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July 2, 2003
Project H9042.Q

Mr. Jerry Harbert
46765 Mountain Cove Drive
Indian Wells, California 92210

Subject: **Groundwater Monitoring Report - First Quarter 2003**
Harbert Transportation
19984 Meekland Avenue, Hayward, California

Dear Mr. Harbert:

This report describes groundwater monitoring activities conducted by Weber, Hayes and Associates at the former Harbert Transportation facility, 19984 Meekland Avenue, Hayward, California, during the first quarter 2003. This report has been prepared pursuant to a directive from the Alameda County Health Care Services Agency/Environmental Health Services (Environmental Health) regarding a release of petroleum hydrocarbons from underground storage tanks at the site.

EXECUTIVE SUMMARY

The groundwater monitoring event for the first quarter 2003 took place on March 21, 2003. Groundwater elevations at the site fell an average of approximately 1.11 feet since the previous quarter (December, 2002). The calculated groundwater flow direction on March 21, 2003 was to the west, which appears to be consistent with historical data. Groundwater analytical results from the first quarter 2003 indicate that dissolved PHC concentrations fluctuated somewhat; they increased in on-site wells, and a decreased in off-site wells. **Dissolved PHC concentrations remained below our proposed site-specific cleanup goals.**

Methyl - tert - Butyl Ether (MTBE) was not detected in the groundwater samples collected this quarter. MTBE has not been detected in soil or groundwater at the site. Groundwater samples in the third quarter 2000 were analyzed for the fuel oxygenates Di-isopropyl Ether, tertiary Butyl Alcohol, Ethyl tertiary Butyl Ether, and tertiary Amyl Methyl Ether. No fuel oxygenates were detected in these groundwater samples.

The groundwater samples collected this quarter were also analyzed for Halogenated Volatile Organic Compounds (HVOCs), because trace levels of the HVOCs trichloroethylene, tetrachloroethylene and 1, 2-dichloroethane had been detected in the original site investigation. None of these compounds were detected in the groundwater samples. 1, 1, 2-trichloroethane was detected at a maximum concentration of 9 micrograms per liter (µg/L, parts per billion, ppb). This concentration is well below the Risk Based Screening Level of 930 ppb for Residential Indoor Air Impacts in coarse grained soils which we propose to use as the site-specific cleanup goal.

At this time we recommend:

- Completing a Well/Conduit Search to confirm our hypothesis that shallow groundwater near the site is not a drinking water source and that there are no nearby abandoned wells that

could serve as conduits to deeper groundwater. A Work Plan for the Well/Conduit Search was presented in our March 27, 2003 report and was approved by Alameda County Environmental Health on April 15, 2003. The Well/Conduit Search has begun, and results will be presented in the next monitoring report.

- Continuing quarterly groundwater monitoring while the Regional Board and Alameda County Environmental Health review the site-specific cleanup goals proposed in our March 27, 2003 report and the results of the Well/Conduit Search.

- Closing the fuel leak investigation and cleanup if the Well/Conduit Search confirms that shallow groundwater is not currently a drinking water source and deeper groundwater is not threatened. Site investigations and groundwater monitoring have shown that residual PHCs in soil and groundwater do not threaten human health or groundwater resources. Residual PHCs in shallow groundwater at the site will degrade to groundwater quality goals (drinking water Action Levels/Maximum Contaminant Levels).

INTRODUCTION

This report documents groundwater monitoring activities at the former Harbert Transportation facility, 19984 Meekland Avenue, Hayward, California (the site), during the first quarter 2003. This report has been prepared pursuant to a directive from the Alameda County Health Care Services Agency/Environmental Health Services (Environmental Health, August 8, 2000) regarding a release of petroleum hydrocarbons (PHCs) from underground storage tanks (USTs) at the site.

Environmental Health concurred with our first quarter 2002 recommendation to decrease the sampling frequency at selected monitoring wells. The current sampling schedule is:

Quarterly	Monitoring Wells MW-3, 5, 6, 9, and 10
Semi-Annually	Monitoring Wells MW-3, 5, 6, 7, 9, and 10 (Second Quarter)
Annually	All Wells, MW-3 - 12 (Fourth Quarter)

Groundwater monitoring activities conducted during this quarter included:

1. Measuring groundwater levels and checking for the presence of free product in all of the monitoring wells associated with the site
2. Measuring the physical parameters of pH, temperature, electrical conductivity, and dissolved oxygen concentration in each well
3. Collecting groundwater samples from the appropriate monitoring wells
4. Submitting the groundwater samples to a state-certified analytical laboratory for analysis of dissolved PHC concentrations following proper chain-of-custody procedures
5. Determining groundwater elevations, flow direction, and gradient in the vicinity of the site
6. Mapping the extent of the dissolved PHC plume in groundwater beneath the site
7. Preparing this technical report

For completeness the groundwater samples collected this quarter were also analyzed for Halogenated Volatile Organic Compounds (HVOCs), because trace levels of some HVOCs were detected in the original site investigation. It is appropriate to check if any HVOCs remain as the site is now poised for closure. The only HVOC detected was 1, 1, 2-trichloroethane (1,1,2-TCA). 1,1,2-TCA was ***not*** detected in the initial site investigation. There is no evidence that 1,1,2-TCA was ever used at the site. 1,1,2-TCA was detected at a maximum concentration of 9 micrograms per liter (µg/L, parts per billion, ppb), well below the Risk Based Screening Level of 930 ppb for Residential Indoor Air Impacts in coarse grained soils which we propose to use as the site-specific cleanup goal. This site-specific cleanup goal is appropriate since shallow groundwater at the site is not a drinking water source and there is no nearby surface water that could be impacted.

SITE DESCRIPTION AND BACKGROUND

The site is located at the corner of Meekland Avenue and Blossom Way, a highly urbanized area in Alameda County California (Figure 1). The site is located at an elevation of approximately 55 feet above sea level. The site is relatively flat. The area of the site is approximately 21,000 square feet. The site is located approximately 2,500 feet south of San Lorenzo Creek, and approximately 15,000 feet east of the San Francisco Bay (see Figure 1). There are no ecologically sensitive areas (such as surface water or wetlands) or homes to endangered species within 1,000 feet of the site. Domestic water at the site and in the vicinity is provided by the East Bay Municipal Utilities District.

Past, Current and Anticipated Future Site Activities and Uses

The site was used primarily for commercial activities in the past. It has operated as a motor vehicle fueling station since the 1940's. Harbert Transportation used the site as a vehicle and fueling yard before selling the site to Durham Transportation in 1986. Durham used the site for similar activities.

The site is currently vacant. Anticipated future site uses are residential, so all Risk-Based Screening for contaminants at the site were based on residential land use. Residual concentrations of PHCs are below the residential Risk-Based Screening Levels, so no formal land use restrictions are necessary to protect human health (see below).

Summary of Site Investigations

In August 1989, four underground storage tanks (USTs) were removed from the site and properly disposed of. Soil and groundwater investigations at the site, conducted by Applied Geosystems, CTTS, and AGI Technologies, indicated that PHCs were present in soil and groundwater at the site. A list of reports documenting the soil and groundwater investigations is included in the Reference section. Twelve groundwater monitoring wells were installed by the former consultants. Ten of the monitoring wells still exist at the site (see Figure 2). Documentation indicates the other two monitoring wells were properly destroyed. Groundwater samples were not collected from the site

between September 1996 and September 2000. Documentation indicates that excavated soil from the UST removals was returned to the (reportedly plastic-lined) excavations (CTTS, November 1, 1992).

Documentation also indicates that two USTs were removed from the site in the early 1950's (CTTS, November 27, 1990). These USTs were located near the dispensers for the USTs removed in 1989.

Weber, Hayes and Associates initiated a groundwater monitoring program at the site in the third quarter 2000. The groundwater monitoring program continued on a quarterly basis to the present. **Analytical data from the groundwater monitoring program indicate that shallow groundwater at the site has been impacted by PHCs. However, neither Methyl tert Butyl Ether (MTBE) nor other fuel oxygenates (Di-isopropyl Ether, tertiary Butyl Alcohol, Ethyl tertiary Butyl Ether, and tertiary Amyl Methyl Ether) have ever been detected in groundwater at the site.**

On February 14, 2001, we collected soil samples from the site to determine the extent of PHCs remaining in the unsaturated zone in accordance with our September 7, 2000 Work Plan. The Work Plan was approved by Environmental Health on November 1, 2000. **Analysis of the data collected indicated that the soils at the site were predominately fine grained, and confirmed that significant concentrations of PHCs remained in soils beneath the former dispensers and in the 1989 UST excavation which was backfilled with the excavated material.** We recommended excavation of these residual PHCs as an Interim Remedial Action (Weber, Hayes and Associates, June 18, 2001). Environmental Health concurred with this recommendation in a letter dated June 26, 2001.

On January 7 - 10, 2002 we conducted an interim remedial action excavation using six foot diameter augers to remove contaminated soils from the subsurface. Approximately 670 cubic yards (yds^3) of soil was removed from the subsurface. Approximately 594 yds^3 of PHC-impacted soil was transported to an appropriate landfill for disposal. The remaining soil was verified not to contain any detectable PHCs, and was reused on-site as backfill material. A pump was installed in one of the large diameter boreholes and 3,000-gallons of PHC impacted water was removed from the subsurface and properly disposed of. Oxygen Release Compound® (ORC) was added to the saturated zone in each borehole to promote microbial growth and enhance the ability of aerobic microbes to degrade contaminants. Each borehole was backfilled with control density fill and clean fill soil to ground surface. This work was described in our February 8, 2002 report, *Large Diameter Excavation and 4th Quarter 2001 Quarterly Groundwater Monitoring*. The highest residual PHC concentrations in soil at the site after the source zone excavation are summarized in the table below.

Summary of Maximum Residual PHC Concentrations in Soil After Source Zone Excavation (mg/kg, ppm)

Chemical	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes
Highest Site Soil Concentrations	34	0.041	0.014	0.12	0.62

The highest residual PHC concentrations at the site are from a single confirmation soil sample collected after the source excavation in January 2002 (sample LD#16 SW-W). The majority of the confirmation samples collected after the source excavation did not contain any detectable PHCs.

In the first quarter 2002 we recommend that the frequency of sampling in monitoring well MW-7 be reduced to semi-annually (second and fourth quarters) and that the frequency of sampling in monitoring wells MW-4, 8, 11 and 12 be reduced to annually (fourth quarter only). Alameda County Environmental Health concurred with our recommendations in a telephone conversation on July 29, 2002.

In the fourth quarter 2002 (Weber, Hayes, and Associates, March 27, 2003) we presented site-specific soil and groundwater cleanup goals based on the California Regional Water Quality Control Board, San Francisco Bay Region's publication: *Application of Risk-Base Screening Levels and Decision Making to Sites with Impacted Soil and Groundwater*. The site specific cleanup goals are summarized below.

Comparison of Site Specific Cleanup Goals/Tier 1 RBSLs to Site Data

Chemical	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes
Highest Site Soil Concentrations	34 mg/kg	0.041 mg/kg	0.014 mg/kg	0.12 mg/kg	0.62 mg/kg
Soil Cleanup Goal	100 mg/kg	0.045 mg/kg	2.6 mg/kg	2.5 mg/kg	1.0 mg/kg
Groundwater Cleanup Goal	5,000 - 50,000 µg/L	5,800 µg/L	530,000 µg/L	170,000 µg/L	150,000 µg/L

Comparison of the site-specific cleanup goals for PHCs in soil with the highest residual concentrations of PHCs in soil indicate that residual concentrations of PHCs in soil were below site-specific cleanup goals and did not pose a threat to human health. There are no sensitive ecological habitats, such as surface water or wetlands, within three miles of the site, so the residual PHCs in soil do not pose a threat to the environment, either. PHC concentrations in groundwater were also below site-specific cleanup goals and did not pose a threat to human health.

In the fourth quarter 2002 we also presented a Work Plan for the Well/Conduit Search to confirm our assumption that shallow groundwater near the site is not a drinking water source and that there are no nearby abandoned wells that could serve as conduits to deeper groundwater. Environmental Health concurred with our Work Plan on April 15, 2003, and requested that the search be expanded to identify the presence of all wells within 1/2 mile radius of the site (i.e., monitoring and production wells; active, inactive, standby, destroyed, abandoned), provide details of their construction (where available), and an interpretation of their possible contribution to plume dispersal, should there be any. Environmental Health also requested that the Conduit Search include an evaluation of all potential preferential pathways (e.g.,utilities, storm drains, etc.).

GROUNDWATER MONITORING - FIRST QUARTER 2003

The groundwater monitoring event for the first quarter 2003 took place on March 21, 2003. Field methods followed Weber, Hayes and Associates' standard field methodology for groundwater monitoring, which is described in Appendix A. Groundwater samples were collected from monitoring wells MW-3, 5, 6, 9 and 10 in accordance with directives from Environmental Health, and analyzed for Total Petroleum Hydrocarbons as gasoline (TPH-g) by EPA Method 8015M, and benzene, toluene, ethylbenzene, and xylenes (BTEX), and Methyl tert Butyl Ether (MTBE) by EPA Method 8020. Samples with elevated detection limits or detections of MTBE were analyzed by EPA Method 8260 to confirm the presence of MTBE and provide the proper detection limit.

Groundwater samples from this quarterly monitoring event were also analyzed for Halogenated Volatile Organic Compounds (HVOCs) by EPA Method 8010 (by EPA Method 8260) for completeness because trace concentrations of some of these compounds were detected during the initial site investigation. We also analyzed a sample from groundwater monitoring well MW-3 for Total Dissolved Solids (TDS) by EPA Method 160.1. Groundwater with TDS in excess of 3,000 parts per million (milligrams per liter, ppm) is not suitable for use as a drinking water source.

