KELLY-MOORE PAINT COMPANY, INC.

November 6, 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 October 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

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Real Estate Manager
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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

MR. W. E. BERRY
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987 COMMERCIAL STREET
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OCTOBER 2000

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OCTOBER 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 and this monitoring was performed in September 2000. The June monitoring was deferred. 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 has been 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 parking lot s have been concrete paved. The existing groundwater monitor wells are located along the west 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

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

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 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

[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.

(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 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.

The results of the first quarter of groundwater monitoring (16 March 2000) were reported in April 2000, as requested by County. The results of the third quarter groundwater monitoring (September 20, 2000) are reported here, as requested by the county.

2.0 - SCOPE-OF-WORK

2.1 - INTRODUCTION

On 20 September 2000, ProTech performed the third quarter monitoring at the site. The second quarter monitoring was deffered. 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;
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 20 September 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 14.10 fbg, MW-4 measured a TD of 14.71, MW-5 measured a TD of 20.11 fbg, and MW-6 measured a TD of 19.84. The TDs for the monitor wells were the same as those previously measured.

On 20 September 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 0.038. 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 dropped an average of 1.96 feet (3.37 feet for MW-2, 2.72 feet for MW-3, 0.13 feet for MW-4, 1.33 feet for MW-5, and 2.27 feet for MW-6). The driveway pavement is now complete now and the wells are surface sealed under bolted metal covers.

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 in the March 2000 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 a foot valved centrifugal 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, at the mid point of pumping and at the end of the purge volume (we paused, if the well dewatered[4]). No wells dewatered during the September monitoring event. 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

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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.

historically cleanest to historically dirtiest to reduce the potential of cross-contamination. The only equipment placed downhole 20 September 2000 was a cleaned check valve attached to the sampling tube that was marked and dedicated to each well. The check valve prevented flushing of the well with "run-down" pumped water. *Formerly, 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 purging and sampling was MW-2, MW-6, MW-5, MW-3, and MW-4.

2.3.1 - Monitor Well MW-2

Approximately 3.5 gallons (~1 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 4 gallons (1 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.

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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.

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.

2.3.3 - Monitor Well MW-4

Approximately 7 gallons (1 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 7 gallons (1 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 6.5 gallons (1 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 bythe monitiring crew the evening on 20 September 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, except Tetrachloroethene at 1.4 and Trichloroethene at 0.83 μg/1. While these values were reported by the laboratory, the significance of the approximate 1 part per billion levels is yet to be seen.

2.4.2 - Monitor Well MW-3

The results of the VOCs analyses indicated that Chloroform was detected at 2.6 ppb (MDL 0.5, 1,1-DCA was no longer detected, PCE was detected at 0.5 ppb (MDL of 0.5 ppb), and TCE was no longer detected. All other compounds tested for were below their MDLs (rangin 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 both Bromoform and Chloroform were detected at 1.6 and 2.6 (MDL 0.5), 1,1-DCA was detected at 99 ppb (MDL of 0.5 ppb), 1,1-DCE was detected at 1.4 ppb, cis-1,2-DCE was detected at 25 ppb (MDL of 0.5 ppb), PCE was detected at 21 ppb (MDL of 0.5 ppb), TCE was detected at 7.2 ppb (MDL of 0.5 ppb), and vinyl chloride was detected

at 2.1 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 not detected, 1,1-DCA was detected at 2.0 ppb (MDL of 0.5 ppb), PCE was detected at 0.86 ppb (MDL of 0.5 ppb), and TCE was not detected. 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 Chloroform was detected at 1.1 ppb (MDL 0.5 ppb), 1,1-DCA was detected at 1.40 ppb (MDL of 0.5 ppb), cis 1,2-DCE was detected at 0.51 ppb (MDL 0.5 ppb), PCE was detected at 6.3 ppb (MDL of 0.5 ppb), and TCE was detected at 1.7 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 dropped since March 2000. The average elevation decrease was 1.96 ft with MW4 showing the least decrease.

Groundwater flow direction continues to be to the southwest, and its calculated gradient has flattened, particularly in the vicinity of MW-2 and MW-5, from March to approximately 0.038.

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.

The very low levels measured do show some variations. Results of groundwater sample analysis indicate that TCE was found in MW2 but lowered in MW4. TCE was not found in MW3 and MW5. TCE increased slightly in MW6.

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. MW2 did show results of PCE (1.4 ppb) and TCE (0.82 ppb). MW3 had Chloroform (2.6 ppb) but the PCE (0.5 ppb) was 1/3 of last time.

Increases were noted 1,1-DCA (99 ppb), and PCE (21 ppb) that were again above their California MCLs (1,1-DCA - 5 ppb, and PCE - 5 ppb) in MW-4, while only PCE (6.3 ppb) was above its California MCL in MW-6. MW4 results showed the presence of both Bromoform (1.6 ppb) and Chloroform (2.6). However TCE went from 44 to 7.2 ppb that is still above California MCL of 5 ppb. 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

As previously recommended, the County should consider the applicability of the Containment Zone Concept for this site. With the exception of MW4, the levels are low and the concentration increases and decreases may suggest a bottom threshold concentration has been reached.

It would appear that the purging method using the foot valved centrifugal pump is acceptable. The parameter monitoring indicates that the wells stabilized quite well during purging. We recommend continuing this new faster method of purging for at least the next quarter.

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.

_____, 1999c, *Quarterly Groundwater Monitoring Report Comment Letter*, 16 September 1999.

California Code of Regulations, Title 8; Department of Industrial Relations - California Occupational Safety and Health Regulations (Title 8).

California Code of Regulations, Title 22: Social Security; Division 4: Environmental Health and Division 4.5: Chapter 11: Identification of Hazardous Waste; article 3: Characterization of Hazardous Waste (Title 22).

California State Water Resources Control Board, 1989, Leaking Underground Fuel Tanks Manual (LUFT Manual).

California Department of Water Resources, California Well Standards, Bulletins 74-90 and 74-81.

Code of Federal Regulations, Title 29; part 1910: Occupational Safety and Health Standards (29 CFR).

Code of Federal Regulations, Title 40; part 261; subpart B - Criteria for identifying the Characteristics of Hazardous Waste and for Listing Hazardous Waste, and subpart C - Characteristics of Hazardous Waste (40 CFR).

Division of Toxic Substances Control (DTSC), 1986, California Site Mitigation Decision Tree, Chapter 3.

Designated Level Methodology for Waste Classification and Cleanup Level Determination; California Regional Water Quality Control Board; Central Valley Region (Marshack Document) 1986.

ERM, West, Inc., 1990a, *Soil and Groundwater Investigation* at Former Firestone Tire & Rubber

Company Facility, Albany, California, October 1990.

_____, 1990b, *Soil Remediation* at Former Firestone Tire & Rubber Company Facility, Albany, California, December 1990.

Nielsen, David M., 1991, *Practical Handbook of Ground-Water Monitoring*, Lewis Publishers.

ProTech, 1998a, *Phase I - Environmental Site Assessment Report*, 969 San Pablo Avenue, Albany, California, April 1998.

_____, 1998b, *Letter Report - Groundwater Sampling*, 969 San Pablo Avenue, Albany, California, May 1998

_____, 1998c, *Letter Report - Hydraulic Lift Removal*, 969 San Pablo Avenue, Albany, California, December 1998

_____, 1999a, *Workplan for Groundwater Monitor Well Installation, Development, and Sampling and Analysis*, Kelly-Moore Paint Store, 969 San Pablo Avenue, Albany, California, March, 1999.

_____, 1999b, *Technical Report for Groundwater Monitor Well Installation, Development, and Sampling and Analysis*, Kelly-Moore Paint Store, 969 San Pablo Avenue, Albany, California, April, 1999.

_____, 1999c, *Quarterly Groundwater Monitoring Report*, Kelly-Moore Paint Store, 969 San Pablo Avenue, Albany, California, July, 1999.

_____, 1999d, *Quarterly Groundwater Monitoring Report*, Kelly-Moore Paint Store, 969 San Pablo Avenue, Albany, California, October, 1999.

_____, 2000a, *Quarterly Groundwater Monitoring Report*, Kelly-Moore Paint Store, 969 San Pablo Avenue, Albany, California, January 2000.

_____, 2000b, *Quarterly Groundwater Monitoring Report*, Kelly-Moore Paint Store, 969 San Pablo Avenue, Albany, California, April 2000.

US EPA, 1996, *Test Methods for Evaluating Solid Waste*, (SW-846).

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
	20-Sept-00	42.14	8.55	33.59	ND	ND	ND	ND	1.40	0.83	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
	20-Sept-00	41.49	7.77	33.72	2.60	ND	ND	ND	0.50	ND	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**
	20-Sept-00	41.15	8.93	32.22	2.60	**99.00**	1.40	**25.00**	**21.00**	**7.20**	**2.10**

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-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
	20-Sept-00	41.71	9.63	32.08	ND	**2.00**	ND	ND	0.86	ND	ND
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
	20-Sept-00	42.04	9.65	32.39	1.10	1.40	ND	0.51	**6.30**	1.70	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 2 - Wellbore Volume Calculations
Kelly-Moore Paint company
969 San Pablo Avenue, Albany, CA
ProTech Project #124-OH00
Sampling Date: 9/20/00

Well #	DTW	TD	ΔH	Well R	Well R^2	WV (ft^3)	WV (gal)	VR (g)	TWV
MW-2	8.55	14.53	5.98	0.17	0.03	0.52	3.90	3.50	0.90
MW-3	7.77	14.1	6.33	0.17	0.03	0.55	4.13	4.00	0.97
MW-4	8.93	14.71	5.78	0.17	0.03	0.50	3.77	7.00	1.86
MW-5	9.63	20.11	10.48	0.17	0.03	0.91	6.84	7.00	1.02
MW-6	9.65	19.84	10.19	0.17	0.03	0.89	6.65	6.50	0.98

Notes: Wellbore volume formula used - ΠR^2H; where H is ΔH
DTW = depth-to water (ft below grade)
TD = total depth of well
ΔH = water column thickness (ft)
Well R = well radius (ft)
Well R^2 = well radius squared (ft^2)
WV (ft^3) = wellbore volume (ft^3)
WV (gal) = wellbore volume (gallons); where 1 ft^3 = 7.48 gallons
VR (gal) = volume removed during purging (gallons)
TWV = total wellbore volumes removed during purging

Table 3 - Parameter Testing Results
Kelly-Moore Paint company
969 San Pablo Avenue, Albany, CA
ProTech Project #124-OH00
Sampling Date: 9/20/00

Well #	Interval	~Gals	pH	Cond	Temp
MW-2	Start	0.00	7.73	1.18	72.90
	Middle	1.50	7.26	1.23	73.40
	End	3.50	7.20	1.24	73.40
MW-3	Start	0.00	7.05	1.23	71.50
	Middle	2.00	7.04	1.24	72.40
	End	4.00	6.94	1.22	72.40
MW-4	Start	0.00	6.76	1.18	75.20
	Middle	3.50	6.67	1.23	74.80
	End	7.00	6.47	1.22	73.70
MW-5	Start	0.00	6.78	1.20	70.20
	Middle	3.50	6.79	1.24	71.80
	End	7.00	6.76	1.24	72.20
MW-6	Start	0.00	7.43	1.23	69.70
	Middle	3.00	7.07	1.24	70.30
	End	6.50	6.87	1.23	70.20

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

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
MW-2	0.00	16-Jun-1999	6.88		1.26		62.30	
	5.00		6.94	0.06	1.28	0.02	63.00	0.70
	6.00		6.78	0.16	1.30	0.02	62.30	0.70
	0.00	15-Sep-1999	7.56		1.44		63.50	
	4.00		7.52	0.04	1.44	0.00	63.00	0.50
	0.00	15-Dec-1999	7.66		1.27		60.10	
	4.00		7.58	0.08	1.29	0.02	59.90	0.20
	0.00	16-Mar-2000	8.29		1.32		60.70	
	3.00		8.15	0.14	1.36	0.04	60.50	0.20
	6.00		7.95	0.20	1.37	0.01	60.50	0.00
	0.00	20-Sept-2000	7.73		1.18		72.90	
	1.50		7.26	0.47	1.23	0.05	73.40	0.50
	3.50		7.20	0.06	1.24	0.01	73.40	0.00
MW-3	0.00	29-Mar-1999	6.97		1.32		58.40	
	5.00		6.95	0.02	1.33	0.01	57.40	1.00
	7.00		6.81	0.14	1.34	0.01	58.00	0.60
	0.00	16-Jun-1999	6.68		1.27		62.80	
	5.00		6.88	0.20	1.37	0.10	63.90	1.10
	7.00		6.96	0.08	1.35	0.02	64.00	0.10
	0.00	15-Sep-1999	7.88		1.43		64.90	
	4.50		7.34	0.54	1.40	0.03	65.00	0.10
	0.00	15-Dec-1999	7.79		1.22		56.90	
	4.00		7.55	0.24	1.29	0.07	61.10	4.20

