13:07

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	45.2		50.0		90.4			69-129	20		
Chlorobenzene	51.5		50.0		103.0			61-121	20		
1,1-Dichloroethene	42.8		50.0		85.6			65-125	20		
Toluene	45.5		50.0		91.0			70-130	20		
Trichloroethene	41.5		50.0		83.0			74-134	20		
Surrogate(s)											
4-Bromofluorobenzene	547		500		109.4			86-115			
1,2-Dichloroethane-d4	484		500		96.8			76-114			
Toluene-d8	508		500		101.6			88-110			

To: **Protech Consulting**

Attn.: Woody Lovejoy

Test Method: 8260A

Prep Method: 5030

Batch QC Report

Volatile Organic Compounds

Matrix Spike (MS / MSD) **Water** **QC Batch # 2000/03/20-01.27**

Sample ID: **ICA-B31-W** Lab Sample ID: 2000-03-0267-007

MS: 2000/03/20-01.27-003 Extracted: 03/20/2000 22:41 Analyzed: 03/20/2000 22:41 Dilution: 1.0

MSD: 2000/03/20-01.27-004 Extracted: 03/20/2000 23:19 Analyzed: 03/20/2000 23:19 Dilution: 1.0

Compound	Conc. [ug/L]			Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Benzene	42.5	44.9	ND	50.0	50.0	85.0	89.8	5.5	69-129	20		
Chlorobenzene	52.6	51.9	ND	50.0	50.0	105.2	103.8	1.3	61-121	20		
1,1-Dichloroethene	40.9	44.8	ND	50.0	50.0	81.8	89.6	9.1	65-125	20		
Toluene	44.4	44.5	ND	50.0	50.0	88.8	89.0	0.2	70-130	20		
Trichloroethene	40.7	40.9	ND	50.0	50.0	81.4	81.8	0.5	74-134	20		
Surrogate(s)												
4-Bromofluorobenzene	507	484		500	500	101.4	96.8		86-115			
1,2-Dichloroethane-d4	537	524		500	500	107.4	104.8		76-114			
Toluene-d8	468	485		500	500	93.6	97.0		88-110			

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

1220 Quarry Lane • Pleasanton, California 94566-4756
510/484-1919 • Facsimile 510/484-1096

Chain of Custody

DATE 16 Mar 00 PAGE 1 OF 1

PROJ MGR Woody Lovejoy
COMPANY Pro Tech
ADDRESS 1755 E Bayshore #14B
Redwood City

SAMPLERS (SIGNATURE) [signature]
(PHONE NO.) 650-659-4029
(FAX NO.) 651-659-4027

ANALYSIS REPORT

SAMPLE ID	DATE	TIME	MATRIX	PRESERV.	TPH (EPA 8015,8020) ☐ Gas w/ ☐ BTEX ☐ MTBE	PURGEABLE AROMATICS BTEX (EPA 8020)	TPH-Diesel (EPA 8015M)	TEPH (EPA 8015M) Diesel, Kerosene, Oil, etc.	PURGEABLE HALOCARBONS (HVOCs) (EPA 8010)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMIVOLATILES (EPA 8270)	TOTAL OIL AND GREASE (SM 5520 B+F, E+F)		☐ PESTICIDES (EPA 8080) ☐ PCB'S (EPA 8080)	PNA's by ☐ 8270 ☐ 8310	☐ Spec. Cond. ☐ TSS ☐ TDS	LUFT METALS: Cd, Cr, Pb, Ni, Zn	CAM 17 METALS (EPA 6010/7470/7471)	TOTAL LEAD	☐ W.E.T. (STLC) ☐ TCLP	☐ Hexavalent Chromium ☐ pH (24 hr hold time for H2O)				NUMBER OF CONTAINERS
mw2	16Mar		Water							X															3
mw3										X															3
mw4										X															3
mw5										X															3
mw6										X															3

PROJECT INFORMATION

PROJECT NAME: B/M
PROJECT NUMBER: 124-0400
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	15
HEAD SPACE	
TEMPERATURE	
CONFORMS TO RECORD	

TAT	(STANDARD 5-DAY)			24	48	72	OTHER

Report: ( ) Routine ( ) Level 2 ( ) Level 3 ( ) Level 4 ( ) Electronic Report

SPECIAL INSTRUCTIONS/COMMENTS:
Email Results to Woody Lovejoy
Bill Pro Tech

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
[signature] (SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
S. Lovejoy (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
Pro Tech (COMPANY)	(COMPANY)	(COMPANY)

RECEIVED BY 1.	RECEIVED BY 2.	RECEIVED BY (LABORATORY) 3.
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY)	(COMPANY)	(LAB)

Revised 8/98