Field data forms are also presented in Appendix A.

Free Product

Free product was not observed in any of the monitoring wells at the site. Free product has never been observed at the site.

Groundwater Elevation and Flow Direction

Groundwater elevations were calculated by subtracting the measured depth-to-groundwater from the top-of-casing elevations, which were surveyed by a state-licensed Land Surveyor. Field measurements and the calculated groundwater elevations for the site are summarized in Table 1. Groundwater elevations at the site fell an average of approximately 1.11 feet since the previous quarter (December 2002). Calculated groundwater elevations from the gauging data collected on March 21, 2003 are shown on Figure 2. Data from this quarter indicate that groundwater flow is to the west (see Figure 2). The calculated groundwater gradient on March 21, 2003 was approximately 0.002 feet per foot. Previous reports indicate that the groundwater flow direction in the vicinity of the site has generally been in a westerly direction. A table and figures summarizing previous depth to groundwater data are presented as Appendix B.

Groundwater Analytical Results

Groundwater samples were collected from five of the ten monitoring wells associated with the site this quarter, in accordance with directives from Environmental Health. The groundwater analytical results for this quarter are summarized below.

Summary of Petroleum Hydrocabon Groundwater Sample Analytical Results, March 21, 2003 (µg/L, ppb)

Well ID	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW-3	460	3.3	1.4	5.6	< 2.5	ND*
MW-5	4,800	190	82	370	700	< 5*
MW-6	1,200	6.3	< 5	54	< 10	ND*
MW-9	5,900	190	24	470	630	< 5*
MW-10	700	3.4	1.4	0.71	1	ND*
PQLs	50	0.5	0.5	0.5	1	1
AL/MCL	1,000	1	150	700	1,750	5
Groundwater Cleanup Goal	5,000 - 50,000	5,800	530,000	170,000	150,000	NA

* = Confirmed by GC/MS method 8260, PQL = Laboratory's Practical Concentration Limit

The concentration of benzene in wells MW-3 and 10 exceed the groundwater quality goal/drinking water MCL of 1 part per billion (ppb), but were below the site-specific groundwater cleanup goal of 5,800 ppb.

The concentrations of TPH-g and benzene in wells MW-5 and 6 exceed the respective groundwater quality goal/drinking water Action Level (AL) / Maximum Contaminant Level (MCL), but were below their respective site-specific groundwater cleanup goals.

The concentration of TPH-g in well MW-9 slightly exceeded the site-specific groundwater cleanup goal of 5,000 ppb. We note that there is no Risk Based Screening Level for TPH-g, and that we proposed the site-specific cleanup goal for TPH-g based on the known propensity of gasoline-range petroleum compounds to degrade in situ, the distance of this site from sensitive ecological receptors, the assumption that shallow groundwater is not a drinking water source, and review of the Regional Board's *RBSL Document*. We assume that the TPH compounds will degrade to groundwater quality goals in a reasonable time frame. Since the drinking water ingestion and sensitive receptor exposure pathways are closed, there are no other exposure pathways (such as volatilization to indoor air) for TPH-g. Based on these criteria, a site-specific cleanup goal for TPH-g of up to 50,000 ppb would

be acceptable. **The concentration of 5,900 ppb of TPH-g in well MW-9 does *not* pose a threat to human health or the environment.**

No other PHCs exceed their respective groundwater quality goals/ALs or MCLs.

MTBE was not detected in any of the wells associated with the site.

Please see the Site Conceptual Model section for further discussion of the groundwater analytical results.

Analytical results for the groundwater samples collected by Weber, Hayes and Associates since the third quarter 2000 are summarized in Table 2. PHC concentrations detected in groundwater during the current monitoring event are shown on Figure 3. The extent of dissolved PHCs greater than 1,000 ppb TPH-g and 10 ppb benzene in groundwater are shown on Figure 4. A dissolved oxygen concentration contour map is presented as Figure 5. The decreasing trend in TPH-g and benzene concentrations in wells MW-5 and 9, along with groundwater elevations over time, are shown on Figures 6 and 7.

The laboratory's Certified Analytical Reports for the groundwater samples is presented as Appendix C. All laboratory quality control and quality assurance data were within acceptable limits. A table and figures summarizing analytical results of groundwater samples collected by previous consultants is presented as Appendix D (review of analytical data collected by previous consultants further illustrates the decreasing trend in dissolved PHC concentrations).

For completeness the groundwater samples collected this quarter were also analyzed for Halogenated Volatile Organic Compounds (HVOCs), because trace levels of tetrachloroethylene, trichloroethylene and 1, 2-dichloroethane were detected in the initial site investigation. It is appropriate to check if any of these compounds remain as the site is now poised for closure. Only 1, 1, 2-trichloroethane (1,1,2-TCA) was detected in the groundwater samples. 1,1,2-TCA was ***not*** detected in the initial site investigation. There is no evidence that 1,1,2-TCA was ever used at the site. **No other HVOCs, including tetrachloroethylene, trichloroethylene and 1, 2-dichloroethane were detected.** The concentrations of 1, 1, 2-trichloroethane detected this quarter are summarized below. The laboratory's Certified Analytical Report is presented in Appendix C.

Summary of HVOC Groundwater Sample Analytical Results, March 21, 2003 (µg/L, ppb)

Well ID	MW-3	MW-5	MW-6	MW-9	MW-10
1,1,2-Trichloroethane Concentration (ppb)	ND	5.3	3.9	5.3	9.0

We compared these concentrations of 1,1,2-TCA to the Risk Based Screening Level for residential land use for protection of human health based on indoor air impacts from 1,1,2-TCA in Table F-1 of Appendix 1 (Volume 2) of the Regional Board's *RBSL Document*. This is appropriate RBSL for the site because indoor air is the only complete exposure pathway at the site since groundwater is not used for drinking water in the vicinity of the site. For a more thorough discussion of the appropriateness of using RBSLs see our March 27, 2003 *Report*. The RBSL for indoor air impacts from 1, 1, 2-trichloroethane is 930 ppb in ***coarse*** grain soils. The soils at the site are fine grained; the RBSL for fine grained soils is 8,200 ppb. The entry for 1, 1, 2-trichloroethane in Table F-1 of the *RBSL Document* is presented as Appendix E. **The concentrations of 1, 1, 2-trichloroethane at the site do not exceed the Risk Based Screening Levels, and do not pose a threat to human health.**

The groundwater sample from well MW-3 contained 460 parts per million Total Dissolved Solids (TDS). This indicates that groundwater beneath the site does not exceed the TDS MCL for drinking water.

Dissolved Oxygen Measurements

Current and historic dissolved oxygen measurements collected at the site indicate generally lower levels of dissolved oxygen in PHC-impacted wells compared to levels in non-impacted, upgradient wells. The decrease in dissolved oxygen in the impacted wells is shown on the dissolved oxygen concentration contour map, Figure 5. We believe the depletion of dissolved oxygen in PHC-impacted wells, combined with the observed decrease in dissolved PHC concentrations over time (see Figures 6 and 7), indicates that natural attenuation of PHCs via biologic activity (bioremediation) is occurring in groundwater, with microbes using dissolved PHCs as a food source during aerobic respiration (Bushek and O'Reilly, 1995).

Summary of Quarterly Groundwater Monitoring Results

- Free product was not observed in any of the monitoring wells at the site.
- Groundwater elevations at the site fell an average of approximately 1.11 feet since the previous quarter (December 2002).
- The groundwater flow direction on March 21, 2003 was to the west at a gradient of approximately 0.002 feet per foot. This direction is in agreement with data collected by us and previous data collected by others at the site.
- Concentrations of dissolved PHCs in the on-site monitoring wells increased slightly compared to last quarter.

- Concentrations of dissolved PHCs in off-site monitoring wells decreased compared to last quarter.

- **MTBE was not detected in any of the groundwater samples collected this quarter.**
- TPH-g was detected at a concentration above the drinking water Action Level in on-site wells MW-5, 6, and 9. The concentrations of TPH-g were below the appropriate Risk Based Screening Level/site-specific cleanup level.

- Benzene was detected at a concentration above the drinking water MCL in wells MW-3, 5, 6, 9, and 10. The concentrations of benzene were below the appropriate Risk Based Screening Level/site-specific cleanup level.

- No other PHCs were detected above their respective water quality goals/drinking water Action Levels/Maximum Contaminant Levels.

- 1,1,2-Trichloroethane was detected in four of the five samples collected this quarter, but at concentrations well below the Risk Based Screening Level appropriate for the site.

- Total Dissolved Solids were measured at a concentration of 460 ppm in well MW-3.

- Current and historic measurements of dissolved oxygen collected at the site indicate aerobic bioremediation is occurring in the PHC-impacted groundwater.

SITE CONCEPTUAL MODEL

The Site Conceptual Model provides a compilation of our understanding of the existing site conditions:

- Soils encountered at the site generally consisted of fine grained materials: fat Clays and sandy Clays.

- Source zone PHC-impacted soil was removed from the site in January 2002. Approximately 594 yds^3 of PHC-impacted soil was removed from the subsurface and transported to an appropriate landfill for disposal. The maximum residual PHC concentrations in soil are **below** the appropriate Risk Based Screening Levels/site-specific cleanup levels. See the Summary Table below and our March 27, 2003 *Report.*

- **MTBE has not been detected in any of the soil or groundwater samples collected at the site.**

- Dissolved PHCs are present in groundwater beneath the site, downgradient of the removed USTs, at concentrations that exceed groundwater quality goals/drinking water Action Levels and/or MCLs. The maximum residual PHC concentrations in groundwater are **below** the

appropriate Risk Based Screening Levels/site-specific cleanup levels. See the Summary Table below and our March 27, 2003 *Report*.

- Dissolved PHC concentrations show a general downward trend (see Table 2 and Figures 6 and 7).

- **Natural attenuation/bioremediation has and will continue to remove PHCs from groundwater at the site, as evidenced by the general downward trend in PHC concentrations.**

Comparison of Site Specific Cleanup Goals/Tier 1 RBSLs to Site Data

Chemical	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes
Highest Site Soil Concentrations	34 mg/kg	0.041 mg/kg	0.014 mg/kg	0.12 mg/kg	0.62 mg/kg
Soil Cleanup Goal	100 mg/kg	0.045 mg/kg	2.6 mg/kg	2.5 mg/kg	1.0 mg/kg
Highest Current Groundwater Concentration	5,900 µg/L	190 µg/L	24 µg/L	470 µg/L	700 µg/L
Groundwater Cleanup Goal	5,000 - 50,000 µg/L	5,800 µg/L	530,000 µg/L	170,000 µg/L	150,000 µg/L

RECOMMENDATIONS

At this time we recommend:

- Completing a Well/Conduit Search to confirm our assumption that shallow groundwater near the site is not a drinking water source and that there are no nearby abandoned wells that could serve as conduits to deeper groundwater. A Work Plan for the Well/Conduit Search was presented in our report dated March 21, 2003 and was approved by Alameda County Environmental Health on April 15, 2003. The Well/Conduit Search has begun, and results will be presented in the next monitoring report.

- Continuing quarterly groundwater monitoring while the Regional Board and Alameda County Environmental Health review the site-specific cleanup goals proposed in our March 27, 2003 report and the results of the Well/Conduit Search.

- Closing the fuel leak investigation and cleanup if the Well/Conduit Search confirms that shallow groundwater is not currently a drinking water source and deeper groundwater is not

threatened. Site investigations and groundwater monitoring have shown that residual PHCs in soil and groundwater do not threaten human health or groundwater resources. Residual PHCs in groundwater should degrade to groundwater quality goals (drinking water Action Levels/Maximum Contaminant Levels) in a reasonable amount of time.

SCHEDULE OF ACTIVITIES FOR THE FOLLOWING QUARTER

The following activities are scheduled for the next quarter:

- Quarterly groundwater monitoring according to the schedule agreed upon with Environmental Health. Groundwater monitoring will include measuring the depth-to-groundwater, dissolved oxygen concentration, and physical parameters, and collecting samples from the appropriate monitoring wells and analyzing them for TPH-g, BTEX and MTBE by EPA Methods 8015M and 8020. All detections of MTBE will be confirmed by EPA Method 8260.

- Completing the Well/Conduit Search that began this quarter.

LIMITATIONS

Our service consists of professional opinions and recommendations made in accordance with generally accepted geologic and engineering principles and practices. This warranty is in lieu of all others, either expressed or implied. The analysis and proposals in this report are based on sampling and testing which are necessarily limited. Additional data from future work may lead to modification of the opinions expressed herein.

Thank you for the opportunity to aid in the assessment and cleanup of this site. If you have any questions or comments regarding this project please call us at (831) 722 - 3580.