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	16-Mar-2000	8.22		1.28		62.50	
	3.00		7.57	0.65	1.29	0.01	60.50	2.00
	6.00		7.58	0.01	1.30	0.01	61.20	0.70
	0.00	20-Sept-2000	7.05		1.23		71.50	
	2.00		7.04	0.01	1.24	0.01	72.40	0.90
	4.00		6.94	0.10	1.22	0.02	72.40	0.00
MW-4	0.00	29-Mar-1999	6.40		1.35		58.40	
	5.00		6.41	0.01	1.34	0.01	59.40	1.00
	6.00		6.38	0.03	1.34	0.00	60.00	0.60
	0.00	16-Jun-1999	6.34		1.26		62.00	
	5.00		6.54	0.20	1.27	0.01	63.40	1.40
	6.00		6.39	0.15	1.28	0.01	64.20	0.80
	0.00	15-Sep-1999	7.45		1.41		64.20	
	5.00		7.42	0.03	1.38	0.03	64.60	0.40
	0.00	15-Dec-1999	6.81		1.57		57.60	
	4.00		6.75	0.06	1.67	0.10	58.00	0.40
	0.00	16-Mar-2000	7.59		1.46		60.50	
	2.00		7.56	0.03	1.52	0.06	61.20	0.70
	4.00		7.28	0.28	1.55	0.03	61.50	0.30
	0.00	20-Sept-2000	6.76		1.18		75.20	
	3.50		6.67	0.09	1.23	0.05	74.80	0.40
	7.00		6.47	0.20	1.22	0.01	73.70	1.10

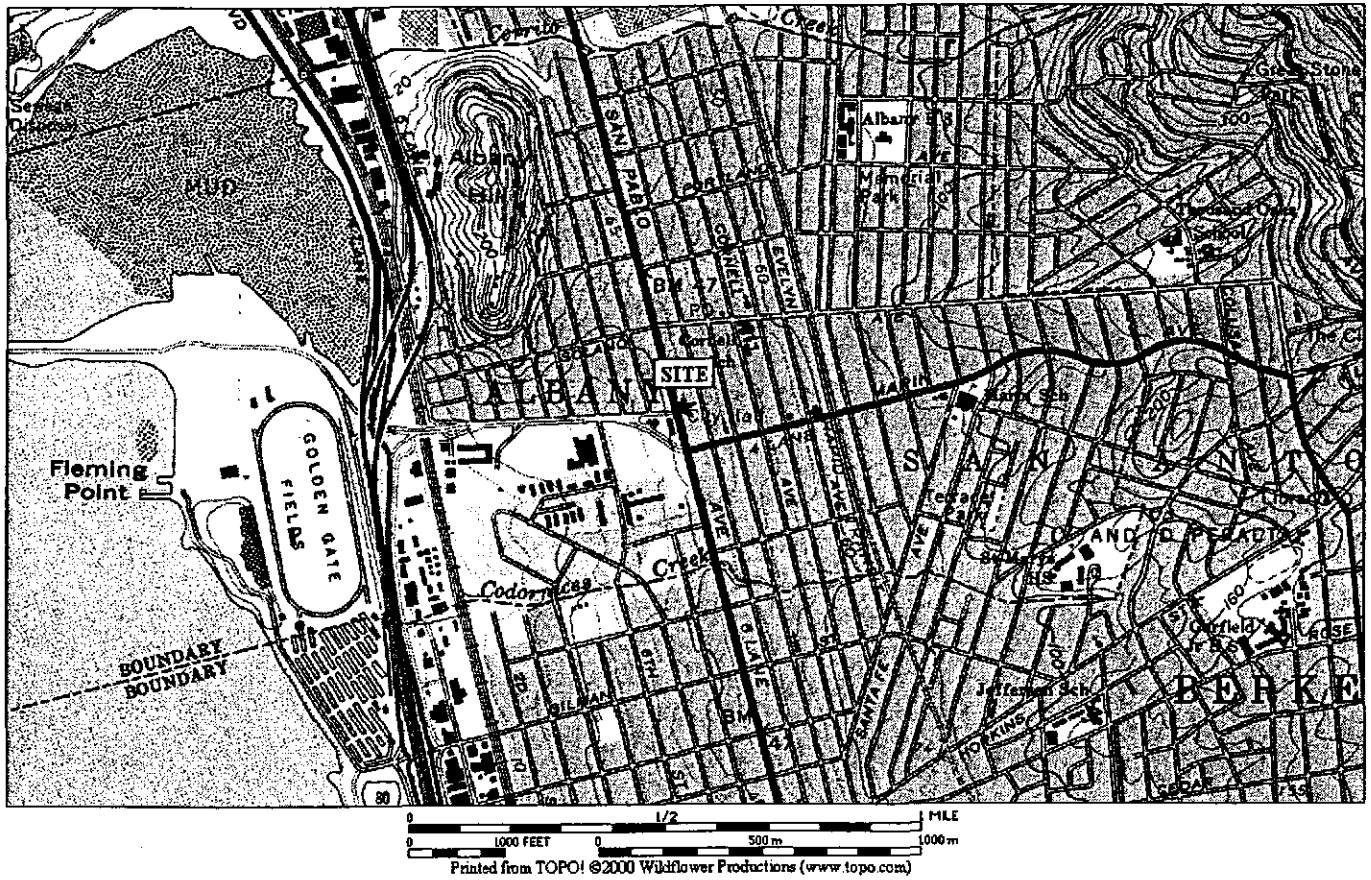
Table 4 - Comparison of Parameter Testing Results
Kelly-Moore Paint company
969 San Pablo Avenue, Albany, CA
ProTech Project #124-OH00

Well #	GR	Date	pH	ΔpH	Cond	ΔCond	Temp	ΔTemp
MW-5	0.00	29-Mar-1999	6.89		1.38		62.50	
	8.00		6.90	0.01	1.30	0.08	66.00	3.50
	15.00		6.70	0.20	1.39	0.09	66.40	0.40
	25.00		6.75	0.05	1.38	0.01	66.70	0.30
	0.00	16-Jun-1999	7.14		1.27		61.50	
	17.00		6.85	0.29	1.44	0.17	62.30	0.80
	25.00		6.86	0.01	1.31	0.13	62.90	0.60
	31.00		6.84	0.02	1.32	0.01	62.60	0.30
	0.00	15-Sep-1999	7.35		1.41		65.80	
	12.00		7.24	0.11	1.42	0.01	65.70	0.10
	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
	0.00	20-Sept-2000	6.78		1.20		70.20	
	3.50		6.79	0.01	1.24	0.04	71.80	1.60
	7.00		6.76	0.03	1.24	0.00	72.20	0.40
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

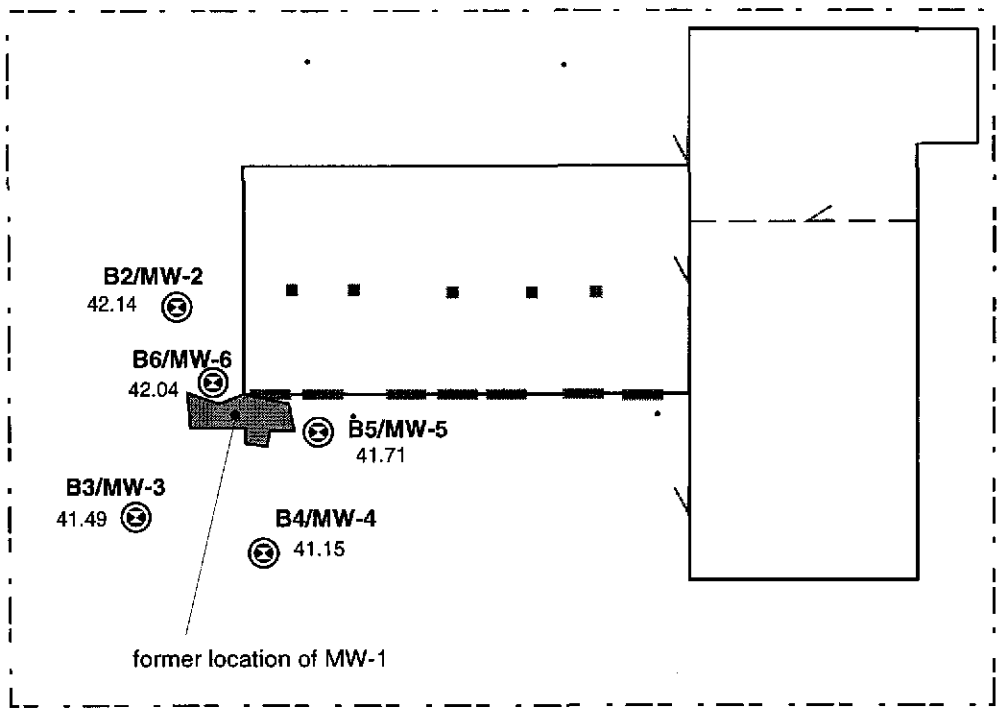
Table 4 - Comparison of Parameter Testing Results
Kelly-Moore Paint company
969 San Pablo Avenue, Albany, CA
ProTech Project #124-OH00

Well #	GR	Date	pH	ΔpH	Cond	ΔCond	Temp	ΔTemp
	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
	0.00	20-Sept-2000	7.43		1.23		69.70	
	3.00		7.07	0.40	1.24	0.01	70.30	0.60
	6.50		6.87	0.20	1.23	0.01	70.20	0.10

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



ProTech Consulting & Engineering	Job No. 000104 Date 20 September 2000 Drawn by WL Rev CHT Approvd WL	**Site Location Map** Project Groundwater Sampling Program Kelly-Moore Paint Company 969 San Pablo Avenue, Albany, CA	↑ N	Figure **1**



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	20 Sept. 2000
Drawn by	WL
Rev	CHT
Apprvd	WL

Project

Site Plan w/ Well Locations

Groundwater Sampling Program

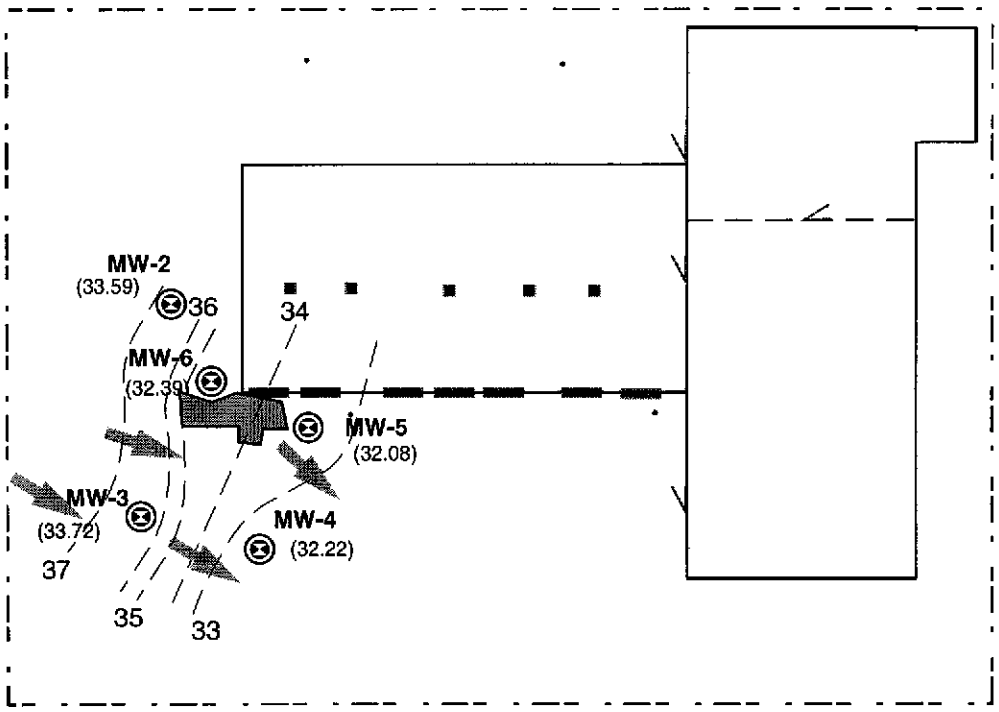
Kelly-Moore Paint Company

969 San Pablo Avenue, Albany, California

N

Figure

2



San Pablo Avenue

Legend

- Property Boundary
- MW-3 33.72 — Groundwater Monitoring Well w/groundwater elevation (ft-AMSL)
- Doorway
- Sewer Cleanout
- Garage Doors
- Former Hydraulic Lifts
- Former waste oil tank excavation limits
- 0.038 — 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	20 Sept. 2000
Drawn by	WL
Rev	CHT
Apprvd	WL