Sincerely yours,

Weber, Hayes And Associates

By:_____
Chad N. Taylor
Staff Geologist

And:_____
Craig B. Drizin, P.E.
Senior Engineer

REGISTERED PROFESSIONAL ENGINEER
CRAIG B. DRIZIN
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Attachments

Table 1	Summary of Groundwater Elevation and PHC Analytical Data
Figure 1	Location Map
Figure 2	Site Plan with Groundwater Elevations
Figure 3	Site Plan with PHC Concentrations in Groundwater
Figure 4	Site Plan with Extent of TPH-g and Benzene in Groundwater
Figure 5	Site Plan with Dissolved Oxygen Contours
Figure 6	TPH-g and Groundwater Elevation MW-5 and MW-9
Figure 7	Benzene and Groundwater Elevation MW-5 and MW-9
Appendix A	Field Methodology for Groundwater Monitoring and Field Data Forms
Appendix B	Summary of Historical Depth to Groundwater Measurements, Groundwater Elevations, and Groundwater Flow Direction - AGI Technologies, Inc.
Appendix C	Certified Analytical Report - Groundwater Samples
Appendix D	Summary of Historical Groundwater Analytical Results - AGI Technologies, Inc.
Appendix E	Risk Based Screening Level for 1, 1, 2-Trichloroethane from *Application of Risk-Based Screening Levels and Decision Making to Sites with Impacted Soil and Groundwater*

c: Mr. Scott Seery, Alameda County Environmental Health
Mr. Jeff Lawson
Ms. Laurie Berger
Mr. Gregg Petersen, Durham Transportation
Mr. Chuck Headlee, San Francisco Bay Regional Water Quality Control Board

REFERENCES

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Alameda County Health Care Services Agency, Environmental Health Services, July 11, 2000. *Property at 19984 Meekland Avenue, Hayward, Ca 94541 - Groundwater Monitoring and Work Plan Request*

Alameda County Health Care Services Agency, Environmental Health Services, August 8, 2000. *Property at 19984 Meekland Avenue, Hayward, Ca 94541 - Groundwater Monitoring and Work Plan Request - Clarification*

Alameda County Health Care Services Agency, Environmental Health Services, November 1, 2000. *Property at 19984 Meekland Avenue, Hayward, Ca 94541 - Approval of Work Plan for Soil and Groundwater Sampling*

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Alameda County Health Care Services Agency, Environmental Health Services, February 21, 2001. *Property at 19984 Meekland Avenue, Hayward, Ca 94541 - Concur with work proposed in Fourth Quarter 2000 Groundwater Monitoring Report*

Alameda County Health Care Services Agency, Environmental Health Services, June 26, 2001. *Property at 19984 Meekland Avenue, Hayward, Ca 94541 - Concur with work proposed in First Quarter 2001 Groundwater Monitoring Report*

Alameda County Health Care Services Agency, Environmental Health Services, November 29, 2001. *Property at 19984 Meekland Avenue, Hayward, Ca 94541 - Receipt of "Status Report-UST Assessment and Cleanup" dated November 6, 2001, Concur with work proposed in Second Quarter 2001 Groundwater Monitoring Report*

Alameda County Health Care Services Agency, Environmental Health Services, December 13, 2001. *Property at 19984 Meekland Avenue, Hayward, Ca 94541 - Concur with work proposed in Addendum to Interim Remedial Action and Modified Feasibility Study*

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Table 2: Summary of Groundwater Elevation and PHC Analytical Data

Former Harbert Transportation Facility, 19984 Meekland Avenue, Hayward, Ca.

Weber, Hayes and Associates Project H9042

Monitoring Point Information						Laboratory Analytical Results							Field Measurements	
						Total Petroleum Hydrocarbons	Volatile Organic Compounds							
Well I.D.	TOC Elevation (feet, NGVD)	Screen Interval (feet, bgs)	Date Sampled	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, NGVD)	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Fuel Oxygenates (ug/L)	Dissolved Oxygen (mg/L)	Redox Potential (ORP) (mV)
MW-3	55.44	20 - 40?												
			03/21/03	22.41	33.03	460	3.3	1.4	5.6	< 2.5	ND*	–	0.15	-34
			12/30/02	21.32	34.12	70	ND	ND	2.1	< 1	ND*	–	0.14	536
			08/27/02	23.87	31.57	350	0.56	1.1	14	3.4	ND	–	0.13	216
			06/13/02	22.92	32.52	300	1.1	1.4	4	1.8	ND	–	0.14	194
			03/21/02	21.96	33.48	240	0.94	2.5	12	11.7	ND	–	0.1	–
			12/18/01	23.59	31.85	270	1.6	1.7	13	5.4	ND	–	–	–
			09/20/01	24.16	31.28	380	1.7	2.6	32	8.9	ND	–	0.4	–
			06/20/01	23.55	31.89	760	4.4	2.4	62	23	ND*	–	–	–
			03/29/01	22.02	33.42	170	1.1	ND	10	1.6	ND	–	0.6	–
			01/12/01	23.41	32.03	310	2.4	2.2	4.4	10	ND	–	0.7	–
			09/27/00	23.09	32.35	430	ND	ND	44	ND	ND	ND	1	–
MW-4	55.71	20 - 40?												
			03/21/03	22.49	33.22	–	–	–	–	–	–	–	1.03	18
			12/30/02	21.50	34.21	ND	ND	ND	ND	< 1	ND	–	0.41	368
			08/27/02	24.07	31.64	–	–	–	–	–	–	–	0.21	187
			06/13/02	23.15	32.56	ND	ND	ND	ND	ND	ND	–	0.20	392
			03/21/02	22.15	33.56	ND	ND	ND	ND	ND	ND	–	0.2	–
			12/18/01	23.80	31.91	ND	ND	0.9	ND	ND	ND	–	–	–
			09/20/01	24.32	31.39	ND	ND	ND	ND	ND	ND	–	0.4	–
			06/20/01	23.74	31.97	ND	ND	ND	ND	ND	ND	–	–	–
			03/29/01	22.22	33.49	ND	ND	4.2	ND	ND	ND	–	0.5	–
			01/12/01	23.60	32.11	ND	ND	ND	ND	ND	ND	–	0.7	–
			09/27/00	23.25	32.46	ND	ND	ND	ND	ND	ND	ND	2.5	–
MW-5	56.03	25 - 45												
			03/21/03	22.99	33.04	4,800	190	82	370	700	*< 5	–	0.07	-72
			12/30/02	21.88	34.15	130	5.8	1.0	9.9	5.9	ND*	–	0.14	251
			08/27/02	24.42	31.61	1,900	170	14	210	93	ND*	–	0.43	207
			06/13/02	23.57	32.46	1,500	24	16	120	110	ND*	–	0.06	144
			03/21/02	24.69	31.34	360	11	9.4	28	62	ND	–	0.1	–
			12/18/01	23.15	32.88	780	21	12	86	94	ND*	–	–	–
			09/20/01	24.75	31.28	2,300	46	41	280	330	ND*	–	0.3	–
			06/20/01	24.15	31.88	6,500	120	130	740	940	ND*	–	–	–
			03/29/01	22.69	33.34	13,000	220	510	1000	2700	ND*	–	0.4	–
			01/12/01	23.97	32.06	1,100	62	40	150	290	ND*	–	0.3	–
			09/27/00	23.69	32.34	18,000	840	2.9	1200	3500	< 30	ND	0.4	–
MW-6	56.01	25 - 45												
			03/21/03	22.96	33.05	1,200	6.3	< 5	54	< 10	ND*	–	0.09	-45
			12/30/02	21.91	34.10	670	2.5	< 1.25	29	2.7	ND*	–	0.15	321
			08/27/02	24.44	31.57	1,300	< 2.5	7.2	210	55	ND*	–	0.14	231
			06/13/02	23.53	32.48	1,600	<1.25	4.7	67	5.3	< 1.5*	–	0.53	233
			03/21/02	23.11	32.90	750	0.77	1.2	39	3.2	ND*	–	0.1	–
			12/18/01	24.16	31.85	3,700	33	8.7	320	110	< 1.5*	–	–	–
			09/20/01	24.72	31.29	2,500	11	8.6	240	94	ND*	–	0.3	–
			06/20/01	24.13	31.88	1,800	14	4.6	160	79	ND*	–	–	–
			03/29/01	22.56	33.45	610	2.2	ND	37	4.6	ND*	–	0.5	–
			01/12/01	23.97	32.04	2,300	16	3.5	290	83	ND*	–	0.5	–
			09/27/00	23.56	32.45	1,300	ND	4.3	200	17	ND	ND	0.5	–

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Former Harbert Transportation Facility, 19984 Meekland Avenue, Hayward, Ca.

Weber, Hayes and Associates Project H9042

Monitoring Point Information						Laboratory Analytical Results							Field Measurements	
						Total Petroleum Hydrocarbons	Volatile Organic Compounds							
Well I.D.	TOC Elevation (feet, NGVD)	Screen Interval (feet, bgs)	Date Sampled	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, NGVD)	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Fuel Oxygenates (ug/L)	Dissolved Oxygen (mg/L)	Redox Potential (ORP) (mV)
MW-7	56.66	25 - 45												
			03/21/03	23.50	33.16	--	--	--	--	--	--	--	0.51	20
			12/30/02	22.34	34.32	ND	ND	ND	ND	< 1	ND*	--	0.17	370
			08/27/02	24.98	31.68	--	--	--	--	--	--	--	0.22	369
			06/13/02	24.07	32.59	ND	ND	ND	ND	ND	ND	--	0.20	370
			03/21/02	23.05	33.61	ND	ND	ND	ND	ND	ND	--	0	--
			12/18/01	24.70	31.96	290	ND	ND	119	4.6	ND	--	--	--
			09/20/01	25.27	31.39	290	0.98	ND	12	4.5	ND*	--	0.4	--
			06/20/01	24.68	31.98	430	2.4	0.96	30	9.7	ND*	--	--	--
			03/29/01	23.10	33.56	ND	ND	ND	ND	ND	ND	--	0.5	--
			01/12/01	24.49	32.17	1,600	13	0.86	150	35	ND*	--	0.5	--
			09/27/00	24.18	32.48	270	13	6.6	11	ND	ND	ND	0.5	--
MW-8	56.16	20 - 40												
			03/21/03	22.91	33.25	--	--	--	--	--	--	--	1.62	15
			12/30/02	21.79	34.37	ND	ND	ND	ND	< 1	ND*	--	1.36	365
			08/27/02	24.43	31.73	--	--	--	--	--	--	--	1.98	402
			06/13/02	23.54	32.62	ND	ND	ND	ND	ND	ND	--	1.96	394
			03/21/02	22.51	33.65	ND	ND	ND	ND	ND	ND	--	2.4	--
			12/18/01	24.16	32.00	ND	ND	ND	ND	ND	ND	--	--	--
			09/20/01	24.68	31.48	ND	ND	ND	ND	ND	ND	--	1.6	--
			06/20/01	24.09	32.07	ND	ND	ND	ND	ND	ND	--	--	--
			03/29/01	22.56	33.60	ND	ND	0.8	ND	ND	ND	--	1.9	--
			01/12/01	23.93	32.23	ND	ND	ND	ND	ND	ND	--	2.1	--
			09/27/00	23.59	32.57	ND	ND	ND	ND	ND	ND	ND	1.9	--
MW-9	55.21	20 - 40												
			03/21/03	22.17	33.04	5,900	190	24	470	630	*< 5	--	0.10	-84
			12/30/02	21.09	34.12	2,800	140	25	200	370	ND*	--	0.15	276
			08/27/02	23.69	31.52	310	27	2.5	20	20	ND*	--	0.18	154
			06/13/02	22.76	32.45	5,100	140	21	490	300	< 1.5*	--	0.14	135
			03/21/02	21.76	33.45	510	26	4.6	50	52	ND	--	0.1	--
			12/18/01	23.36	31.83	6,400	640	120	630	1300	< 1.5*	--	--	--
			09/20/01	23.94	31.27	3,400	270	38	390	430	ND*	--	0.3	--
			06/20/01	23.36	31.85	8,300	330	88	850	1700	< 0.6*	--	--	--
			03/29/01	21.61	33.60	1,600	110	14	240	150	ND*	--	0.4	--
			01/12/01	23.17	32.04	10,000	550	110	1200	2200	ND*	--	0.5	--
			09/27/00	22.90	32.31	1,000	40	6.7	110	55	ND	ND	0.5	--
MW-10	54.74	25 - 40												
			03/21/03	22.00	32.74	700	3.4	1.4	0.71	1	ND*	--	0.06	-62
			12/30/02	20.78	33.96	1,200	5.6	< 5	< 5	< 10	ND*	--	0.18	267
			08/27/02	23.46	31.28	1,800	< 2.5	15	3.9	5	ND*	--	0.14	183
			06/13/02	22.56	32.18	1,700	0.77	6.2	3.3	2.9	< 0.3*	--	0.28	201
			03/21/02	21.53	33.21	1,500	ND	11	3.1	ND	ND*	--	0.1	--
			12/18/01	21.11	33.63	1,500	7.9	2.9	ND	ND	< 0.6*	--	--	--
			09/20/01	23.70	31.04	1,200	6	9.9	1.2	3.9	ND*	--	0.4	--
			06/20/01	23.17	31.57	810****	3	1.6	5.1	13	ND*	--	--	--
			03/29/01	21.63	33.11	600****	2	0.65	ND	0.72	ND	--	0.5	--
			01/12/01	22.99	31.75	530	3.7	1.9	2.1	4.5	ND	--	0.6	--
			09/27/00	22.72	32.02	880	ND	ND	ND	ND	ND	ND	0.4	--

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Weber, Hayes and Associates Project H9042

Monitoring Point Information						Laboratory Analytical Results							Field Measurements	
						Total Petroleum Hydrocarbons	Volatile Organic Compounds							
Well I.D.	TOC Elevation (feet, NGVD)	Screen Interval (feet, bgs)	Date Sampled	Depth to Groundwater (feet, TOC)	Groundwater Elevation (feet, NGVD)	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	Fuel Oxygenates (ug/L)	Dissolved Oxygen (mg/L)	Redox Potential (ORP) (mV)
MW-11	55.20	25 - 40												
			03/21/03	22.24	32.96	–	–	–	–	–	–	–	0.32	24
			12/30/02	21 11	34.09	ND	ND	ND	ND	< 1	ND	–	0.16	374
			08/27/02	23.68	31.52	–	–	–	–	–	–	–	0.13	369
			06/13/02	22.78	32.42	ND	ND	ND	ND	ND	ND	–	0.15	380
			03/21/02	21 76	33 44	ND	ND	ND	ND	ND	ND	–	0.1	–
			12/18/01	23 39	31 81	ND	ND	0 56	ND	ND	ND	–	–	–
			09/20/01	23.87	31.33	ND	ND	ND	ND	ND	ND	–	0.4	–
			06/20/01	23 39	31.81	ND	ND	ND	ND	ND	ND	–	–	–
			03/29/01	21.84	33 36	ND	ND	4.5	ND	ND	ND	–	0.6	–
			01/12/01	23 21	31.99	ND	ND	2 1	ND	ND	ND	–	0.6	–
			09/27/00	22 43	32.77	63	ND	ND	ND	ND	ND	ND	0.6	–
MW-12	56.49	25 - 40												
			03/21/03	23.28	33 21	–	–	–	–	–	–	–	1.23	22
			12/30/02	22.16	34 33	ND	ND	ND	ND	< 1	ND	–	0.77	372
			08/27/02	24.68	31.81	–	–	–	–	–	–	–	0.60	410
			06/13/02	23.86	32 63	ND	ND	ND	ND	ND	ND	–	0.51	400
			03/21/02	22.86	33 63	ND	ND	ND	ND	ND	ND	–	0.7	–
			12/18/01	24.49	32 00	ND	ND	0.86	ND	ND	ND	–	–	–
			09/20/01	24.95	31 54	ND	ND	ND	ND	ND	ND	–	0.7	–
			06/20/01	24.47	32 02	ND	ND	ND	ND	ND	ND	–	–	–
			03/29/01	22.91	33 58	ND	ND	5	ND	ND	ND	–	1	–
			01/12/01	24.28	32 21	ND	ND	1 1	ND	ND	ND	–	1	–
			09/27/00	23.98	32 51	ND	ND	ND	ND	ND	ND	ND	1.2	–
Practical Quantitation Limit:						50	0.5	0.5	0.5	0.5	1	0.5	–	–
Site-Specific Cleanup Goals						7,000	210	26,000	27,000	200,000	NA	NA	–	–

NOTES:

T.O.C. = Top of Casing Elevation. Calculated groundwater elevation = TOC - Depth to Groundwater. Referenced to NGVD

TPH-g = Total Petroleum Hydrocarbons as gasoline. MTBE = Methy - tert - Butyl Ether

F.O.'s = Fuel Oxygenates = Di-isopropyl ether (DIPE), tertiary Butyl Alcohol (TBA), Ethyl tertiary Butyl Ether (ETBE), tertiary amyl Methyl Ether (TAME)

VOC's = Volatile Organic Compounds. D.O. = Dissolved Oxygen

ug/L = micrograms per liter, parts per billion, mg/L = milligrams per liter, parts per million

ND = Not Detected at the Practical Quantitation Limit (PQL); <X = Not Detected at the elevated PQL, X = PQL elevated because of sample dilution

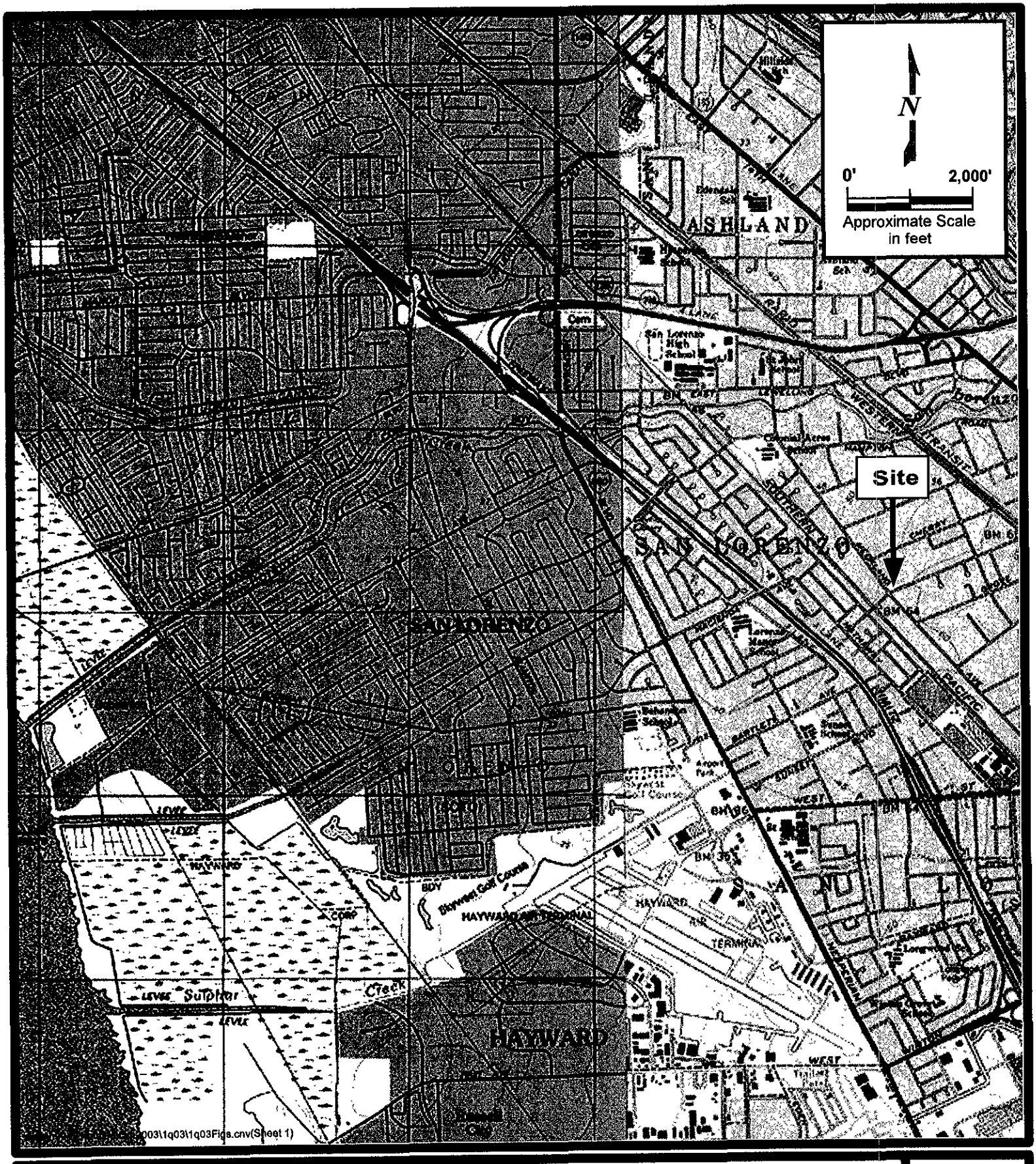
– = Data not collected or measured, or analysis not conducted

MCL = Maximum Contaminant Level for drinking water in California (Department of Health Services)

** Confirmed by GC/MS method 8260*

*** = Action Level. *** = Secondary MCL / water quality goal*

***** = Laboratory Report indicates results within quantitation range; chromatographic pattern not typical of fuel*



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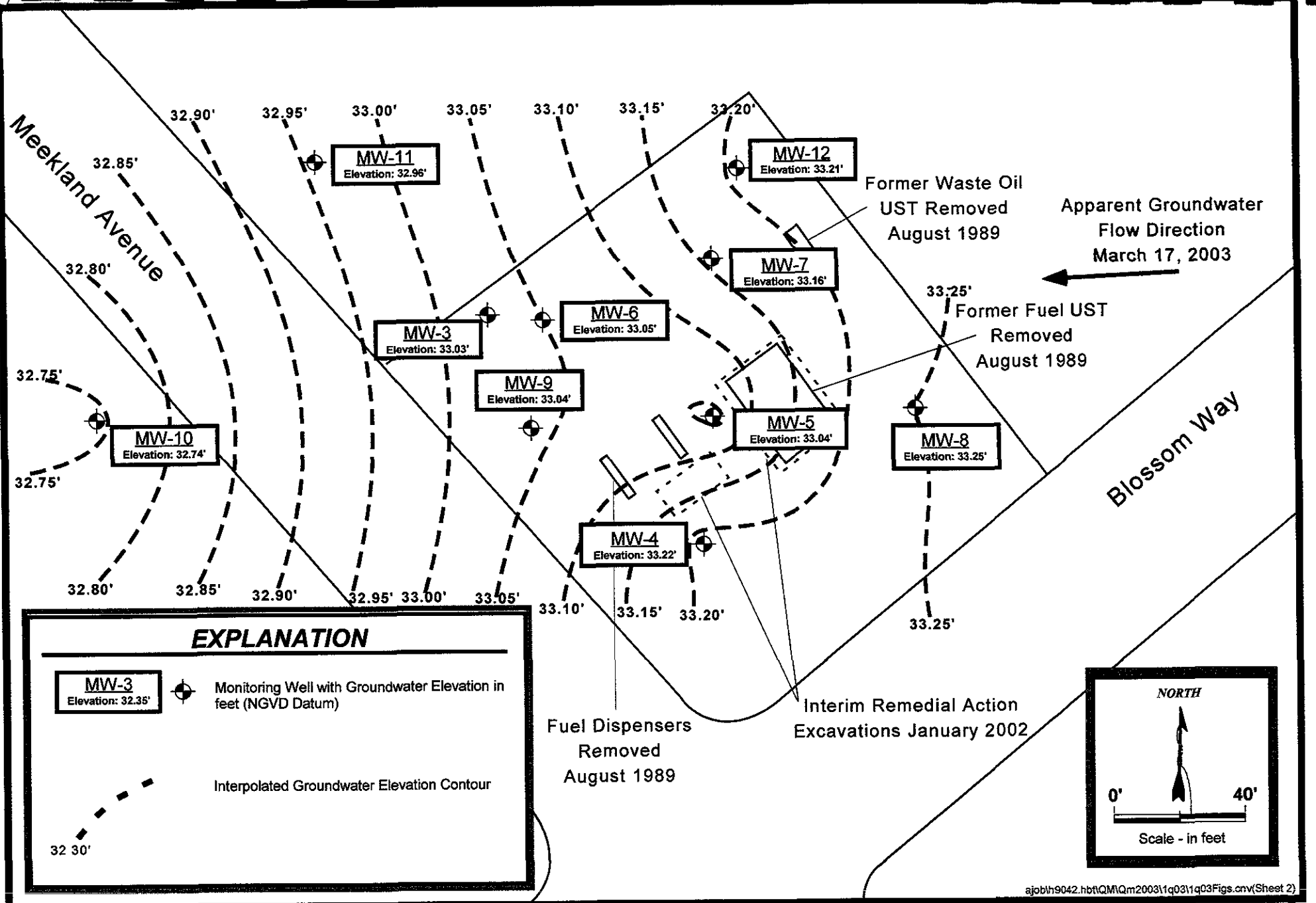
Location Map
Former Harbert Transportation Facility
19984 Meekland Avenue
Hayward, California

Figure 1
Job # H9042



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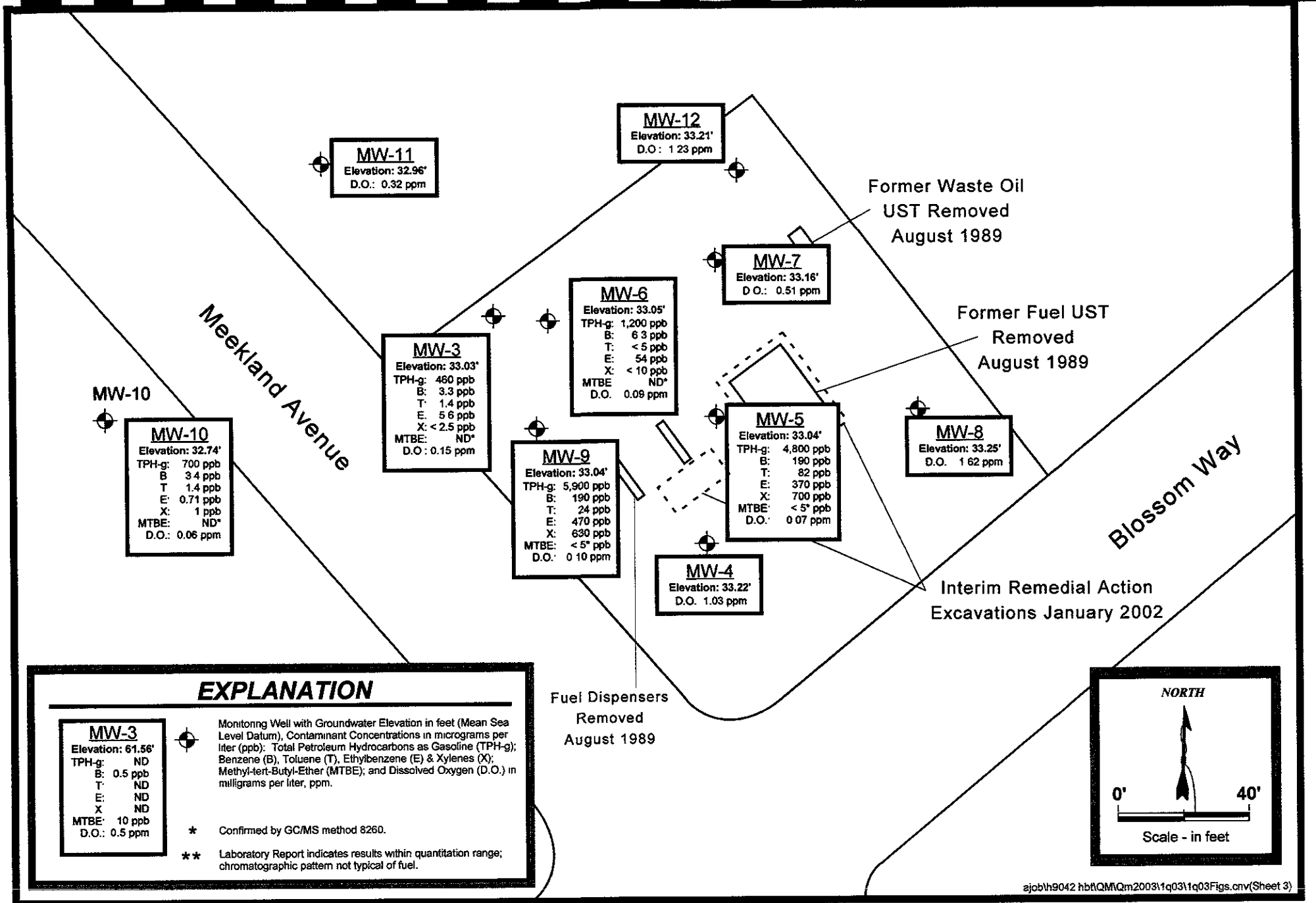
Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, Ca. 95076
(831) 722 - 3580 (831) 662 - 3100