Project

Site Plan w/ Groundwater Elevations

Groundwater Sampling Program

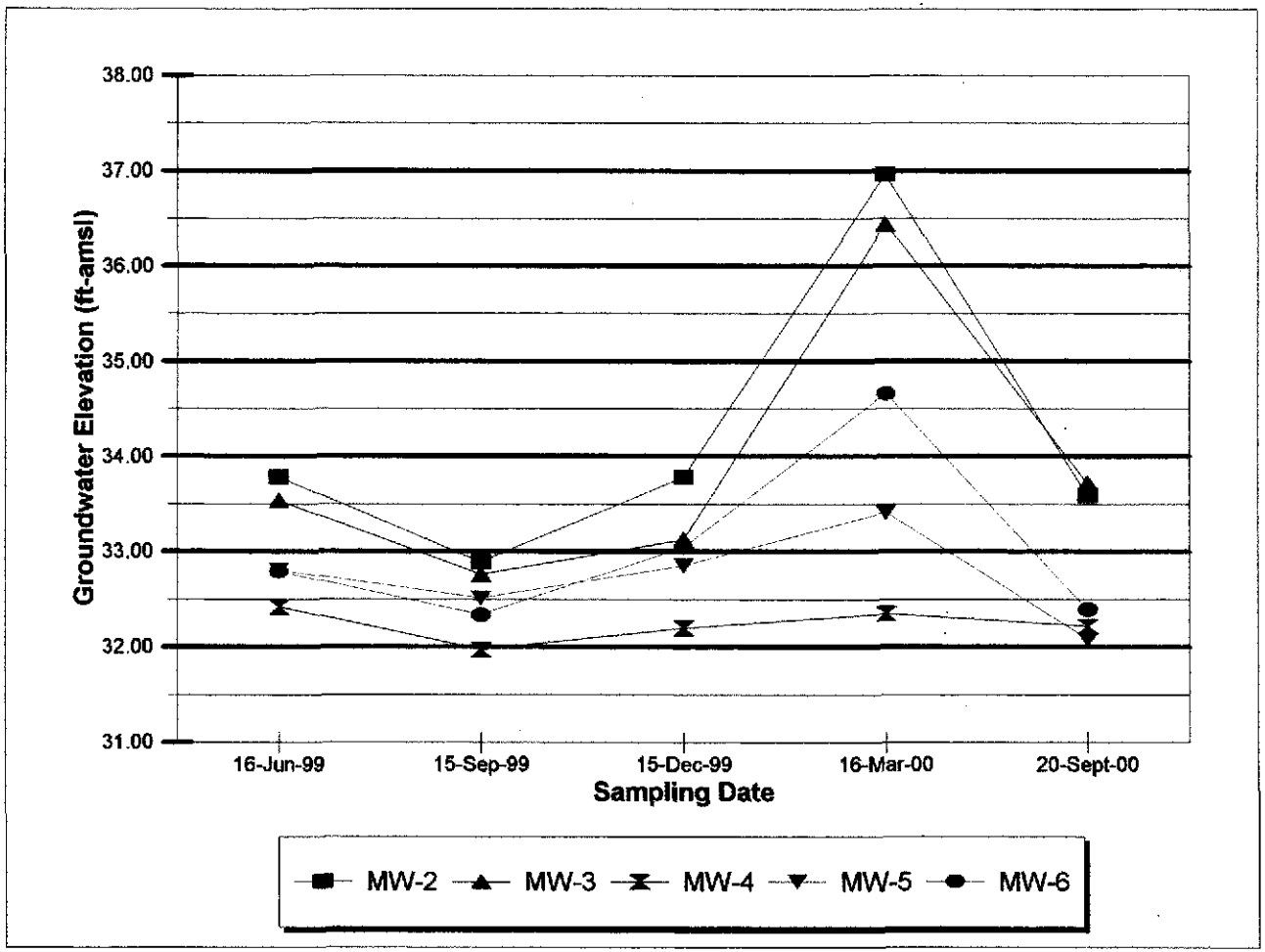
Kelly-Moore Paint Company

969 San Pablo Avenue, Albany, California

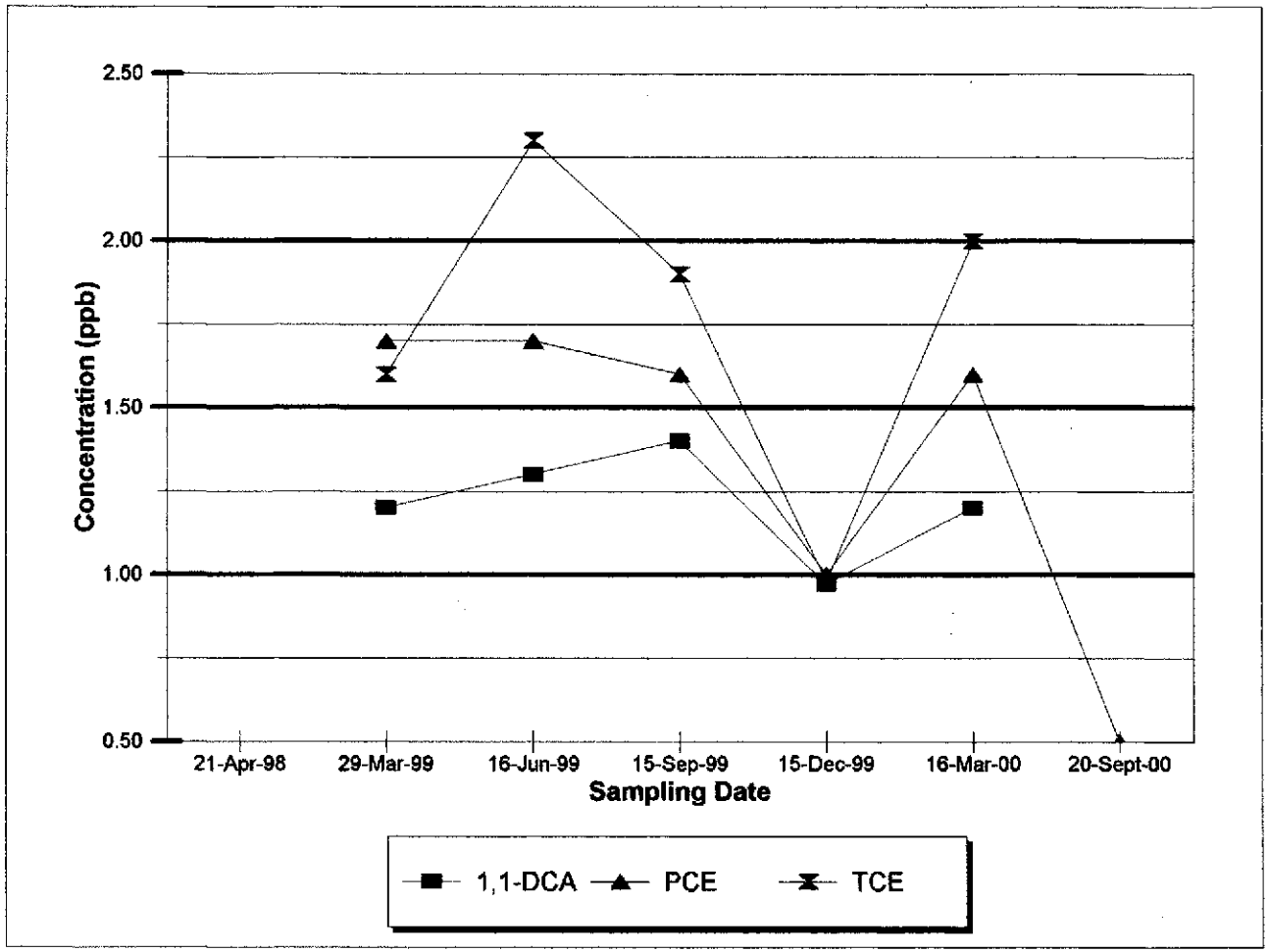
N

Figure

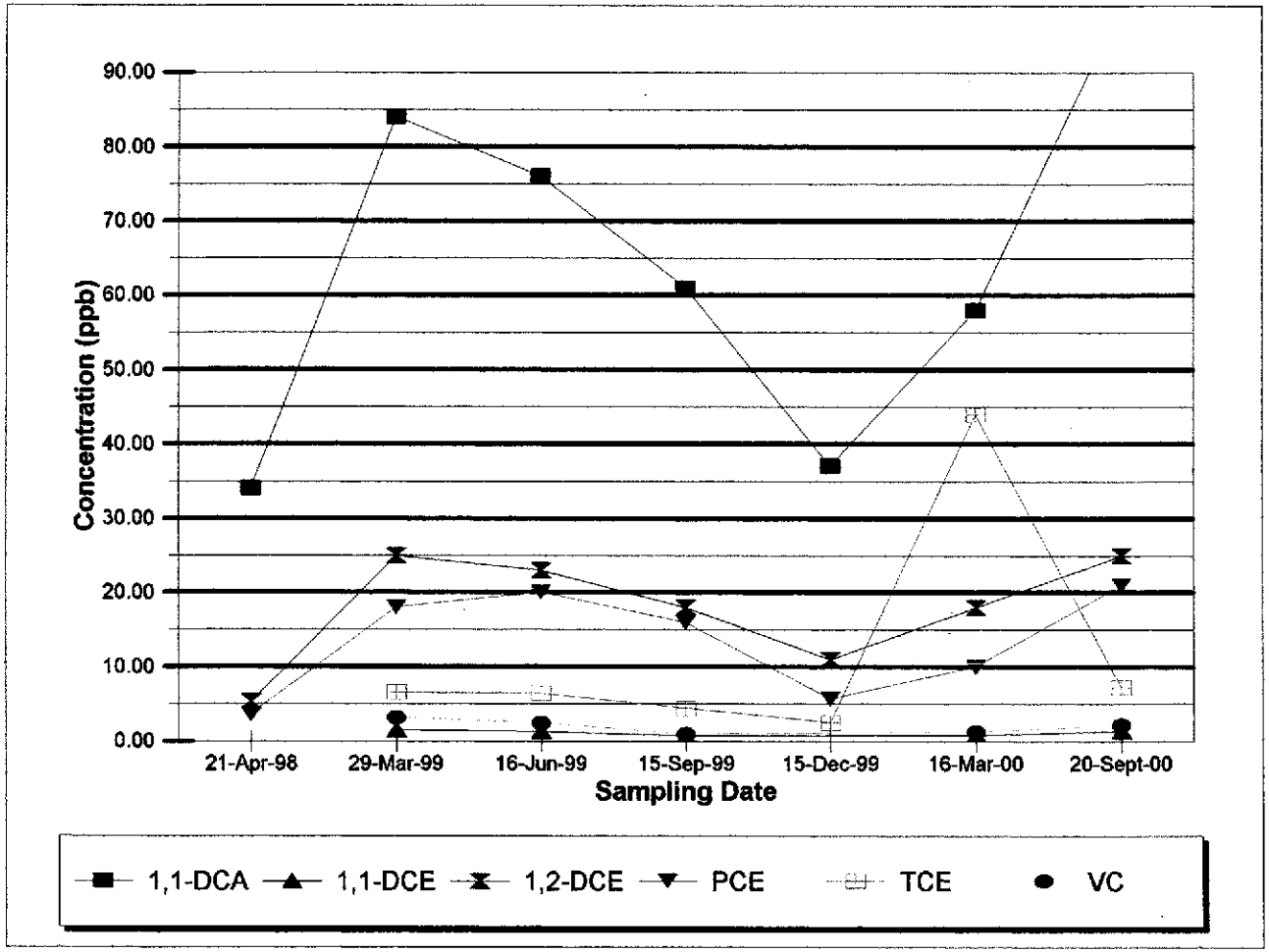
3



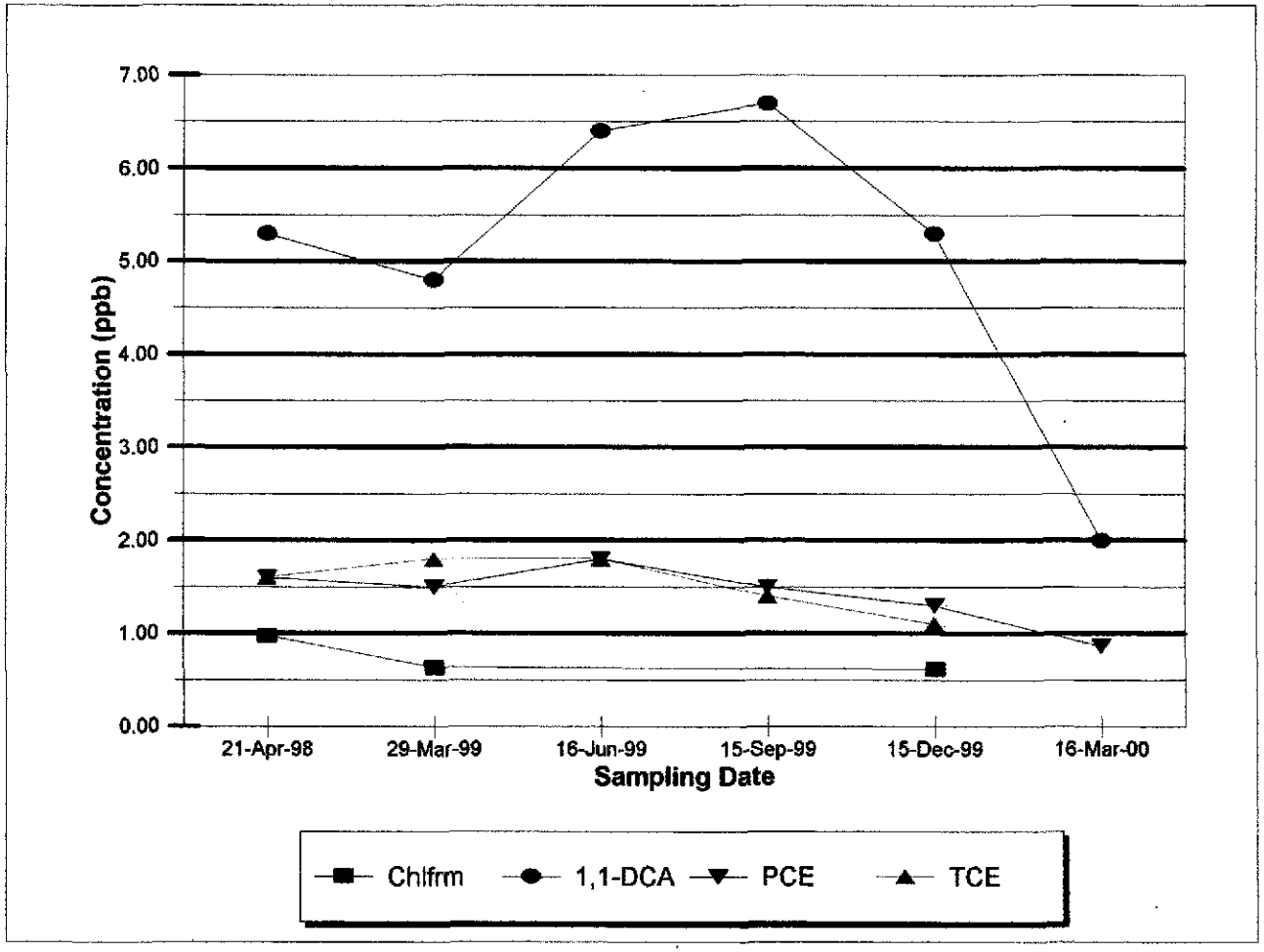
ProTech Consulting & Engineering	Job No. 000104 Date 20 September 2000 Drawn by WL Rev CHT Approvd WL	**Historic Groundwater Elevations** Project Groundwater Sampling Program Kelly-Moore Paint Company 969 San Pablo Avenue, Albany, CA		Figure **4**



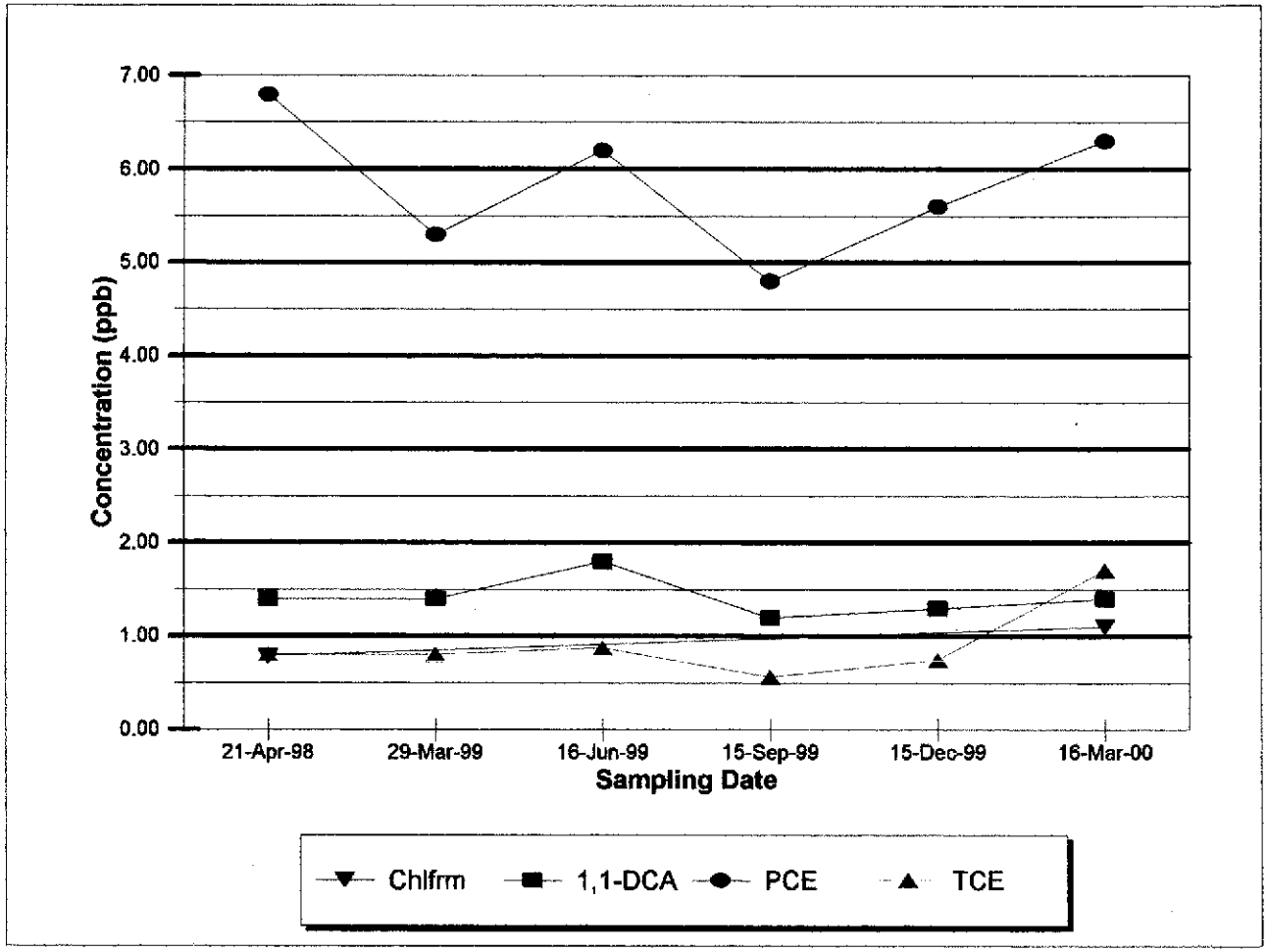
ProTech Consulting & Engineering	Job No. **000104** Date **20 September 2000** Drawn by **WL** Rev **CHT** Approvd **WL**	**Historic VOC Results – MW3** Project Groundwater Sampling Program Kelly-Moore Paint Company 969 San Pablo Avenue, Albany, CA		Figure **5**



ProTech Consulting & Engineering	Job No. 000104 Date 20 September 2000 Drawn by WL Rev CHT Approvd WL	**Historic VOC Results – MW4** Project Groundwater Sampling Program Kelly-Moore Paint Company 969 San Pablo Avenue, Albany, CA		Figure **6**



ProTech Consulting & Engineering	Job No. **000104** Date **20 September 2000** Drawn by **WL** Rev **CHT** Approvd **WL**	**Historic VOC Results – MW5** Project Groundwater Sampling Program Kelly-Moore Paint Company 969 San Pablo Avenue, Albany, CA	Figure **7**



ProTech Consulting & Engineering	Job No. 000104 Date 20 September 2000 Drawn by WL Rev CHT Approvd WL	**Historic VOC Results – MW6** Project Groundwater Sampling Program Kelly-Moore Paint Company 969 San Pablo Avenue, Albany, CA	Figure **8**

H T A

EXCELLENCE IN SCIENCE AND ENGINEERING

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4541 Pennsylvania Ave., Suite One, Fair Oaks, CA 95628-5838
916-965-4235
fax: 916-965-1167
www.htaengineering.com

WELL DEVELOPMENT/SAMPLING DOCUMENTATION FORM

Project Name Kelly-Moore Paint Store Job # _____ Well # MW2
Site Address 969 San Pablo Avenue Date 9/20/00 Sample ID _____
Sampling Team CHT & TVT Weather Conditions _____
Purpose of Sampling ___ Initial ✓ Quarterly ___ Verification ___ Other: _____

GROUNDWATR LEVEL/CASING VOLUME

Description	Time	Depth (DTW)	Total Depth	Feet of Water	Conversion Factor (ft to gal)	Casing Volume (gallons)
Initial	4:30	8.55	14.53	5.98	0.651	3.8
After Purge		12.35				
At Time of Sampling		"	"			

Three Casing Volumes _____ Gals
Five Casing Volumes _____ Gals
Ten Casing Volumes _____ Gals

.21

WELL DEVELOPMENT/PURGING

Equipment: ___ Submersible Pump ___ Bailer ___ Sandpiper ___ Other: _____
Method: _____
Decontamination Method: Triple rinse
Water Containment: ✓ Drums ___ Baker Tank ___ Treatment System ___ Other _____
Labeled: _____

Start Time	Volume Water Extracted	Temperature	µS/cm	pH	Observation (Color, Turbitity, Oils, Odor)
	sample (Start	72.9	1.18	7.73	Brownish tint
	middle	73.4	1.23	7.26	
	end	73.4	1.24	7.20	

SAMPLE INFORMATION

1 Liter Amber # _____ Ice ___ Other _____ 40 ml VOA # 3 Ice ✓ Other _____
Other Container _____ # _____ Ice ___ Other _____

Device: Bailer, Disposable _____ Other Dedicated Bailer

Pertinent Field Observations, Deviations, etc.

_____
_____
_____
_____
_____
_____
_____
_____

1" ϕ = 0.041 gal/ft **2" ϕ = 0.163 gal/ft** **3" ϕ = 0.367 gal/ft** **4" ϕ = 0.651 gal/ft**

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WELL DEVELOPMENT/SAMPLING DOCUMENTATION FORM

Project Name Kelly-Moore Paint Store Job # _____ Well # MW3
Site Address 969 San Pablo Ave Date 9/20/00 Sample ID _____
Sampling Team CHT & TVT Weather Conditions _____
Purpose of Sampling ___ Initial ✓ Quarterly ___ Verification ___ Other: _____

GROUNDWATR LEVEL/CASING VOLUME

Description	Time	Depth (DTW)	Total Depth	Feet of Water	Conversion Factor (ft to gal)	Casing Volume (gallons)
Initial		7.77	14.10	6.33	0.65	4.1
After Purge		12.16				
At Time of Sampling						

Three Casing Volumes _____ Gals
Five Casing Volumes _____ Gals
Ten Casing Volumes _____ Gals

WELL DEVELOPMENT/PURGING

Equipment: ___ Submersible Pump ___ Bailer ___ Sandpiper ___ Other: _____
Method: _____
Decontamination Method: _____
Water Containment: ___ Drums ___ Baker Tank ___ Treatment System ___ Other _____
Labeled: _____

Start Time	Volume Water Extracted	Temperature	µS/cm	pH	Observation (Color, Turbitity, Oils, Odor)
		71.5	1.23	7.05	
		72.4	1.24	7.04	
		72.4	1.22	6.94	

SAMPLE INFORMATION

1 Liter Amber #_____ Ice ___ Other_____ 40 ml VOA # 3 Ice ✓ Other_____
Other Container _____ #_____ Ice ___ Other_____

Device: Bailer, Disposable _____ Other Dedicated Bailer

Pertinent Field Observations, Deviations, etc.