Site Plan with Groundwater Elevations
March 17, 2003
Former Harbert Transportation Facility
19984 Meekland Avenue, Hayward, California

Figure 2
Project H9042



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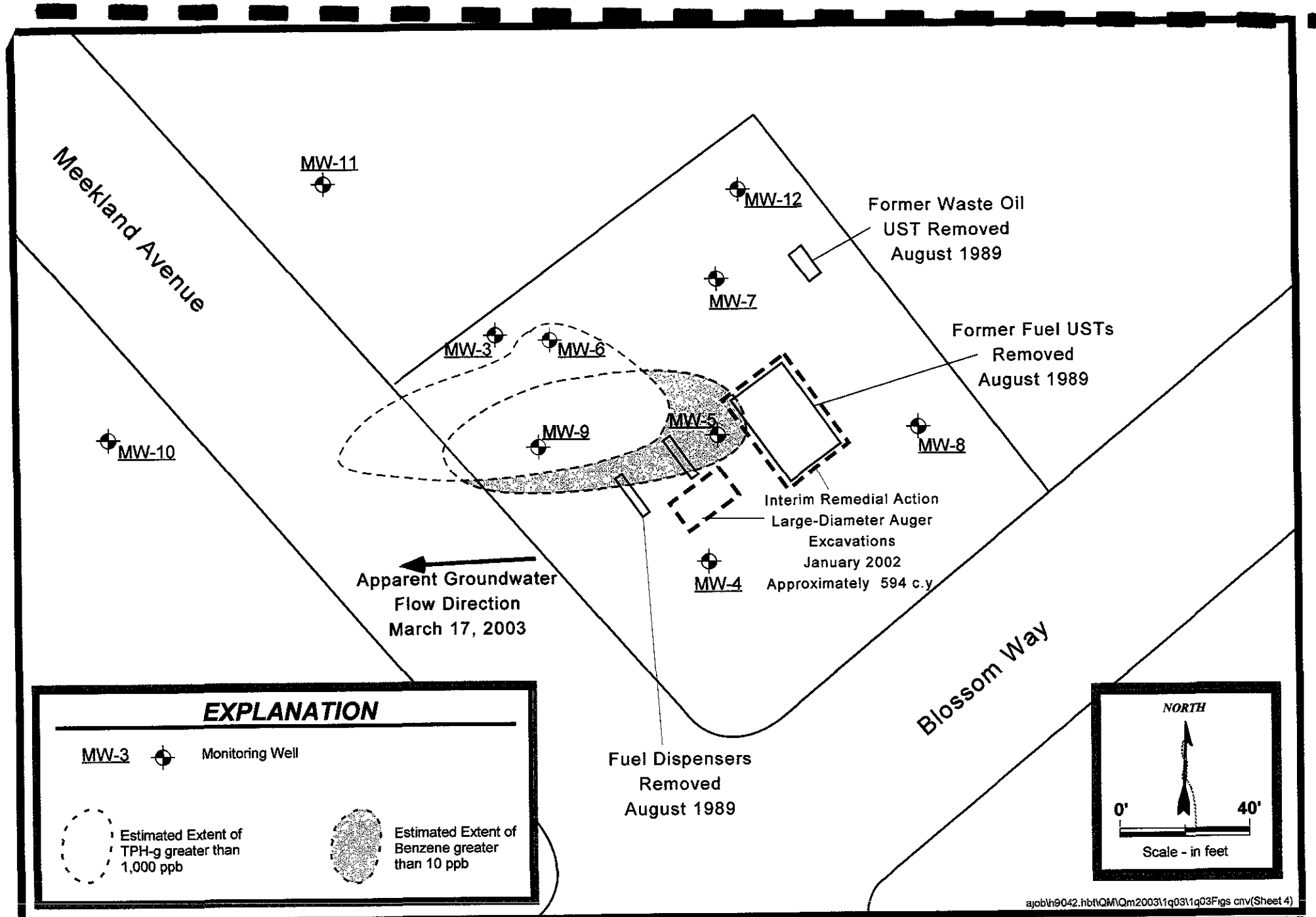
Site Plan with PHC Concentrations in Groundwater
March 17, 2003
Former Harbert Transportation Facility
19984 Meekland Avenue, Hayward, California

Figure 3
Project H9042



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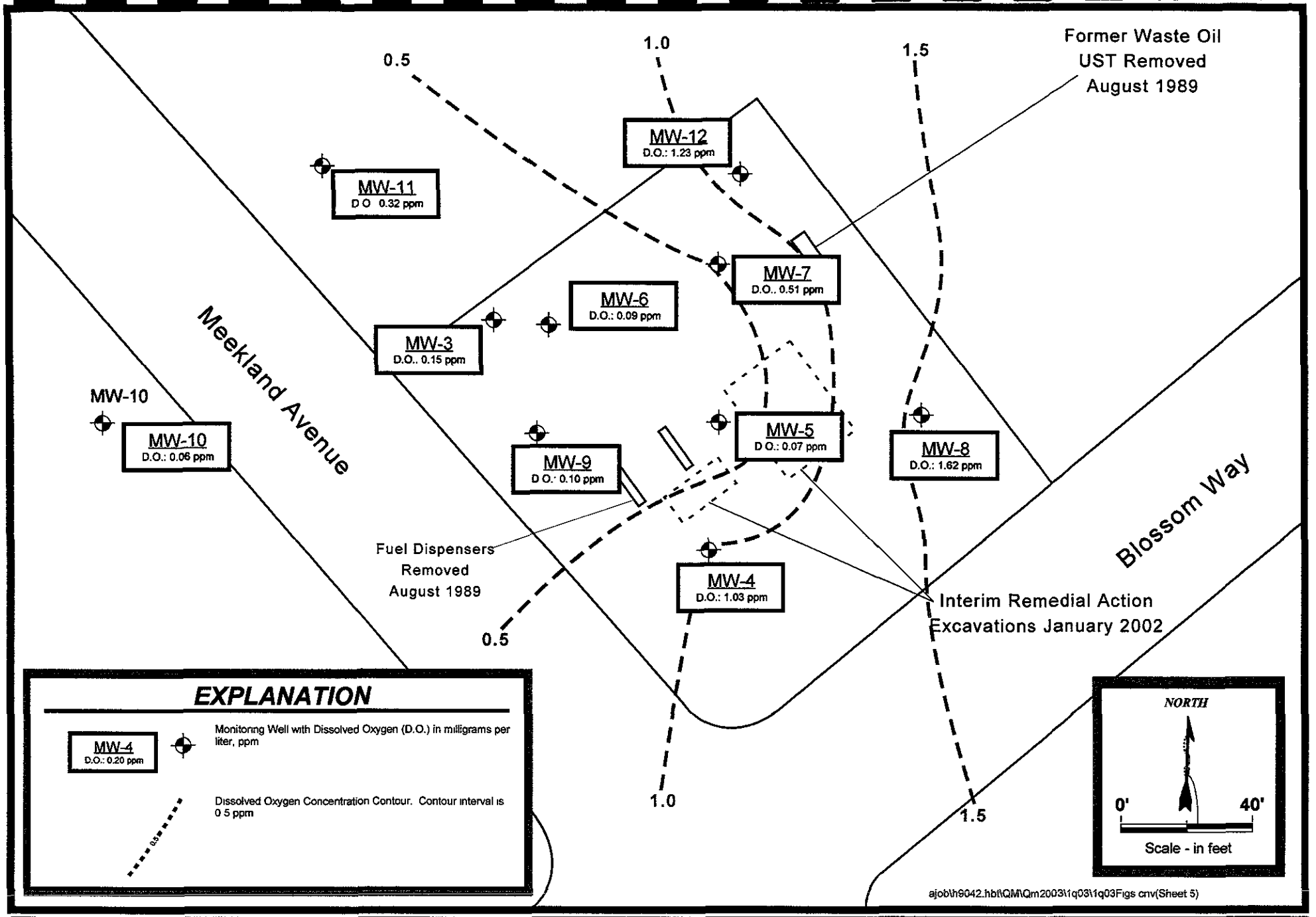
Site Plan with Extent of TPH-g and Benzene in Groundwater, March 17, 2003
Former Harbert Transportation Facility
19984 Meekland Avenue, Hayward, California

Figure 4 Project H9042



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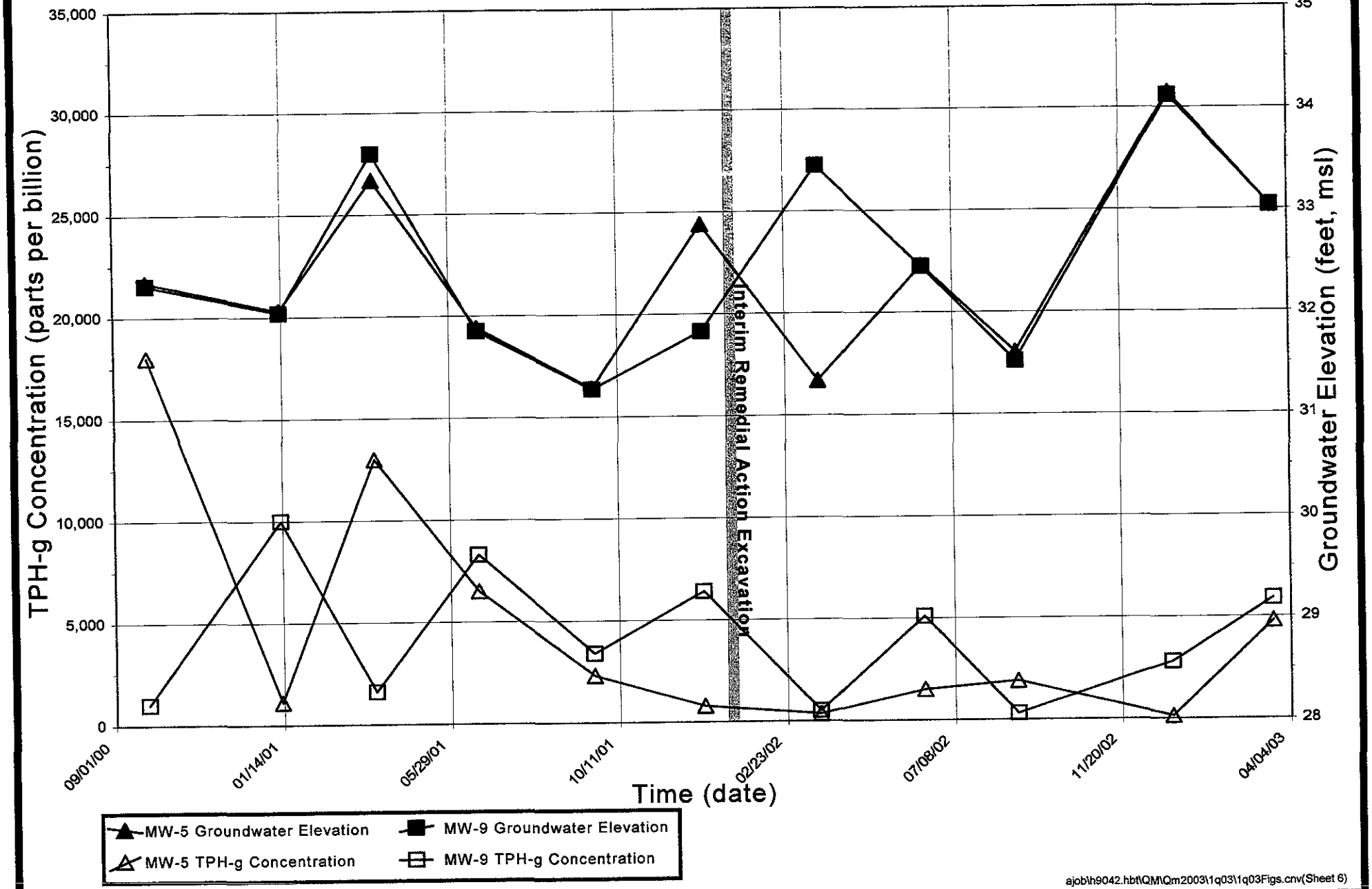
Site Plan with Dissolved Oxygen Contours
March 17, 2003
Former Harbert Transportation Facility
19984 Meekland Avenue, Hayward, California