_____
_____
_____
_____
_____
_____
_____
_____

1" ϕ = 0.041 gal/ft **2" ϕ = 0.163 gal/ft** **3" ϕ = 0.367 gal/ft** **4" ϕ = 0.651 gal/ft**

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WELL DEVELOPMENT/SAMPLING DOCUMENTATION FORM

Project Name Kelly-Moore Paint Store Job # _____ Well # MW4
Site Address 969 San Pablo Ave Date 9/20/00 Sample ID _____
Sampling Team CHJ & TVT Weather Conditions _____
Purpose of Sampling ___ Initial ✓ Quarterly ___ Verification ___ Other: _____

GROUNDWATR LEVEL/CASING VOLUME

Description	Time	Depth (DTW)	Total Depth	Feet of Water	Conversion Factor (ft to gal)	Casing Volume (gallons)
Initial		8.93	14.71	5.78	0.65	7.0 (3.8) D
After Purge		12.84				
At Time of Sampling						

Three Casing Volumes _____ Gals
Five Casing Volumes _____ Gals
Ten Casing Volumes _____ Gals

WELL DEVELOPMENT/PURGING

Equipment: ___ Submersible Pump ___ Bailer ___ Sandpiper ___ Other: _____
Method: _____
Decontamination Method: _____
Water Containment: ___ Drums ___ Baker Tank ___ Treatment System ___ Other _____
Labeled: _____

Start Time	Volume Water Extracted	Temperature	µS/cm	pH	Observation (Color, Turbitity, Oils, Odor)
		75.2	1.18	6.76	
		74.8	1.23	6.67	
		73.7	1.22	6.47	
Finish					
1:34					

SAMPLE INFORMATION

1 Liter Amber #_____ Ice ___ Other_____ 40 ml VOA # 3 Ice ✓ Other_____
Other Container _____ #____ Ice ___ Other_____

Device: Bailer, Disposable _____ Other Dedicated Bailer

Pertinent Field Observations, Deviations, etc.

_____
_____
_____
_____
_____
_____
_____
_____

1" ϕ = 0.041 gal/ft **2" ϕ = 0.163 gal/ft** **3" ϕ = 0.367 gal/ft** **4" ϕ = 0.651 gal/ft**

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WELL DEVELOPMENT/SAMPLING DOCUMENTATION FORM

Project Name Kelly-Moore Paint Store Job # _____ Well # MW5

Site Address 969 San Pablo Ave Date 9/20/00 Sample ID _____

Sampling Team CHJ & TVT Weather Conditions _____

Purpose of Sampling ___ Initial ✓ Quarterly ___ Verification ___ Other: _____

GROUNDWATR LEVEL/CASING VOLUME

Description	Time	Depth (DTW)	Total Depth	Feet of Water	Conversion Factor (ft to gal)	Casing Volume (gallons)
Initial		9.63	20.11	10.48	0.652	6.8
After Purge	13.54	~~13.35~~				
At Time of Sampling						

Three Casing Volumes _____ Gals
Five Casing Volumes _____ Gals
Ten Casing Volumes _____ Gals

WELL DEVELOPMENT/PURGING

Equipment: ___ Submersible Pump ___ Bailer ___ Sandpiper ___ Other: _____

Method: _____

Decontamination Method: _____

Water Containment: ___ Drums ___ Baker Tank ___ Treatment System ___ Other _____

Labeled: _____

Start Time	Volume Water Extracted	Temperature	µS/cm	pH	Observation (Color, Turbitity, Oils, Odor)
		70.2	1.20	6.78	
		71.3	1.24	6.79	
		72.2	1.24	6.76	

SAMPLE INFORMATION

1 Liter Amber #_____ Ice ___ Other_____ **40 ml VOA #** 3 Ice ✓ Other_____

Other Container _____ #____ Ice ___ Other_____

Device: Bailer, Disposable _____ Other Dedicated Bailer

Pertinent Field Observations, Deviations, etc.

_____

_____

_____

_____

_____

_____

_____

_____

1" ϕ = 0.041 gal/ft **2" ϕ = 0.163 gal/ft** **3" ϕ = 0.367 gal/ft** **4" ϕ = 0.651 gal/ft**

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WELL DEVELOPMENT/SAMPLING DOCUMENTATION FORM

Project Name Kelly-Moore Paint Store Job # _____ Well # MW6
Site Address 4694 San Pablo Ave Date 9/20/00 Sample ID _____
Sampling Team C.H. T + STAFF Weather Conditions _____
Purpose of Sampling ___ Initial ✓ Quarterly ___ Verification ___ Other: _____

GROUNDWATR LEVEL/CASING VOLUME

Description	Time	Depth (DTW)	Total Depth	Feet of Water	Conversion Factor (ft to gal)	Casing Volume (gallons)
Initial		9.65	19.84	10.19	0.651	6.6
After Purge		14.20				
At Time of Sampling						

Three Casing Volumes _____ Gals
Five Casing Volumes _____ Gals
Ten Casing Volumes _____ Gals

WELL DEVELOPMENT/PURGING

Equipment: ___ Submersible Pump ___ Bailer ___ Sandpiper ___ Other: _____
Method: _____
Decontamination Method: _____
Water Containment: ___ Drums ___ Baker Tank ___ Treatment System ___ Other _____
Labeled: _____

Start Time	Volume Water Extracted	Temperature	µS/cm	pH	Observation (Color, Turbitity, Oils, Odor)
11:22	Start	69.7	1.23	7.43	
	2nd	70.3	1.24	7.07	
	3rd	70.2	1.23	6.87	Cloudy Brown

SAMPLE INFORMATION

1 Liter Amber #_____ Ice ___ Other_____ 40 ml VOA # 3 Ice ✓ Other_____
Other Container _____ #_____ Ice ___ Other_____

Device: Bailer, Disposable _____ Other Dedicated Bailer

Pertinent Field Observations, Deviations, etc.

_____
_____
_____
_____
_____
_____
_____
_____

1" ϕ = 0.041 gal/ft **2" ϕ = 0.163 gal/ft** **3" ϕ = 0.367 gal/ft** **4" ϕ = 0.651 gal/ft**

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

Attn.: Dr. C. Hugh Thompson

Project: K/M

Dear Dr. Thompson,

Attached is our report for your samples received on Wednesday September 20, 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 November 4, 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

Gary Cook

Volatile Organic Compounds by 8260A

Protech Consulting

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

Attn: C. Hugh Thompson

Phone: (650) 569-4020 Fax: (650) 569-4023

Project #:

Project: K/M

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW 2	Water	09/20/2000	1
MW 3	Water	09/20/2000	2
MW 4	Water	09/20/2000	3
MW 5	Water	09/20/2000	4
MW 6	Water	09/20/2000	5

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds by 8260A

Sample ID:	**MW 2**	Lab Sample ID:	**2000-09-0382-001**
Project:	K/M	Received:	09/20/2000 20:30
		Extracted:	09/29/2000 20:50
Sampled:	09/20/2000	QC-Batch:	2000/09/29-01.07
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	ND	50	ug/L	1.00	09/29/2000 20:50	
Benzene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Bromodichloromethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Bromoform	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Bromomethane	ND	1.0	ug/L	1.00	09/29/2000 20:50	
Carbon tetrachloride	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Chlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Chloroethane	ND	1.0	ug/L	1.00	09/29/2000 20:50	
2-Butanone(MEK)	ND	50	ug/L	1.00	09/29/2000 20:50	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Chloroform	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Chloromethane	ND	1.0	ug/L	1.00	09/29/2000 20:50	
Dibromochloromethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1.00	09/29/2000 20:50	
1,2-Dibromoethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Dibromomethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Dichlorodifluoromethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,1-Dichloroethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Ethylbenzene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
2-Hexanone	ND	50	ug/L	1.00	09/29/2000 20:50	
Methylene chloride	ND	5.0	ug/L	1.00	09/29/2000 20:50	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	1.00	09/29/2000 20:50	
Naphthalene	ND	1.0	ug/L	1.00	09/29/2000 20:50	
Styrene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-09-0382

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

V olatile Organic Compounds by 8260A

Sample ID:	**MW 2**	Lab Sample ID:	**2000-09-0382-001**
Project:	K/M	Received:	09/20/2000 20:30
		Extracted:	09/29/2000 20:50
Sampled:	09/20/2000	QC-Batch:	2000/09/29-01.07
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Tetrachloroethene	1.4	0.50	ug/L	1.00	09/29/2000 20:50	
Toluene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Trichloroethene	0.83	0.50	ug/L	1.00	09/29/2000 20:50	
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Vinyl acetate	ND	5.0	ug/L	1.00	09/29/2000 20:50	
Vinyl chloride	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Total xylenes	ND	1.0	ug/L	1.00	09/29/2000 20:50	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Carbon disulfide	ND	1.0	ug/L	1.00	09/29/2000 20:50	
Isopropylbenzene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Bromobenzene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Bromochloromethane	ND	1.0	ug/L	1.00	09/29/2000 20:50	
Trichlorofluoromethane	ND	2.0	ug/L	1.00	09/29/2000 20:50	
Surrogate(s)						
4-Bromofluorobenzene	93.4	86-115	%	1.00	09/29/2000 20:50	
1,2-Dichloroethane-d4	92.0	76-114	%	1.00	09/29/2000 20:50	
Toluene-d8	104.0	88-110	%	1.00	09/29/2000 20:50	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds by 8260A

Sample ID:	**MW 3**	Lab Sample ID:	**2000-09-0382-002**
Project:	K/M	Received:	09/20/2000 20:30
		Extracted:	09/29/2000 21:29
Sampled:	09/20/2000	QC-Batch:	2000/09/29-01.07
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	ND	50	ug/L	1.00	09/29/2000 21:29	
Benzene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Bromodichloromethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Bromoform	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Bromomethane	ND	1.0	ug/L	1.00	09/29/2000 21:29	
Carbon tetrachloride	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Chlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Chloroethane	ND	1.0	ug/L	1.00	09/29/2000 21:29	
2-Butanone(MEK)	ND	50	ug/L	1.00	09/29/2000 21:29	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Chloroform	2.6	0.50	ug/L	1.00	09/29/2000 21:29	
Chloromethane	ND	1.0	ug/L	1.00	09/29/2000 21:29	
Dibromochloromethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1.00	09/29/2000 21:29	
1,2-Dibromoethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Dibromomethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Dichlorodifluoromethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,1-Dichloroethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Ethylbenzene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
2-Hexanone	ND	50	ug/L	1.00	09/29/2000 21:29	
Methylene chloride	ND	5.0	ug/L	1.00	09/29/2000 21:29	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	1.00	09/29/2000 21:29	
Naphthalene	ND	1.0	ug/L	1.00	09/29/2000 21:29	
Styrene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds by 8260A

Sample ID: **MW 3**
Project: K/M
Sampled: 09/20/2000
Matrix: Water

Lab Sample ID: **2000-09-0382-002**
Received: 09/20/2000 20:30
Extracted: 09/29/2000 21:29
QC-Batch: 2000/09/29-01.07

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Tetrachloroethene	0.50	0.50	ug/L	1.00	09/29/2000 21:29	
Toluene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Trichloroethene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Vinyl acetate	ND	5.0	ug/L	1.00	09/29/2000 21:29	
Vinyl chloride	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Total xylenes	ND	1.0	ug/L	1.00	09/29/2000 21:29	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Carbon disulfide	ND	1.0	ug/L	1.00	09/29/2000 21:29	
Isopropylbenzene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Bromobenzene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Bromochloromethane	ND	1.0	ug/L	1.00	09/29/2000 21:29	
Trichlorofluoromethane	ND	2.0	ug/L	1.00	09/29/2000 21:29	
Surrogate(s)						
4-Bromofluorobenzene	94.7	86-115	%	1.00	09/29/2000 21:29	
1,2-Dichloroethane-d4	89.6	76-114	%	1.00	09/29/2000 21:29	
Toluene-d8	104.5	88-110	%	1.00	09/29/2000 21:29	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-09-0382