Figure 5
Project H9042



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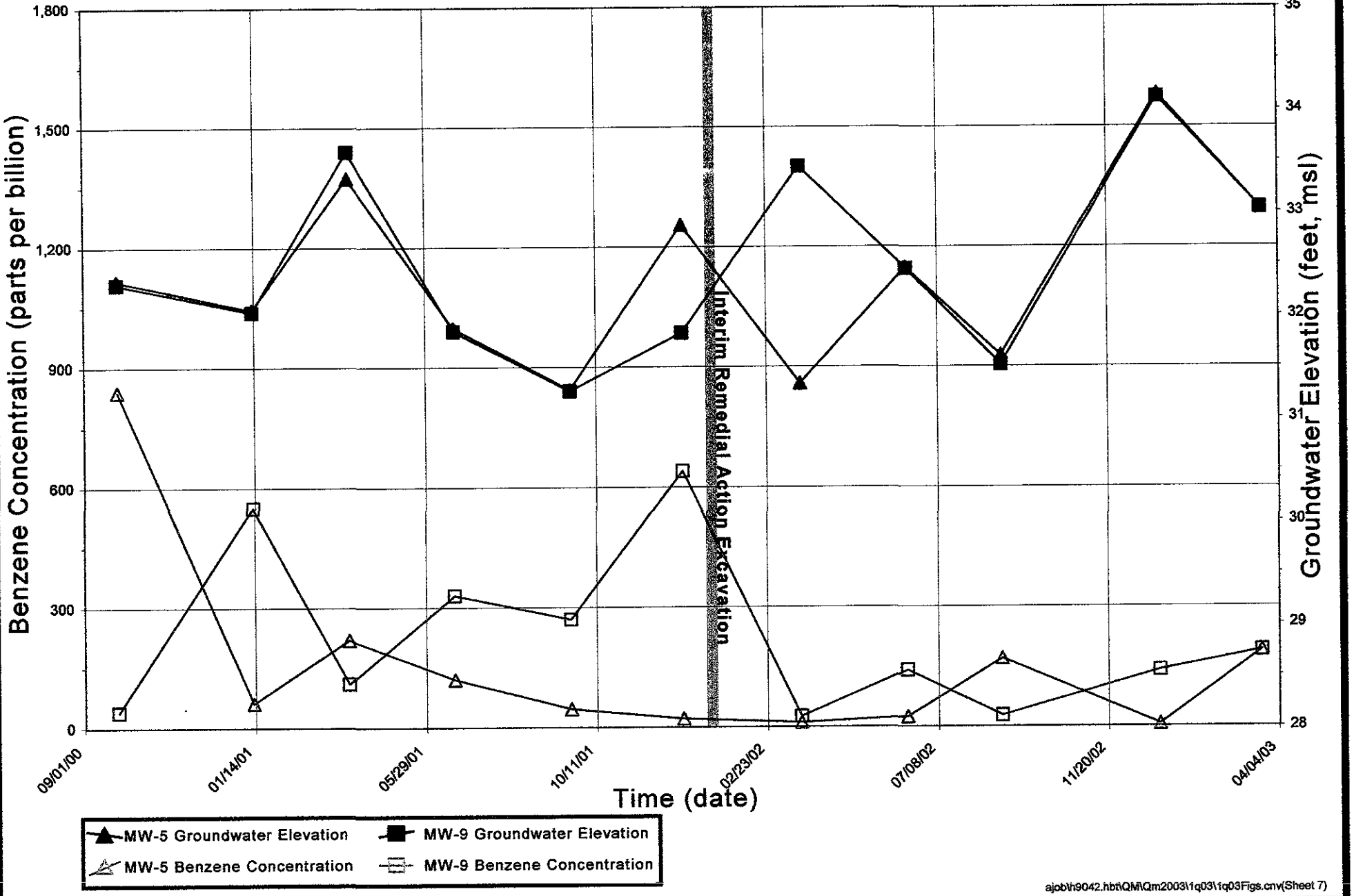
TPH-g and Groundwater Elevation in MW-5 and MW-9 Through March 17, 2003
Former Harbert Transportation Facility
19984 Meekland Avenue, Hayward, California

Figure 6 Project H9042



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Benzene and Groundwater Elevation in MW-5 and MW-9 Through March 17, 2003
Former Harbert Transportation Facility
19984 Meekland Avenue, Hayward, California

Figure 7
Project H9042

Appendix A

Field Methodologies for Groundwater Monitoring and Field Data Forms

Appendix A

Field Methodologies for Groundwater Monitoring

Weber, Hayes and Associates' groundwater monitoring field methodology is based on procedures specified in the *LUFT Field Manual*. The first step in groundwater well sampling is for Weber, Hayes and Associates field personnel to measure the depth-to-groundwater to the nearest hundredth (0.01) of a foot with an electric sounder. If the well appears to be pressurized, or the groundwater level is fluctuating, measurements are made until the groundwater levels stabilizes, and a final depth-to groundwater measurement is taken and recorded. After the depth-to-groundwater is measured, the well is then checked for the presence of free product with a clear, disposable polyethylene bailer. If free product is present, the thickness of the layer is recorded, and the product is bailed to a sheen. All field data (depth-to-groundwater, well purge volume, physical parameters, and sampling method) is recorded on field data sheets (see attached). Because removing free product may skew the data, wells that contain free product are not used in groundwater elevation and gradient calculations.

After measuring the depth-to-groundwater, each well, starting with the cleanest well (based on analytical results from the last sampling event), is purged with a low flow submersible electric pump. During purging the physical parameters of temperature, conductivity, pH, dissolved oxygen (D.O.) concentration, and Oxidation-Reduction Potential (ORP) of the purge water are monitored with a QED MP20 Micropurge Flow-Through-Cell and Meter to insure that these parameters have stabilized (are within ~ 15 percent of the previous measurement). The QED MP20 Meter is capable of contiguously monitoring the physical parameters of the purge water via the flow through cell and providing an alarm to indicate when the physical parameters have stabilized to the users specifications. Purging is determined to be complete (stabilized aquifer conditions reached) after the removal of approximately three to five well volumes of water or when the physical parameters have stabilized. Dissolved oxygen and ORP measurements are used as an indicator of intrinsic bioremediation within the contaminant plume. All field instruments are calibrated before use.

All purge water is stored on site in DOT-approved, 55-gallon drums for disposal by a state-licensed contractor pending laboratory analysis for fuel hydrocarbons.

After purging, the water level in the well is allowed to recover to 80 percent of its original depth before a sample is collected. After water level recovery, a groundwater sample is collected from each well with a new, disposable bailer, and decanted into the appropriate laboratory-supplied sample container(s). The sample containers at this site were 40-ml. vials. Each vial was filled until a convex meniscus formed above the vial rim, then sealed with a Teflon®-septum cap, and inverted to insure that there were no air bubbles or head space in the vial. All samples are labeled in the field and transported in insulated containers cooled with blue ice to state-certified laboratories under proper chain of custody procedures.

All field and sampling equipment is decontaminated before, between, and after measurements or sampling by washing in an Liqui-Nox and tap water solution, rinsing with tap water, and rinsing with distilled water.

Weber, Hayes & Associates

Hydrogeology and Environmental Engineering

120 Westgate Dr., Watsonville, CA 95076

(831) 722-3580 (831) 662-3100

Fax: (831) 722-1159

INDICATE ATTACHMENTS THAT APPLY

x 6	Data Sheets
x 3	COC's
___	Site Map
___	Photo Sheet
x 1	Chargeable Materials

Job Name: **Harbert Transportation**	*Date:* **March 21, 2003**
Field Location: **19984 Meekland Avenue, Hayward**	*Study #:* **H9042.Q**
Field Tasks: ☐ *Drilling* ☑ *Sampling* ☑ *Other* **1st Quarter 2003 Well Sampling**	*Weather Conditions:* Clear + Cold
Personnel/Company onsite: (Weber, Hayes and Associates) **Chad Taylor**	

FIELD WORK PLANNING: Performed on: **March 20, 20032**

Meet with project manager: **X** yes, or no.

Number of wells to be sampled: **Six Wells, with D.O. in all wells**
Sample wells: **MW-3, 5, 6, 9, and 10 for TPH-g, BTEX, MTBE, 1,2-DCA, PCE, and TCE, and TDS in MW-3.**

Proposed sampling date: **March 21, 2003**

TIME: 0645
Arrive onsite to perform 1st Quarter Monitoring Well Sampling.

COMMENTS:
Send all analytical to Entech Analytical Laboratory.

INITIALS:

CT -All sampling is conducted according to Standard Operating Procedure (SOP) 10I/
-Water Quality Sampling Information for each well sampled is recorded on following pages.
-Upon sampling, all samples are placed immediately in coolers containing blue ice.
-After sampling each well all equipment is decontaminated according to SOP 10B/.
-All purge water is properly disposed in 55-gallon drums to be purged at a later date.
V -All samples are recorded on field Chain-of-Custody Sheets for transport to Laboratory.

BEGIN CALIBRATION:

CT QED MP20 Flow Through Cell: Temp = 11.4°C pH = 7.00 & 10.00, EC = 1.415% Barometric Pressure = 760
D.O. % Saturation = 100, ORP = N/A

BEGIN SAMPLING ALL WELLS:

MW3 MW-1 MW-5 MW-10 MW-9 ___ ___ ___ ___ ___ ___ ___

-See information below for general monitoring well information this sampling round.

COMMENTS:
All well will be purged until the QED MP20 unit indicates that the water quality parameters (pH, Conductivity, Temp, D.O., and ORP) have stabilized to within ~ 15 % or once four casing volumes in the column requiring sampling have been removed(see Water Quality Sampling Field Forms for details). Wells will be purged from bottom-up and will follow standard operating procedures by WHA. Wells will be sampled using a bladder pump, or disposable bailer.

E:\AJOB\H9042.hbt\QM\QM2003\1q03\QMFIELD.WPD

3/21/03
Signature of Field Personnel & Date

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 (831) 662-3100
Fax: (831) 722-1159

Location	GW Depth (TOC)	Total Depth of Well	D.O. (mg/L)	ORP (mV)	Floating Product (comments).
MW-3	22.91'	40'	0.15	-39	No FP, Slight Odor
MW-4	22.99'	40'	1.03	18	No FP, No Odor
MW-5	22.99'	45'	0.07	-72	No FP, Moderate Odor
MW-6	22.96	45'	0.09	-45	No FP, Slight Odor
MW-7	23.50'	40'	0.51	20	No FP, No Odor
MW-8	22.91'	40'	1.62	15	No FP, No Odor
MW-9	22.17'	40'	0.10	-84	No FP, Slight-Moderate Odor
MW-10	22.00'	40'	0.06	-62	No FP, Slight Odor
MW-11	22.24'	40'	0.32	24	No FP, No Odor
MW-12	23.28'	40'	1.23	22	No Fl, No Odor

CT 3/4/03

HOW MANY PURGE DRUMS WERE LEFT ONSITE 7. APPROXIMATE GAL. 160.
CALL ~~BAYSIDE~~ OIL ON _____ TO HAVE DRUMS PURGED.
DRUMS WILL BE PURGED ON_____.

COMMENTS:

JHt 3/4/03
Signature of Field Personnel & Date

GROUNDWATER MONITORING WELL SAMPLING INFORMATION

Project Name/No.: Herbert Transportation / 119042.Q **Date:** 3/11/03

Sample No.: MW-3 **Sample Location:** MW-3

Samplers Name: Chad Taylor **Recorded by:** CT

Purge Equipment:

_____ Bailer: Disposable or Acrylic
X Whaler # 1
_____ Bladder Pump
_____ Submersible Pump

Sample Equipment:

X Disposable Bailer
_____ Whaler # _____
_____ Bladder Pump
_____ Submersible Pump

Analyses Requested (cricle all that apply):

(TPH-gas, BTEX, MTBE, 1, 2-DCA, ~~EDB, 8260 Fuel Oxygenates~~ VOCs)
~~TPH-diesel, TPH-Motor Oil, TPH-Heating Oil~~
~~Intrinsic Bio. Parameters~~ (TDS)

Number and Types of Bottle Used:

2 x (3 x 40mL VOA)
1 x 250mL Poly

Well Number: MW-3 **Well Diameter:** 2" with Casing Volume of:

Depth to Water: 22.41' TOC — (2" = (0.16 Gallon/Feet))
Well Depth: 40' BGS or TOC — 4" = (0.65 Gallon/Feet)
Height W-Column: 17.59' feet (well depth - depth to water) — 5" = (1.02 Gallon/Feet)
Volume in Well: 2.8149 gallons (casing volume X height) — 6" = (1.47 Gallon/Feet)
Gallons to purge: 11.23 gallons (volume X 4) — 8" = (2.61 Gallon/Feet)

Lab: Entech **Transportation:** Deliver

Time (24 hr.)	Volume Purged (Gallons)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Parameters Stabilized
0758	0	17.46	0.717	2.99	6.68	100	Low: Clear-Brown, Minor Fines	
0759	1	18.50	0.722	1.28	6.80	34	↓ ↓ ↓	
0759	2	18.58	0.723	0.71	6.80	7	Low: Clear, Trace Fines	
0800	3	18.68	0.721	0.29	6.83	-14		
0800	4	18.70	0.711	0.21	6.82	-23		
0802	6	18.74	0.738	0.18	6.81	-28		
0803	8	18.76	0.717	0.17	6.80	-30		
0805	10	18.76	0.716	0.16	6.79	-32		
0806	12	18.75	0.718	0.15	6.78	-34	↓ ↓ ↓	

Wait for 80% well volume recovery prior to sampling.

Calculate depth to water (from TOC), for 80% well volume recovery:

Calculate 80% of orginal well volume:

Original Height of Water Column = 17.51' x 0.8 = 14.072' - (Well Depth) 40' = Depth to water 25.93'

Time: 0807 1st measured depth to water, 22.54' feet below TOC. — Is well within 80% of original well casing volume: Yes ✓ No ____
Time: ____ 1st measured depth to water, ____ feet below TOC. — Is well within 80% of original well casing volume: Yes ____ No ____
Time: ____ 1st measured depth to water, ____ feet below TOC. — Is well within 80% of original well casing volume: Yes ____ No ____

Sample Well

Time: 0807 Sample ID: MW-3 Depth: 22.54' feet below TOC

Comments: No Floating Product. Slight Odor.

GROUNDWATER MONITORING WELL SAMPLING INFORMATION

Project Name/No.: Herbert Transportation / 119042.Q **Date:** 3/21/03

Sample No.: MW-6 **Sample Location:** MW-6

Samplers Name: Chad Taylor **Recorded by:** CT

Purge Equipment:

- ____ Bailer: Disposable or Acrylic
- X Whaler # 2
- ____ Bladder Pump
- ____ Submersible Pump

Sample Equipment:

- X Disposable Bailer
- ____ Whaler # ____
- ____ Bladder Pump
- ____ Submersible Pump

Analyses Requested (circle all that apply):

(TPH-gas) (BTEX) (MTBE) (1, 2-DCA) ~~EDB, 8260 Fuel Oxygenates~~ (PCE, TCE)

~~TPH-diesel, TPH-Motor Oil, TPH-Heating Oil~~

~~Intrinsic Bio. Parameters~~

Number and Types of Bottle Used: 2x (3x40mL VOA's w/HCl)

Well Number: MW-6

Depth to Water: 22.96' TOC

Well Depth: 45' BGS or TOC

Height W-Column: 22.04' feet (well depth - depth to water)

Volume in Well: 14.326' gallons (casing volume X height)

Gallons to purge: 57.30 gallons (volume X 4)

Well Diameter: 4" with Casing Volume of:

- 2" = (0.16 Gallon/Feet)
- 4" = (0.65 Gallon/Feet)
- 5" = (1.02 Gallon/Feet)
- 6" = (1.47 Gallon/Feet)
- 8" = (2.61 Gallon/Feet)

Lab: Entech **Transportation:** Deliver

Time (24 hr.)	Volume Purged (Gallons)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Paramaters Stabilized
0837	0	18.01	0.731	0.92	6.68	-51	High: Gray-Brown, Many Fines	
0838	2	18.39	0.688	0.18	6.69	-28	Low: Clear-Brown, Min. Fines	
0840	4	18.60	0.688	0.20	6.70	-8	↓ ↓ ↓	
0841	6	18.82	0.691	0.14	6.72	6	Low: Clear, Trace Fines	
0843	8	18.88	0.693	0.09	6.72	11		
0844	10	18.93	0.692	0.17	6.73	7		
0850	20	19.11	0.655	0.36	6.69	-28		
0904	40	19.11	0.699	0.09	6.65	-45	↓ ↓ ↓	✓
STOP-	Parameters Stabilized, Purge Complete.							

Wait for 80% well volume recovery prior to sampling.

Calculate depth to water (from TOC), for 80% well volume recovery:

Calculate 80% of orginal well volume:

Original Height of Water Column = 22.04' x 0.8 = 17.632' - (Well Depth) 45' = Depth to water 27.37'

Time: 0907 1st measured depth to water, 23.57' feet below TOC. Is well within 80% of original well casing volume: Yes ___ No ___

Time: ___ 1st measured depth to water, ___ feet below TOC. Is well within 80% of original well casing volume: Yes ___ No ___

Time: ___ 1st measured depth to water, ___ feet below TOC. Is well within 80% of original well casing volume: Yes ___ No ___

Sample Well

Time: 0907 Sample ID: MW-6 Depth: 23.57' feet below TOC

Comments: No Floating Product. Slight Odor.

GROUNDWATER MONITORING WELL SAMPLING INFORMATION

Project Name/No.: Harbert Transportation / 19042.Q **Date:** 3/21/03

Sample No.: MW-5 **Sample Location:** MW-5

Samplers Name: Chad T, L **Recorded by:** CT

Purge Equipment:

_____ Bailer: Disposable or Acrylic
X Whaler # 3
_____ Bladder Pump
_____ Submersible Pump

Sample Equipment:

X Disposable Bailer
_____ Whaler # _____
_____ Bladder Pump
_____ Submersible Pump

Analyses Requested (cricle all that apply):

TPH-gas, BTEX, MTBE, 1, 2-DCA, ~~EDB, 8260 Fuel Oxygenates~~ PCE, TCE
~~TPH-diesel, TPH-Motor Oil, TPH-Heating Oil~~
~~Intrincic Bio. Parameters~~

Number and Types of Bottle Used: 2x(3x40mL VOA's w/HCl)

Well Number: MW-5

Depth to Water: 22.99 TOC

Well Depth: 45' BGS or TOC

Height W-Column: 22.01' feet (well depth - depth to water)

Volume in Well: 14.3065 gallons (casing volume X height)

Gallons to purge: 57.23 gallons (volume X 4)

Well Diameter: 4" **with Casing Volume of:**

2" = (0.16 Gallon/Feet)
4" = (0.65 Gallon/Feet)
5" = (1.02 Gallon/Feet)
6" = (1.47 Gallon/Feet)
8" = (2.61 Gallon/Feet)

Lab: Entech **Transportation:** Deliver

Time (24 hr.)	Volume Purged (Gallons)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Paramaters Stabilized
0923	0	18.28	0.378	1.51	6.68	-6	High: Gray-Brown, Many Fines	
0924	2	18.64	0.385	0.21	6.70	-19	Moderate: Brown, Med Fines	
0926	4	18.83	0.382	0.10	6.72	-44	↓	
0927	6	18.93	0.348	0.08	6.72	-70	↓	
0929	8	18.98	0.303	0.07	6.55	-69	↓	
0930	10	19.06	0.287	0.07	6.72	-66	↓	
0937	20	19.04	0.351	0.37	6.76	-55	↓	
0948	35	18.90	0.463	0.07	6.75	-72	↓	✓
STOP -	Parameters Stabilized. Purge Complete.							

Wait for 80% well volume recovery prior to sampling.

Calculate depth to water (from TOC), for 80% well volume recovery:

Calculate 80% of orginal well volume:

Original Height of Water Column = 22.01' x 0.8 = 17.608' - (Well Depth) 45' = Depth to water 27.39'

Time: 0950 1st measured depth to water, 39.24' feet below TOC. Is well within 80% of original well casing volume: Yes ____ No ✓
Time: 0951 1st measured depth to water, 30.12' feet below TOC. Is well within 80% of original well casing volume: Yes ____ No ✓
Time: 1005 1st measured depth to water, 27.37' feet below TOC *Is well within 80% of original well casing volume:* Yes ✓ No ____

Sample Well

Time: 1005 Sample ID: MW-5 Depth: 27.37' feet below TOC

Comments: No Floating Product. Moderate Odor.

GROUNDWATER MONITORING WELL SAMPLING INFORMATION

Project Name/No.: Hurbert Transportation / 119042.9 **Date:** 3/21/03

Sample No.: MW-10 **Sample Location:** MW-10

Samplers Name: Chad Taylor **Recorded by:** CT

Purge Equipment:

_____ Bailer: Disposable or Acrylic
X Whaler # 3
_____ Bladder Pump
_____ Submersible Pump

Sample Equipment:

X Disposable Bailer
_____ Whaler # _____
_____ Bladder Pump
_____ Submersible Pump

Analyses Requested (cricle all that apply):

(TPH-gas) (BTEX) MTBE, ~~1, 2-DCA~~ ~~EDB, 8260 Fuel Oxygenates~~ (PCE, TCE)
~~TPH diesel, TPH Motor Oil, TPH Heating Oil~~
~~Intrinsic Bio. Parameters~~

Number and Types of Bottle Used: 2x (3 x 40mL VOA's w/HCl)

Well Number: MW-10

Depth to Water: 22.00' TOC

Well Depth: 40' BGS or TOC

Height W-Column: 18.00' feet (well depth - depth to water)

Volume in Well: 11.70' gallons (casing volume X height)

Gallons to purge: 46.80' gallons (volume X 4)

Well Diameter: 4" with Casing Volume of:

2" = (0.16 Gallon/Feet)
4" = (0.65 Gallon/Feet)
5" = (1.02 Gallon/Feet)
6" = (1.47 Gallon/Feet)
8" = (2.61 Gallon/Feet)

Lab: Entech **Transportation:** Deliver

Time (24 hr.)	Volume Purged (Gallons)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Parameters Stablized
1012	0	18.05	0.949	4.38	6.46	-13	Moderate Gry, Mod Fines	
1013	2	18.98	0.916	0.71	6.46	-49	Low Clear, Trace Fines	
1014	4	18.76	0.877	0.28	6.44	-45	↓	
1016	6	18.91	0.875	0.18	6.45	-66	↓	
1017	8	18.95	0.875	0.15	6.46	-71	↓	
1018	10	18.98	0.873	0.13	6.41	-71	↓	
1025	20	19.01	0.870	0.09	6.44	-65	↓	
1035	35	18.80	0.873	0.06	6.47	-62	↓	✓
STOP - Parameters Stabilized. Purge Complete.								

Wait for 80% well volume recovery prior to sampling.

Calculate depth to water (from TOC), for 80% well volume recovery:

Calculate 80% of orginal well volume:

Original Height of Water Column = 18.00 x 0.8 = 14.40' - (Well Depth) 40' = Depth to water 25.60'

Time: 1037 1st measured depth to water, 22.16' feet below TOC. Is well within 80% of original well casing volume: Yes ✓ No
Time: \ 1st measured depth to water, \ feet below TOC. Is well within 80% of original well casing volume: Yes \ No
Time: \ CT 1st measured depth to water, \ CT feet below TOC. Is well within 80% of original well casing volume: Yes \ No CT

Sample Well

Time: 1037 Sample ID: MW-10 Depth: 22.16' feet below TOC

Comments: No Floating Product. Slight Odor.

GROUNDWATER MONITORING WELL SAMPLING INFORMATION

Project Name/No.: Harbert Transportation / H9042.Q **Date:** 3/21/03

Sample No.: Mw-9 **Sample Location:** Mw-9

Samplers Name: Chad Taylor **Recorded by:** CT

Purge Equipment:

_____ Bailer: Disposable or Acrylic
X Whaler # 3
_____ Bladder Pump
_____ Submersible Pump

Sample Equipment:

X Disposable Bailer
_____ Whaler # _____
_____ Bladder Pump
_____ Submersible Pump

Analyses Requested (cricle all that apply):

TPH-gas, BTEX, MTBE, 1, 2-DCA, ~~EDB, 8260 Fuel Oxygenates~~ (PCE, TCE)
TPH-diesel, TPH-Motor Oil, TPH-Heating Oil
Intrinsic Bio. Parameters

Number and Types of Bottle Used:

28 (3x40-mL VOA's w/HCl)

Well Number: Mw-9
Depth to Water: 22.17' TOC
Well Depth: 40' BGS or TOC
Height W-Column: 17.83' feet (well depth - depth to water)
Volume in Well: 11.5895 gallons (casing volume X height)
Gallons to purge: 46.36 gallons (volume X 4)

Well Diameter: 4" **with Casing Volume of:**

2" = (0.16 Gallon/Feet)
4" = (0.65 Gallon/Feet)
5" = (1.02 Gallon/Feet)
6" = (1.47 Gallon/Feet)
8" = (2.61 Gallon/Feet)

Lab: Entech **Transportation:** ~~Courier~~ Deliver

Time (24 hr.)	Volume Purged (Gallons)	Temperature (°C)	Conductivity (ms/cm)	D.O. (ppm)	pH	ORP (mV)	Turbidity: Color, Fines	Micropurge Paramaters Stabilized
1104	0	18.72	0.681	1.63	6.14	-84	Moderate: Gray, Med Fines	
1105	2	18.80	0.637	0.37	6.74	-96	Low: Clear, Trace Fines	
1106	4	19.20	0.619	0.15	6.78	-72	↓	
1107	6	19.29	0.615	0.08	6.81	-75	↓	
1108	8	19.32	0.619	0.08	6.81	-77	↓	
1110	10	19.35	0.613	0.07	6.81	-78	↓	
1116	20	19.31	0.600	0.24	6.81	-83	↓	
	32	19.38	0.623	0.10	6.79	-84	↓	✓
STOP- Parameters Stabilized. Purge Complete.								

Wait for 80% well volume recovery prior to sampling.

Calculate depth to water (from TOC), for 80% well volume recovery:

Calculate 80% of orginal well volume:

Original Height of Water Column = 17.83' x 0.8 = 14.264' - (Well Depth) 40' = Depth to water 25.74'

Time: 1126 1st measured depth to water, 22.72' feet below TOC. Is well within 80% of original well casing volume: Yes ✓ No____
Time: ____ 1st measured depth to water, ____ feet below TOC. Is well within 80% of original well casing volume: Yes ____ No____
Time: ____ 1st measured depth to water, ____ feet below TOC. Is well within 80% of original well casing volume: Yes ____ No____

Sample Well

Time: 1126 Sample ID: Mw-9 Depth: 22.72' feet below TOC

Comments: No Floaty Product. Slight-Moderate Odor.

Appendix B

Summary of Historical Depth to Groundwater Measurements, Groundwater Elevations, and Groundwater Flow Direction - AGI Technologies, Inc.