To: **Protech Consulting**

Attn.: C. Hugh Thompson

Test Method: 8260A

Prep Method: 5030

Volatile Organic Compounds by 8260A

Sample ID:	**MW 4**	Lab Sample ID:	**2000-09-0382-003**
Project:	K/M	Received:	09/20/2000 20:30
		Extracted:	09/29/2000 22:08
Sampled:	09/20/2000	QC-Batch:	2000/09/29-01.07
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	ND	50	ug/L	1.00	09/29/2000 22:08	
Benzene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Bromodichloromethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Bromoform	1.6	0.50	ug/L	1.00	09/29/2000 22:08	
Bromomethane	ND	1.0	ug/L	1.00	09/29/2000 22:08	
Carbon tetrachloride	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Chlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Chloroethane	ND	1.0	ug/L	1.00	09/29/2000 22:08	
2-Butanone(MEK)	ND	50	ug/L	1.00	09/29/2000 22:08	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Chloroform	2.6	0.50	ug/L	1.00	09/29/2000 22:08	
Chloromethane	ND	1.0	ug/L	1.00	09/29/2000 22:08	
Dibromochloromethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1.00	09/29/2000 22:08	
1,2-Dibromoethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Dibromomethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Dichlorodifluoromethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,1-Dichloroethane	99	0.50	ug/L	1.00	09/29/2000 22:08	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,1-Dichloroethene	1.4	0.50	ug/L	1.00	09/29/2000 22:08	
cis-1,2-Dichloroethene	25	0.50	ug/L	1.00	09/29/2000 22:08	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Ethylbenzene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
2-Hexanone	ND	50	ug/L	1.00	09/29/2000 22:08	
Methylene chloride	ND	5.0	ug/L	1.00	09/29/2000 22:08	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	1.00	09/29/2000 22:08	
Naphthalene	ND	1.0	ug/L	1.00	09/29/2000 22:08	
Styrene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

V olatile Organic Compounds by 8260A

Sample ID: **MW 4**
Project: K/M
Sampled: 09/20/2000
Matrix: Water

Lab Sample ID: **2000-09-0382-003**
Received: 09/20/2000 20:30
Extracted: 09/29/2000 22:08
QC-Batch: 2000/09/29-01.07

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Tetrachloroethene	21	0.50	ug/L	1.00	09/29/2000 22:08	
Toluene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Trichloroethene	7.2	0.50	ug/L	1.00	09/29/2000 22:08	
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Vinyl acetate	ND	5.0	ug/L	1.00	09/29/2000 22:08	
Vinyl chloride	2.1	0.50	ug/L	1.00	09/29/2000 22:08	
Total xylenes	ND	1.0	ug/L	1.00	09/29/2000 22:08	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Carbon disulfide	ND	1.0	ug/L	1.00	09/29/2000 22:08	
Isopropylbenzene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Bromobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Bromochloromethane	ND	1.0	ug/L	1.00	09/29/2000 22:08	
Trichlorofluoromethane	ND	2.0	ug/L	1.00	09/29/2000 22:08	
Surrogate(s)						
4-Bromofluorobenzene	94.5	86-115	%	1.00	09/29/2000 22:08	
1,2-Dichloroethane-d4	89.4	76-114	%	1.00	09/29/2000 22:08	
Toluene-d8	104.1	88-110	%	1.00	09/29/2000 22:08	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds by 8260A

Sample ID:	**MW 5**	Lab Sample ID:	**2000-09-0382-004**
Project:	K/M	Received:	09/20/2000 20:30
		Extracted:	09/29/2000 22:47
Sampled:	09/20/2000	QC-Batch:	2000/09/29-01.07
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	ND	50	ug/L	1.00	09/29/2000 22:47	
Benzene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Bromodichloromethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Bromoform	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Bromomethane	ND	1.0	ug/L	1.00	09/29/2000 22:47	
Carbon tetrachloride	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Chlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Chloroethane	ND	1.0	ug/L	1.00	09/29/2000 22:47	
2-Butanone(MEK)	ND	50	ug/L	1.00	09/29/2000 22:47	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Chloroform	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Chloromethane	ND	1.0	ug/L	1.00	09/29/2000 22:47	
Dibromochloromethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1.00	09/29/2000 22:47	
1,2-Dibromoethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Dibromomethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Dichlorodifluoromethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,1-Dichloroethane	2.0	0.50	ug/L	1.00	09/29/2000 22:47	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Ethylbenzene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
2-Hexanone	ND	50	ug/L	1.00	09/29/2000 22:47	
Methylene chloride	ND	5.0	ug/L	1.00	09/29/2000 22:47	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	1.00	09/29/2000 22:47	
Naphthalene	ND	1.0	ug/L	1.00	09/29/2000 22:47	
Styrene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds by 8260A

Sample ID: **MW 5**
Project: K/M
Sampled: 09/20/2000
Matrix: Water

Lab Sample ID: **2000-09-0382-004**
Received: 09/20/2000 20:30
Extracted: 09/29/2000 22:47
QC-Batch: 2000/09/29-01.07

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Tetrachloroethene	0.86	0.50	ug/L	1.00	09/29/2000 22:47	
Toluene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Trichloroethene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Vinyl acetate	ND	5.0	ug/L	1.00	09/29/2000 22:47	
Vinyl chloride	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Total xylenes	ND	1.0	ug/L	1.00	09/29/2000 22:47	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Carbon disulfide	ND	1.0	ug/L	1.00	09/29/2000 22:47	
Isopropylbenzene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Bromobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Bromochloromethane	ND	1.0	ug/L	1.00	09/29/2000 22:47	
Trichlorofluoromethane	ND	2.0	ug/L	1.00	09/29/2000 22:47	
Surrogate(s)						
4-Bromofluorobenzene	95.7	86-115	%	1.00	09/29/2000 22:47	
1,2-Dichloroethane-d4	89.3	76-114	%	1.00	09/29/2000 22:47	
Toluene-d8	104.6	88-110	%	1.00	09/29/2000 22:47	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds by 8260A

Sample ID:	**MW 6**	Lab Sample ID:	**2000-09-0382-005**
Project:	K/M	Received:	09/20/2000 20:30
		Extracted:	09/29/2000 23:26
Sampled:	09/20/2000	QC-Batch:	2000/09/29-01.07
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	ND	50	ug/L	1.00	09/29/2000 23:26	
Benzene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Bromodichloromethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Bromoform	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Bromomethane	ND	1.0	ug/L	1.00	09/29/2000 23:26	
Carbon tetrachloride	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Chlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Chloroethane	ND	1.0	ug/L	1.00	09/29/2000 23:26	
2-Butanone(MEK)	ND	50	ug/L	1.00	09/29/2000 23:26	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Chloroform	1.1	0.50	ug/L	1.00	09/29/2000 23:26	
Chloromethane	ND	1.0	ug/L	1.00	09/29/2000 23:26	
Dibromochloromethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1.00	09/29/2000 23:26	
1,2-Dibromoethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Dibromomethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Dichlorodifluoromethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,1-Dichloroethane	1.4	0.50	ug/L	1.00	09/29/2000 23:26	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
cis-1,2-Dichloroethene	0.51	0.50	ug/L	1.00	09/29/2000 23:26	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Ethylbenzene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
2-Hexanone	ND	50	ug/L	1.00	09/29/2000 23:26	
Methylene chloride	ND	5.0	ug/L	1.00	09/29/2000 23:26	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	1.00	09/29/2000 23:26	
Naphthalene	ND	1.0	ug/L	1.00	09/29/2000 23:26	
Styrene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-09-0382

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds by 8260A

Sample ID:	**MW 6**	Lab Sample ID:	**2000-09-0382-005**
Project:	K/M	Received:	09/20/2000 20:30
		Extracted:	09/29/2000 23:26
Sampled:	09/20/2000	QC-Batch:	2000/09/29-01.07
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Tetrachloroethene	6.3	0.50	ug/L	1.00	09/29/2000 23:26	
Toluene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Trichloroethene	1.7	0.50	ug/L	1.00	09/29/2000 23:26	
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Vinyl acetate	ND	5.0	ug/L	1.00	09/29/2000 23:26	
Vinyl chloride	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Total xylenes	ND	1.0	ug/L	1.00	09/29/2000 23:26	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Carbon disulfide	ND	1.0	ug/L	1.00	09/29/2000 23:26	
Isopropylbenzene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Bromobenzene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Bromochloromethane	ND	1.0	ug/L	1.00	09/29/2000 23:26	
Trichlorofluoromethane	ND	2.0	ug/L	1.00	09/29/2000 23:26	
Surrogate(s)						
4-Bromofluorobenzene	94.5	86-115	%	1.00	09/29/2000 23:26	
1,2-Dichloroethane-d4	90.5	76-114	%	1.00	09/29/2000 23:26	
Toluene-d8	105.7	88-110	%	1.00	09/29/2000 23:26	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Batch QC Report
Volatile Organic Compounds by 8260A

Method Blank | **Water** | **QC Batch # 2000/09/29-01.07**

MB: 2000/09/29-01.07-008 | Date Extracted: 09/29/2000 11:03

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Acetone	ND	50	ug/L	09/29/2000 11:03	
Benzene	ND	0.5	ug/L	09/29/2000 11:03	
Bromodichloromethane	ND	0.5	ug/L	09/29/2000 11:03	
Bromoform	ND	0.5	ug/L	09/29/2000 11:03	
Bromomethane	ND	1.0	ug/L	09/29/2000 11:03	
Carbon tetrachloride	ND	0.5	ug/L	09/29/2000 11:03	
Chlorobenzene	ND	0.5	ug/L	09/29/2000 11:03	
Chloroethane	ND	1.0	ug/L	09/29/2000 11:03	
2-Butanone(MEK)	ND	50	ug/L	09/29/2000 11:03	
2-Chloroethylvinyl ether	ND	0.5	ug/L	09/29/2000 11:03	
Chloroform	ND	0.5	ug/L	09/29/2000 11:03	
Chloromethane	ND	1.0	ug/L	09/29/2000 11:03	
Dibromochloromethane	ND	0.5	ug/L	09/29/2000 11:03	
1,2-Dichlorobenzene	ND	0.5	ug/L	09/29/2000 11:03	
1,3-Dichlorobenzene	ND	0.5	ug/L	09/29/2000 11:03	
1,4-Dichlorobenzene	ND	0.5	ug/L	09/29/2000 11:03	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	09/29/2000 11:03	
1,2-Dibromoethane	ND	0.5	ug/L	09/29/2000 11:03	
Dibromomethane	ND	0.5	ug/L	09/29/2000 11:03	
Dichlorodifluoromethane	ND	0.5	ug/L	09/29/2000 11:03	
1,1-Dichloroethane	ND	0.5	ug/L	09/29/2000 11:03	
1,2-Dichloroethane	ND	0.5	ug/L	09/29/2000 11:03	
1,1-Dichloroethene	ND	0.5	ug/L	09/29/2000 11:03	
cis-1,2-Dichloroethene	ND	0.5	ug/L	09/29/2000 11:03	
trans-1,2-Dichloroethene	ND	0.5	ug/L	09/29/2000 11:03	
1,2-Dichloropropane	ND	0.5	ug/L	09/29/2000 11:03	
cis-1,3-Dichloropropene	ND	0.5	ug/L	09/29/2000 11:03	
trans-1,3-Dichloropropene	ND	0.5	ug/L	09/29/2000 11:03	
Ethylbenzene	ND	0.5	ug/L	09/29/2000 11:03	
2-Hexanone	ND	50	ug/L	09/29/2000 11:03	
Methylene chloride	ND	5.0	ug/L	09/29/2000 11:03	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	09/29/2000 11:03	
Naphthalene	ND	1.0	ug/L	09/29/2000 11:03	
Styrene	ND	0.5	ug/L	09/29/2000 11:03	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	09/29/2000 11:03	
Tetrachloroethene	ND	0.5	ug/L	09/29/2000 11:03	
Toluene	ND	0.5	ug/L	09/29/2000 11:03	
1,1,1-Trichloroethane	ND	0.5	ug/L	09/29/2000 11:03	
1,1,2-Trichloroethane	ND	0.5	ug/L	09/29/2000 11:03	
Trichloroethene	ND	0.5	ug/L	09/29/2000 11:03	
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	09/29/2000 11:03	
Vinyl acetate	ND	5.0	ug/L	09/29/2000 11:03	
Vinyl chloride	ND	0.5	ug/L	09/29/2000 11:03	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Batch QC Report
Volatile Organic Compounds by 8260A

Method Blank | **Water** | **QC Batch # 2000/09/29-01.07**

MB: 2000/09/29-01.07-008 | Date Extracted: 09/29/2000 11:03

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Total xylenes	ND	1.0	ug/L	09/29/2000 11:03	
Trichlorotrifluoroethane	ND	0.5	ug/L	09/29/2000 11:03	
Carbon disulfide	ND	1.0	ug/L	09/29/2000 11:03	
Isopropylbenzene	ND	0.5	ug/L	09/29/2000 11:03	
Bromobenzene	ND	0.5	ug/L	09/29/2000 11:03	
Bromochloromethane	ND	1.0	ug/L	09/29/2000 11:03	
Trichlorofluoromethane	ND	2.0	ug/L	09/29/2000 11:03	
Surrogate(s)					
4-Bromofluorobenzene	94.0	86-115	%	09/29/2000 11:03	
1,2-Dichloroethane-d4	90.4	76-114	%	09/29/2000 11:03	
Toluene-d8	103.2	88-110	%	09/29/2000 11:03	

To: **Protech Consulting**
Attn: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Batch QC Report

Volatile Organic Compounds by 8260A

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/09/29-01.07**

LCS: 2000/09/29-01.07-003 Extracted: 09/29/2000 09:45 Analyzed 09/29/2000 09:45
LCSD: 2000/09/29-01.07-004 Extracted: 09/29/2000 10:24 Analyzed 09/29/2000 10:24

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	52.2	53.3	50.0	50.0	104.4	106.6	2.1	69-129	20		
Chlorobenzene	49.7	49.7	50.0	50.0	99.4	99.4	0.0	61-121	20		
1,1-Dichloroethene	44.2	45.5	50.0	50.0	88.4	91.0	2.9	65-125	20		
Toluene	50.4	51.3	50.0	50.0	100.8	102.6	1.8	70-130	20		
Trichloroethene	46.6	47.5	50.0	50.0	93.2	95.0	1.9	74-134	20		
Surrogate(s)											
4-Bromofluorobenzene	470	471	500	500	94.0	94.2		86-115			
1,2-Dichloroethane-d4	452	463	500	500	90.4	92.6		76-114			
Toluene-d8	502	508	500	500	100.4	101.6		88-110			

Volatile Organic Compounds by 8260A

Protech Consulting

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

Attn: C. Hugh Thompson

Phone: (650) 569-4020 Fax: (650) 569-4023

Project #:

Project: K/M

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW 2	Water	09/20/2000	1
MW 3	Water	09/20/2000	2
MW 4	Water	09/20/2000	3
MW 5	Water	09/20/2000	4
MW 6	Water	09/20/2000	5

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds by 8260A

Sample ID:	**MW 2**	Lab Sample ID:	**2000-09-0382-001**
Project:	K/M	Received:	09/20/2000 20:30
		Extracted:	09/29/2000 20:50
Sampled:	09/20/2000	QC-Batch:	2000/09/29-01.07
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	ND	50	ug/L	1.00	09/29/2000 20:50	
Benzene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Bromodichloromethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Bromoform	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Bromomethane	ND	1.0	ug/L	1.00	09/29/2000 20:50	
Carbon tetrachloride	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Chlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Chloroethane	ND	1.0	ug/L	1.00	09/29/2000 20:50	
2-Butanone(MEK)	ND	50	ug/L	1.00	09/29/2000 20:50	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Chloroform	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Chloromethane	ND	1.0	ug/L	1.00	09/29/2000 20:50	
Dibromochloromethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1.00	09/29/2000 20:50	
1,2-Dibromoethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Dibromomethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Dichlorodifluoromethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,1-Dichloroethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Ethylbenzene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
2-Hexanone	ND	50	ug/L	1.00	09/29/2000 20:50	
Methylene chloride	ND	5.0	ug/L	1.00	09/29/2000 20:50	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	1.00	09/29/2000 20:50	
Naphthalene	ND	1.0	ug/L	1.00	09/29/2000 20:50	
Styrene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds by 8260A

Sample ID:	**MW 2**	Lab Sample ID:	**2000-09-0382-001**
Project:	K/M	Received:	09/20/2000 20:30
		Extracted:	09/29/2000 20:50
Sampled:	09/20/2000	QC-Batch:	2000/09/29-01.07
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Tetrachloroethene	1.4	0.50	ug/L	1.00	09/29/2000 20:50	
Toluene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Trichloroethene	0.83	0.50	ug/L	1.00	09/29/2000 20:50	
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Vinyl acetate	ND	5.0	ug/L	1.00	09/29/2000 20:50	
Vinyl chloride	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Total xylenes	ND	1.0	ug/L	1.00	09/29/2000 20:50	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Carbon disulfide	ND	1.0	ug/L	1.00	09/29/2000 20:50	
Isopropylbenzene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Bromobenzene	ND	0.50	ug/L	1.00	09/29/2000 20:50	
Bromochloromethane	ND	1.0	ug/L	1.00	09/29/2000 20:50	
Trichlorofluoromethane	ND	2.0	ug/L	1.00	09/29/2000 20:50	
Surrogate(s)						
4-Bromofluorobenzene	93.4	86-115	%	1.00	09/29/2000 20:50	
1,2-Dichloroethane-d4	92.0	76-114	%	1.00	09/29/2000 20:50	
Toluene-d8	104.0	88-110	%	1.00	09/29/2000 20:50	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds by 8260A

Sample ID: **MW 3**
Project: K/M
Sampled: 09/20/2000
Matrix: Water

Lab Sample ID: **2000-09-0382-002**
Received: 09/20/2000 20:30
Extracted: 09/29/2000 21:29
QC-Batch: 2000/09/29-01.07

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	ND	50	ug/L	1.00	09/29/2000 21:29	
Benzene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Bromodichloromethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Bromoform	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Bromomethane	ND	1.0	ug/L	1.00	09/29/2000 21:29	
Carbon tetrachloride	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Chlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Chloroethane	ND	1.0	ug/L	1.00	09/29/2000 21:29	
2-Butanone(MEK)	ND	50	ug/L	1.00	09/29/2000 21:29	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Chloroform	2.6	0.50	ug/L	1.00	09/29/2000 21:29	
Chloromethane	ND	1.0	ug/L	1.00	09/29/2000 21:29	
Dibromochloromethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1.00	09/29/2000 21:29	
1,2-Dibromoethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Dibromomethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Dichlorodifluoromethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,1-Dichloroethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Ethylbenzene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
2-Hexanone	ND	50	ug/L	1.00	09/29/2000 21:29	
Methylene chloride	ND	5.0	ug/L	1.00	09/29/2000 21:29	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	1.00	09/29/2000 21:29	
Naphthalene	ND	1.0	ug/L	1.00	09/29/2000 21:29	
Styrene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds by 8260A

Sample ID: **MW 3**
Project: K/M
Sampled: 09/20/2000
Matrix: Water

Lab Sample ID: **2000-09-0382-002**
Received: 09/20/2000 20:30
Extracted: 09/29/2000 21:29
QC-Batch: 2000/09/29-01.07

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Tetrachloroethene	0.50	0.50	ug/L	1.00	09/29/2000 21:29	
Toluene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Trichloroethene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Vinyl acetate	ND	5.0	ug/L	1.00	09/29/2000 21:29	
Vinyl chloride	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Total xylenes	ND	1.0	ug/L	1.00	09/29/2000 21:29	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Carbon disulfide	ND	1.0	ug/L	1.00	09/29/2000 21:29	
Isopropylbenzene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Bromobenzene	ND	0.50	ug/L	1.00	09/29/2000 21:29	
Bromochloromethane	ND	1.0	ug/L	1.00	09/29/2000 21:29	
Trichlorofluoromethane	ND	2.0	ug/L	1.00	09/29/2000 21:29	
Surrogate(s)						
4-Bromofluorobenzene	94.7	86-115	%	1.00	09/29/2000 21:29	
1,2-Dichloroethane-d4	89.6	76-114	%	1.00	09/29/2000 21:29	
Toluene-d8	104.5	88-110	%	1.00	09/29/2000 21:29	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds by 8260A

Sample ID: **MW 4**
Project: K/M
Sampled: 09/20/2000
Matrix: Water

Lab Sample ID: **2000-09-0382-003**
Received: 09/20/2000 20:30
Extracted: 09/29/2000 22:08
QC-Batch: 2000/09/29-01.07

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	ND	50	ug/L	1.00	09/29/2000 22:08	
Benzene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Bromodichloromethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Bromoform	1.6	0.50	ug/L	1.00	09/29/2000 22:08	
Bromomethane	ND	1.0	ug/L	1.00	09/29/2000 22:08	
Carbon tetrachloride	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Chlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Chloroethane	ND	1.0	ug/L	1.00	09/29/2000 22:08	
2-Butanone(MEK)	ND	50	ug/L	1.00	09/29/2000 22:08	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Chloroform	2.6	0.50	ug/L	1.00	09/29/2000 22:08	
Chloromethane	ND	1.0	ug/L	1.00	09/29/2000 22:08	
Dibromochloromethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1.00	09/29/2000 22:08	
1,2-Dibromoethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Dibromomethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Dichlorodifluoromethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,1-Dichloroethane	99	0.50	ug/L	1.00	09/29/2000 22:08	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,1-Dichloroethene	1.4	0.50	ug/L	1.00	09/29/2000 22:08	
cis-1,2-Dichloroethene	25	0.50	ug/L	1.00	09/29/2000 22:08	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Ethylbenzene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
2-Hexanone	ND	50	ug/L	1.00	09/29/2000 22:08	
Methylene chloride	ND	5.0	ug/L	1.00	09/29/2000 22:08	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	1.00	09/29/2000 22:08	
Naphthalene	ND	1.0	ug/L	1.00	09/29/2000 22:08	
Styrene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds by 8260A

Sample ID:	**MW 4**	Lab Sample ID:	**2000-09-0382-003**
Project:	K/M	Received:	09/20/2000 20:30
		Extracted:	09/29/2000 22:08
Sampled:	09/20/2000	QC-Batch:	2000/09/29-01.07
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Tetrachloroethene	21	0.50	ug/L	1.00	09/29/2000 22:08	
Toluene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Trichloroethene	7.2	0.50	ug/L	1.00	09/29/2000 22:08	
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Vinyl acetate	ND	5.0	ug/L	1.00	09/29/2000 22:08	
Vinyl chloride	2.1	0.50	ug/L	1.00	09/29/2000 22:08	
Total xylenes	ND	1.0	ug/L	1.00	09/29/2000 22:08	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Carbon disulfide	ND	1.0	ug/L	1.00	09/29/2000 22:08	
Isopropylbenzene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Bromobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:08	
Bromochloromethane	ND	1.0	ug/L	1.00	09/29/2000 22:08	
Trichlorofluoromethane	ND	2.0	ug/L	1.00	09/29/2000 22:08	
Surrogate(s)						
4-Bromofluorobenzene	94.5	86-115	%	1.00	09/29/2000 22:08	
1,2-Dichloroethane-d4	89.4	76-114	%	1.00	09/29/2000 22:08	
Toluene-d8	104.1	88-110	%	1.00	09/29/2000 22:08	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds by 8260A

Sample ID:	**MW 5**	Lab Sample ID:	***2000-09-0382-004***
Project:	K/M	Received:	09/20/2000 20:30
		Extracted:	09/29/2000 22:47
Sampled:	09/20/2000	QC-Batch:	2000/09/29-01.07
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	ND	50	ug/L	1.00	09/29/2000 22:47	
Benzene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Bromodichloromethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Bromoform	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Bromomethane	ND	1.0	ug/L	1.00	09/29/2000 22:47	
Carbon tetrachloride	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Chlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Chloroethane	ND	1.0	ug/L	1.00	09/29/2000 22:47	
2-Butanone(MEK)	ND	50	ug/L	1.00	09/29/2000 22:47	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Chloroform	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Chloromethane	ND	1.0	ug/L	1.00	09/29/2000 22:47	
Dibromochloromethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1.00	09/29/2000 22:47	
1,2-Dibromoethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Dibromomethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Dichlorodifluoromethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,1-Dichloroethane	2.0	0.50	ug/L	1.00	09/29/2000 22:47	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Ethylbenzene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
2-Hexanone	ND	50	ug/L	1.00	09/29/2000 22:47	
Methylene chloride	ND	5.0	ug/L	1.00	09/29/2000 22:47	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	1.00	09/29/2000 22:47	
Naphthalene	ND	1.0	ug/L	1.00	09/29/2000 22:47	
Styrene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds by 8260A

Sample ID:	**MW 5**	Lab Sample ID:	**2000-09-0382-004**
Project:	K/M	Received:	09/20/2000 20:30
		Extracted:	09/29/2000 22:47
Sampled:	09/20/2000	QC-Batch:	2000/09/29-01.07
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Tetrachloroethene	0.86	0.50	ug/L	1.00	09/29/2000 22:47	
Toluene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Trichloroethene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Vinyl acetate	ND	5.0	ug/L	1.00	09/29/2000 22:47	
Vinyl chloride	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Total xylenes	ND	1.0	ug/L	1.00	09/29/2000 22:47	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Carbon disulfide	ND	1.0	ug/L	1.00	09/29/2000 22:47	
Isopropylbenzene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Bromobenzene	ND	0.50	ug/L	1.00	09/29/2000 22:47	
Bromochloromethane	ND	1.0	ug/L	1.00	09/29/2000 22:47	
Trichlorofluoromethane	ND	2.0	ug/L	1.00	09/29/2000 22:47	
Surrogate(s)						
4-Bromofluorobenzene	95.7	86-115	%	1.00	09/29/2000 22:47	
1,2-Dichloroethane-d4	89.3	76-114	%	1.00	09/29/2000 22:47	
Toluene-d8	104.6	88-110	%	1.00	09/29/2000 22:47	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds by 8260A

Sample ID: **MW 6**
Project: K/M
Sampled: 09/20/2000
Matrix: Water

Lab Sample ID: **2000-09-0382-005**
Received: 09/20/2000 20:30
Extracted: 09/29/2000 23:26
QC-Batch: 2000/09/29-01.07

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	ND	50	ug/L	1.00	09/29/2000 23:26	
Benzene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Bromodichloromethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Bromoform	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Bromomethane	ND	1.0	ug/L	1.00	09/29/2000 23:26	
Carbon tetrachloride	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Chlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Chloroethane	ND	1.0	ug/L	1.00	09/29/2000 23:26	
2-Butanone(MEK)	ND	50	ug/L	1.00	09/29/2000 23:26	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Chloroform	1.1	0.50	ug/L	1.00	09/29/2000 23:26	
Chloromethane	ND	1.0	ug/L	1.00	09/29/2000 23:26	
Dibromochloromethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	1.00	09/29/2000 23:26	
1,2-Dibromoethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Dibromomethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Dichlorodifluoromethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,1-Dichloroethane	1.4	0.50	ug/L	1.00	09/29/2000 23:26	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
cis-1,2-Dichloroethene	0.51	0.50	ug/L	1.00	09/29/2000 23:26	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Ethylbenzene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
2-Hexanone	ND	50	ug/L	1.00	09/29/2000 23:26	
Methylene chloride	ND	5.0	ug/L	1.00	09/29/2000 23:26	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	1.00	09/29/2000 23:26	
Naphthalene	ND	1.0	ug/L	1.00	09/29/2000 23:26	
Styrene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Volatile Organic Compounds by 8260A

Sample ID:	**MW 6**	Lab Sample ID:	**2000-09-0382-005**
Project:	K/M	Received:	09/20/2000 20:30
		Extracted:	09/29/2000 23:26
Sampled:	09/20/2000	QC-Batch:	2000/09/29-01.07
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Tetrachloroethene	6.3	0.50	ug/L	1.00	09/29/2000 23:26	
Toluene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Trichloroethene	1.7	0.50	ug/L	1.00	09/29/2000 23:26	
1,1,1,2-Tetrachloroethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Vinyl acetate	ND	5.0	ug/L	1.00	09/29/2000 23:26	
Vinyl chloride	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Total xylenes	ND	1.0	ug/L	1.00	09/29/2000 23:26	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Carbon disulfide	ND	1.0	ug/L	1.00	09/29/2000 23:26	
Isopropylbenzene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Bromobenzene	ND	0.50	ug/L	1.00	09/29/2000 23:26	
Bromochloromethane	ND	1.0	ug/L	1.00	09/29/2000 23:26	
Trichlorofluoromethane	ND	2.0	ug/L	1.00	09/29/2000 23:26	
Surrogate(s)						
4-Bromofluorobenzene	94.5	86-115	%	1.00	09/29/2000 23:26	
1,2-Dichloroethane-d4	90.5	76-114	%	1.00	09/29/2000 23:26	
Toluene-d8	105.7	88-110	%	1.00	09/29/2000 23:26	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Batch QC Report
Volatile Organic Compounds by 8260A

Method Blank | **Water** | **QC Batch # 2000/09/29-01.07**

MB: 2000/09/29-01.07-008 | Date Extracted: 09/29/2000 11:03

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Acetone	ND	50	ug/L	09/29/2000 11:03	
Benzene	ND	0.5	ug/L	09/29/2000 11:03	
Bromodichloromethane	ND	0.5	ug/L	09/29/2000 11:03	
Bromoform	ND	0.5	ug/L	09/29/2000 11:03	
Bromomethane	ND	1.0	ug/L	09/29/2000 11:03	
Carbon tetrachloride	ND	0.5	ug/L	09/29/2000 11:03	
Chlorobenzene	ND	0.5	ug/L	09/29/2000 11:03	
Chloroethane	ND	1.0	ug/L	09/29/2000 11:03	
2-Butanone(MEK)	ND	50	ug/L	09/29/2000 11:03	
2-Chloroethylvinyl ether	ND	0.5	ug/L	09/29/2000 11:03	
Chloroform	ND	0.5	ug/L	09/29/2000 11:03	
Chloromethane	ND	1.0	ug/L	09/29/2000 11:03	
Dibromochloromethane	ND	0.5	ug/L	09/29/2000 11:03	
1,2-Dichlorobenzene	ND	0.5	ug/L	09/29/2000 11:03	
1,3-Dichlorobenzene	ND	0.5	ug/L	09/29/2000 11:03	
1,4-Dichlorobenzene	ND	0.5	ug/L	09/29/2000 11:03	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	09/29/2000 11:03	
1,2-Dibromoethane	ND	0.5	ug/L	09/29/2000 11:03	
Dibromomethane	ND	0.5	ug/L	09/29/2000 11:03	
Dichlorodifluoromethane	ND	0.5	ug/L	09/29/2000 11:03	
1,1-Dichloroethane	ND	0.5	ug/L	09/29/2000 11:03	
1,2-Dichloroethane	ND	0.5	ug/L	09/29/2000 11:03	
1,1-Dichloroethene	ND	0.5	ug/L	09/29/2000 11:03	
cis-1,2-Dichloroethene	ND	0.5	ug/L	09/29/2000 11:03	
trans-1,2-Dichloroethene	ND	0.5	ug/L	09/29/2000 11:03	
1,2-Dichloropropane	ND	0.5	ug/L	09/29/2000 11:03	
cis-1,3-Dichloropropene	ND	0.5	ug/L	09/29/2000 11:03	
trans-1,3-Dichloropropene	ND	0.5	ug/L	09/29/2000 11:03	
Ethylbenzene	ND	0.5	ug/L	09/29/2000 11:03	
2-Hexanone	ND	50	ug/L	09/29/2000 11:03	
Methylene chloride	ND	5.0	ug/L	09/29/2000 11:03	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	09/29/2000 11:03	
Naphthalene	ND	1.0	ug/L	09/29/2000 11:03	
Styrene	ND	0.5	ug/L	09/29/2000 11:03	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	09/29/2000 11:03	
Tetrachloroethene	ND	0.5	ug/L	09/29/2000 11:03	
Toluene	ND	0.5	ug/L	09/29/2000 11:03	
1,1,1-Trichloroethane	ND	0.5	ug/L	09/29/2000 11:03	
1,1,2-Trichloroethane	ND	0.5	ug/L	09/29/2000 11:03	
Trichloroethene	ND	0.5	ug/L	09/29/2000 11:03	
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	09/29/2000 11:03	
Vinyl acetate	ND	5.0	ug/L	09/29/2000 11:03	
Vinyl chloride	ND	0.5	ug/L	09/29/2000 11:03	

To: **Protech Consulting**
Attn.: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Batch QC Report
Volatile Organic Compounds by 8260A

Method Blank | **Water** | **QC Batch # 2000/09/29-01.07**

MB: 2000/09/29-01.07-008 | Date Extracted: 09/29/2000 11:03

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Total xylenes	ND	1.0	ug/L	09/29/2000 11:03	
Trichlorotrifluoroethane	ND	0.5	ug/L	09/29/2000 11:03	
Carbon disulfide	ND	1.0	ug/L	09/29/2000 11:03	
Isopropylbenzene	ND	0.5	ug/L	09/29/2000 11:03	
Bromobenzene	ND	0.5	ug/L	09/29/2000 11:03	
Bromochloromethane	ND	1.0	ug/L	09/29/2000 11:03	
Trichlorofluoromethane	ND	2.0	ug/L	09/29/2000 11:03	
Surrogate(s)					
4-Bromofluorobenzene	94.0	86-115	%	09/29/2000 11:03	
1,2-Dichloroethane-d4	90.4	76-114	%	09/29/2000 11:03	
Toluene-d8	103.2	88-110	%	09/29/2000 11:03	

To: **Protech Consulting**
Attn: C. Hugh Thompson

Test Method: 8260A
Prep Method: 5030

Batch QC Report

Volatile Organic Compounds by 8260A

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/09/29-01.07**

LCS: 2000/09/29-01.07-003 Extracted: 09/29/2000 09:45 Analyzed 09/29/2000 09:45
LCSD: 2000/09/29-01.07-004 Extracted: 09/29/2000 10:24 Analyzed 09/29/2000 10:24

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	52.2	53.3	50.0	50.0	104.4	106.6	2.1	69-129	20		
Chlorobenzene	49.7	49.7	50.0	50.0	99.4	99.4	0.0	61-121	20		
1,1-Dichloroethene	44.2	45.5	50.0	50.0	88.4	91.0	2.9	65-125	20		
Toluene	50.4	51.3	50.0	50.0	100.8	102.6	1.8	70-130	20		
Trichloroethene	46.6	47.5	50.0	50.0	93.2	95.0	1.9	74-134	20		
Surrogate(s)											
4-Bromofluorobenzene	470	471	500	500	94.0	94.2		86-115			
1,2-Dichloroethane-d4	452	463	500	500	90.4	92.6		76-114			
Toluene-d8	502	508	500	500	100.4	101.6		88-110			

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

1220 Quarry Lane • Pleasanton, California 94566-4756
(925) 484-1919 • Fax (925) 484-1096

Reference #: 54606

Chain of Custody

K/m

DATE _____ PAGE _____ OF _____

PROJ. MGR Dr. C. Hugh Thompson
COMPANY ProTech
ADDRESS 1155 East Bayshore Rd #113
Redwood City, CA 94063
SAMPLERS (SIGNATURE) (PHONE NO.)
(FAX NO.)

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 ☐ M.O. ☐ Other	PURGEABLE HALOCARBONS, (HVOC) (EPA 8010)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMIVOLATILES (EPA 8270)	Oil & Grease ☐ Petrol ☐ Total ☐ 1664		☐ 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 ... 10/7470/7471)	TOTAL LEAD	☐ W.E.T. (STLC) ☐ TCLP	☐ Hexavalent Chromium ☐ pH (24 hr hold time for 1220)				NUMBER OF CONTAINERS
mw 2	9/20/00		water							X																3
mw 3	9/20									X																3
mw 4										X																3
mw 5										X																3
mw 6										X																3

PROJECT INFORMATION

PROJECT NAME: K/m
PROJECT NUMBER
P.O. #

SAMPLE RECEIPT

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

TAT: STANDARD 5-DAY | | | 24 | 48 | 72 | OTHER

SPECIAL INSTRUCTIONS/COMMENTS:
Report: ☐ Routine ☐ Level 2 ☐ Level 3 ☐ Level 4 ☐ Electronic Report
Email Results to Dr. C. Hugh Thompson
Chugh2@aol.com
Bill ProTech

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3
(SIGNATURE) Tolinda Thompson 8:30 (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) Tolinda Thompson 9/20 (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY)	(COMPANY)	(COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) Denise Harrington (TIME)
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) D. Harrington 2030 (DATE)
(COMPANY)	(COMPANY)	(LAB) Chromalab 9/20/00