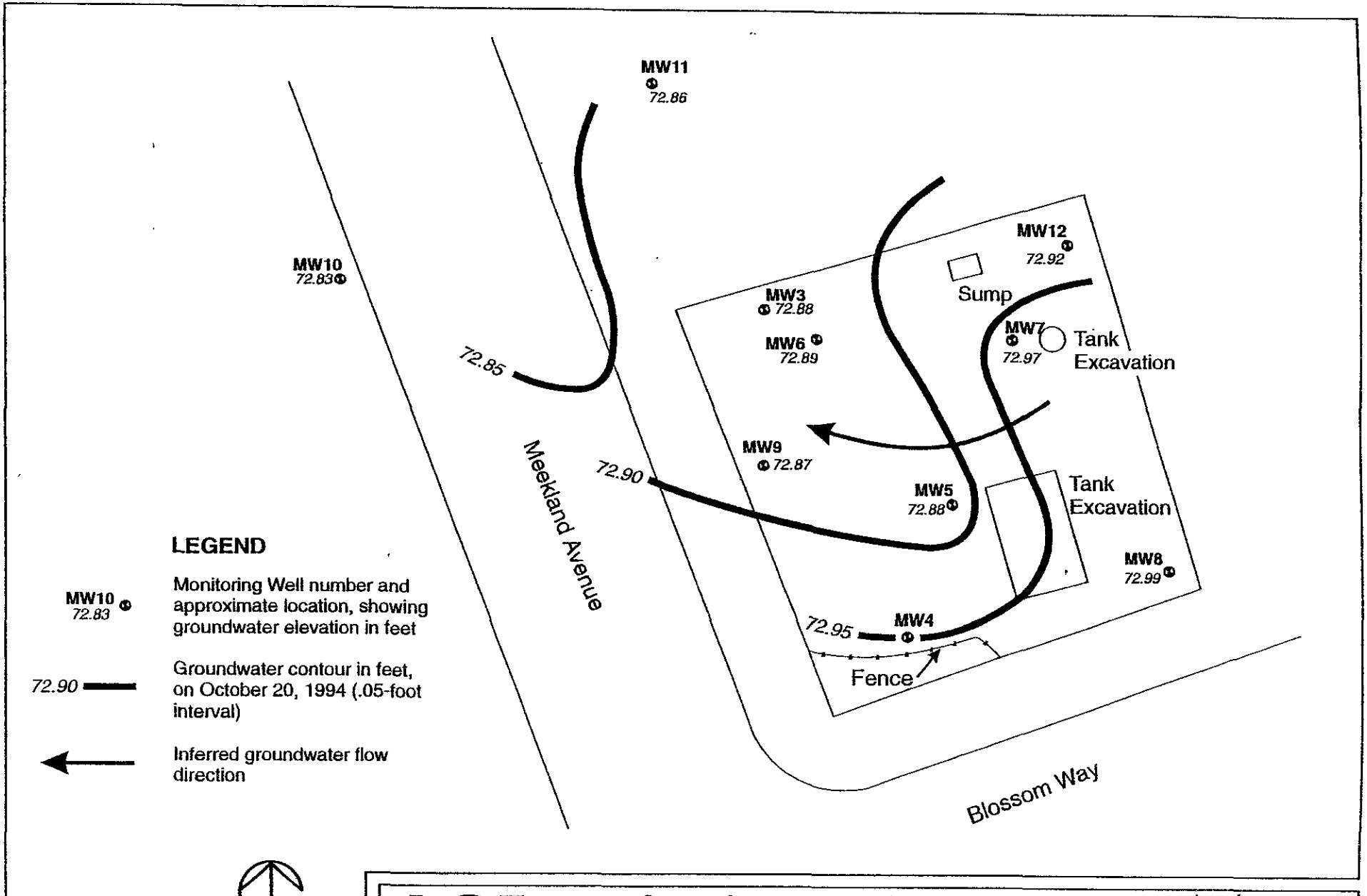
AGI TECHNOLOGIES

Table 1
Groundwater Elevation Data
Harbert Transportation/Meekland Avenue
Hayward, California

Well Number	Date Sampled	Top of Casing Elevation (feet)	Depth to Groundwater (ft bgs)	Groundwater Elevation (feet)
MW3	10/20/94	100.00	27.12	72.88
	09/15/95		24.22	75.78
	03/14/96		19.02	80.98
	09/26/96		23.61	76.39
MW4	10/20/94	100.27	27.32	72.95
	09/15/95		24.42	75.85
	03/14/96		19.23	81.04
	09/26/96		23.85	76.42
MW5	10/20/94	100.59	27.71	72.88
	09/15/95		24.87	75.72
	03/14/96		19.95	80.64
	09/26/96		24.38	76.21
MW6	10/20/94	100.57	27.68	72.89
	09/15/95		24.79	75.78
	03/14/96		19.54	81.03
	09/26/96		24.20	76.37
MW7	10/20/94	101.22	28.25	72.97
	09/15/95		25.35	75.87
	03/14/96		20.06	81.16
	09/26/96		24.75	76.47
MW8	10/20/94	100.72	27.73	72.99
	09/15/95		24.81	75.91
	03/14/96		19.52	81.20
	09/26/96		24.13	76.59
MW9	10/20/94	99.77	26.90	72.87
	09/15/95		24.01	75.76
	03/14/96		18.80	80.97
	09/26/96		23.50	76.27
MW10	10/20/94	99.29	26.46	72.83
	09/15/95		23.79	75.50
	03/14/96		18.62	80.67
	09/26/96		23.30	75.99
MW11	10/20/94	99.75	26.89	72.86
	09/15/95		24.05	75.70
	03/15/96		18.79	80.96
	09/26/96		23.53	76.22
MW12	10/20/94	101.03	28.11	72.92
	09/15/95		25.19	75.84
	03/14/96		19.84	81.19
	09/26/96		24.57	76.46

Note:

ft bgs - Feet below ground surface.



Groundwater Elevation and Contour Map

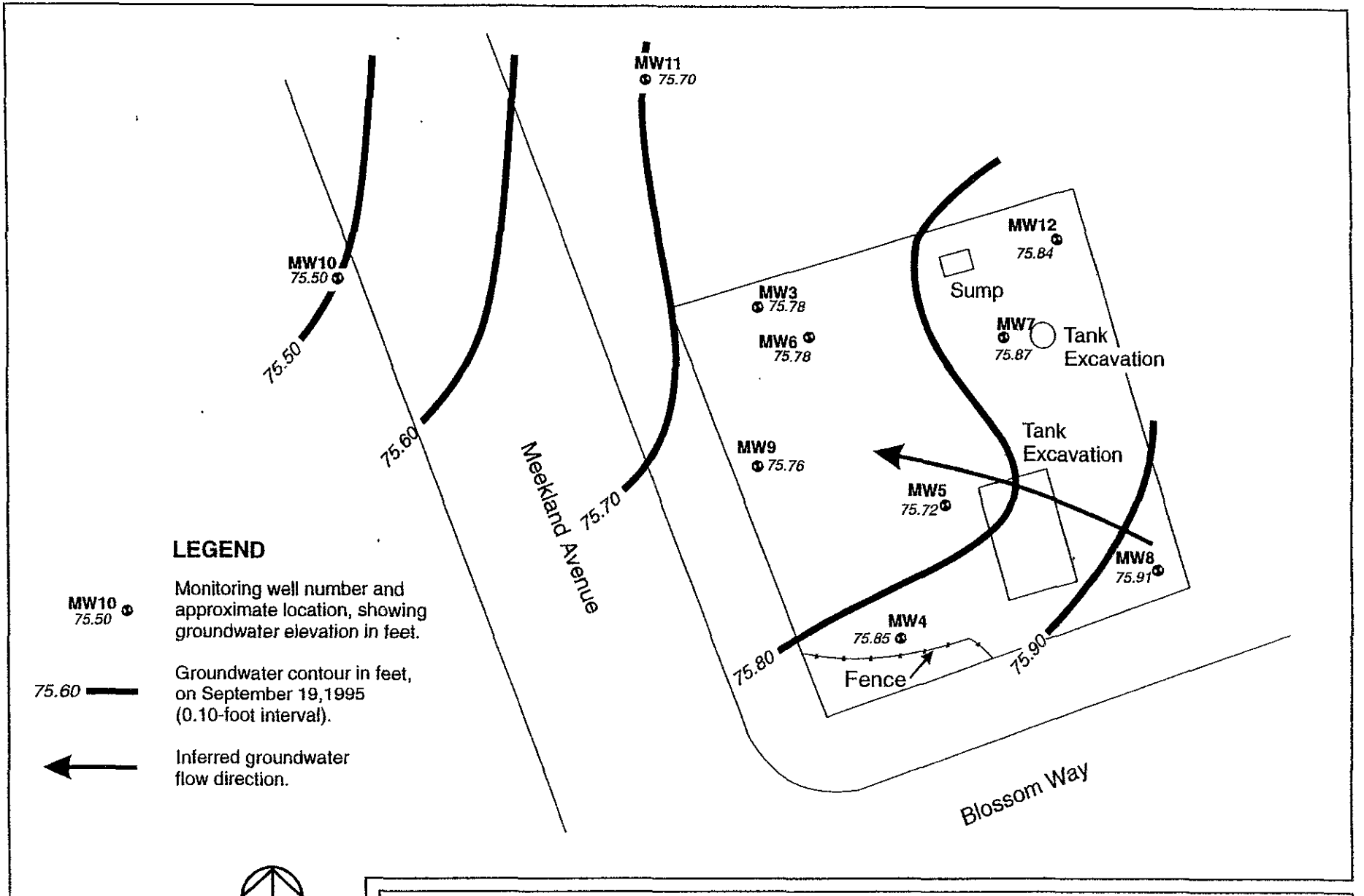
Harbert Transportation/Meekland Avenue
Hayward, California

10/20/94

FIGURE 3

AGI TECHNOLOGIES

grdwat.cdr	PROJECT NO 15,833.002	DRAWN DFF	DATE 29 August 94	APPROVED	REVISED DFF	DATE 23 Nov 94



AGI TECHNOLOGIES

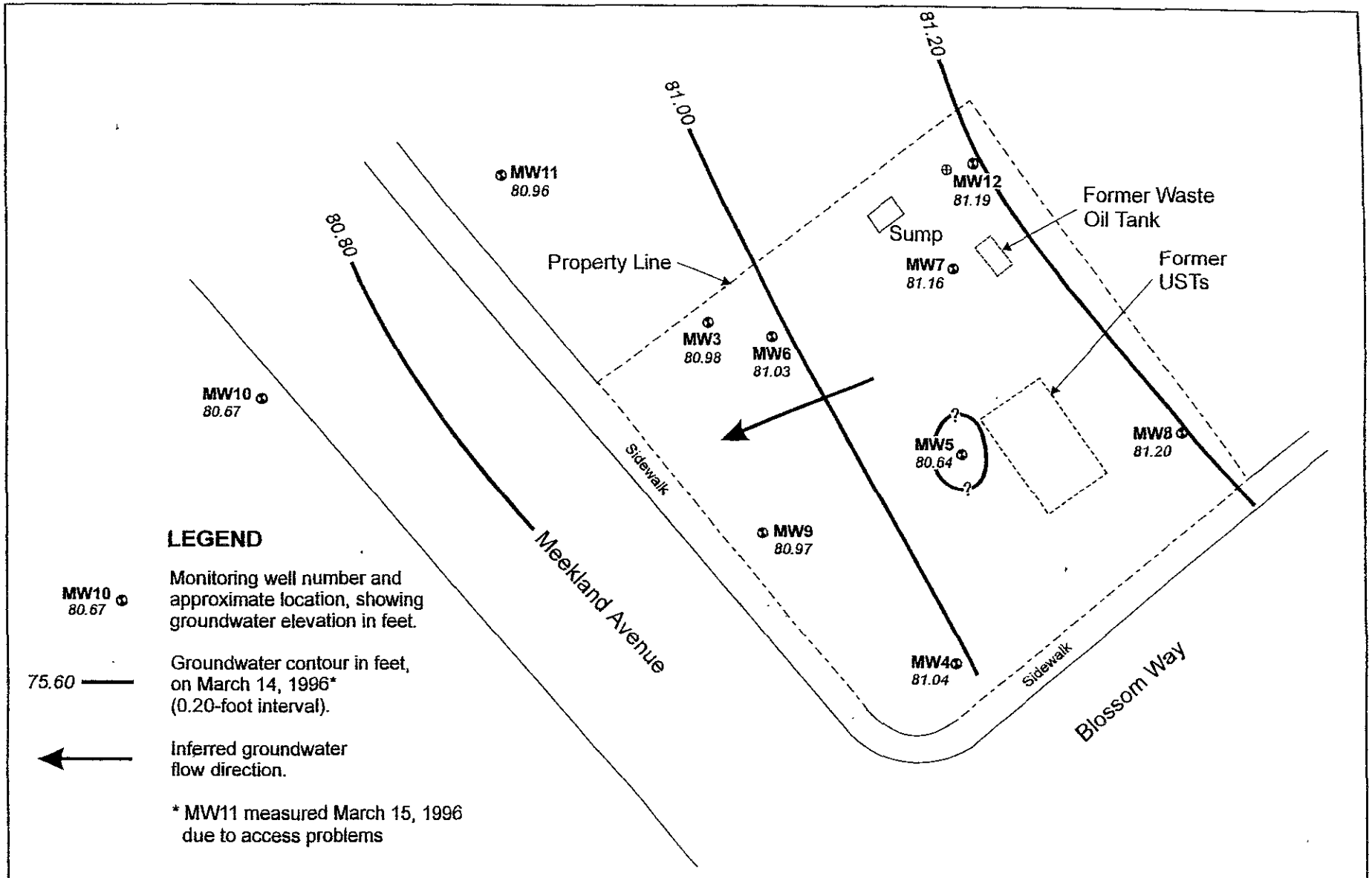
Groundwater Elevation and Contour Map

9.19.95

Harbert Transportation/Meekland Avenue
Hayward, California

FIGURE **3**

PROJECT NO	DRAWN	DATE	APPROVED	REVISED	DATE
grdwat.cdr	15,833.002	DFF	29 August 94	BJA	8 Nov 95



AGI TECHNOLOGIES

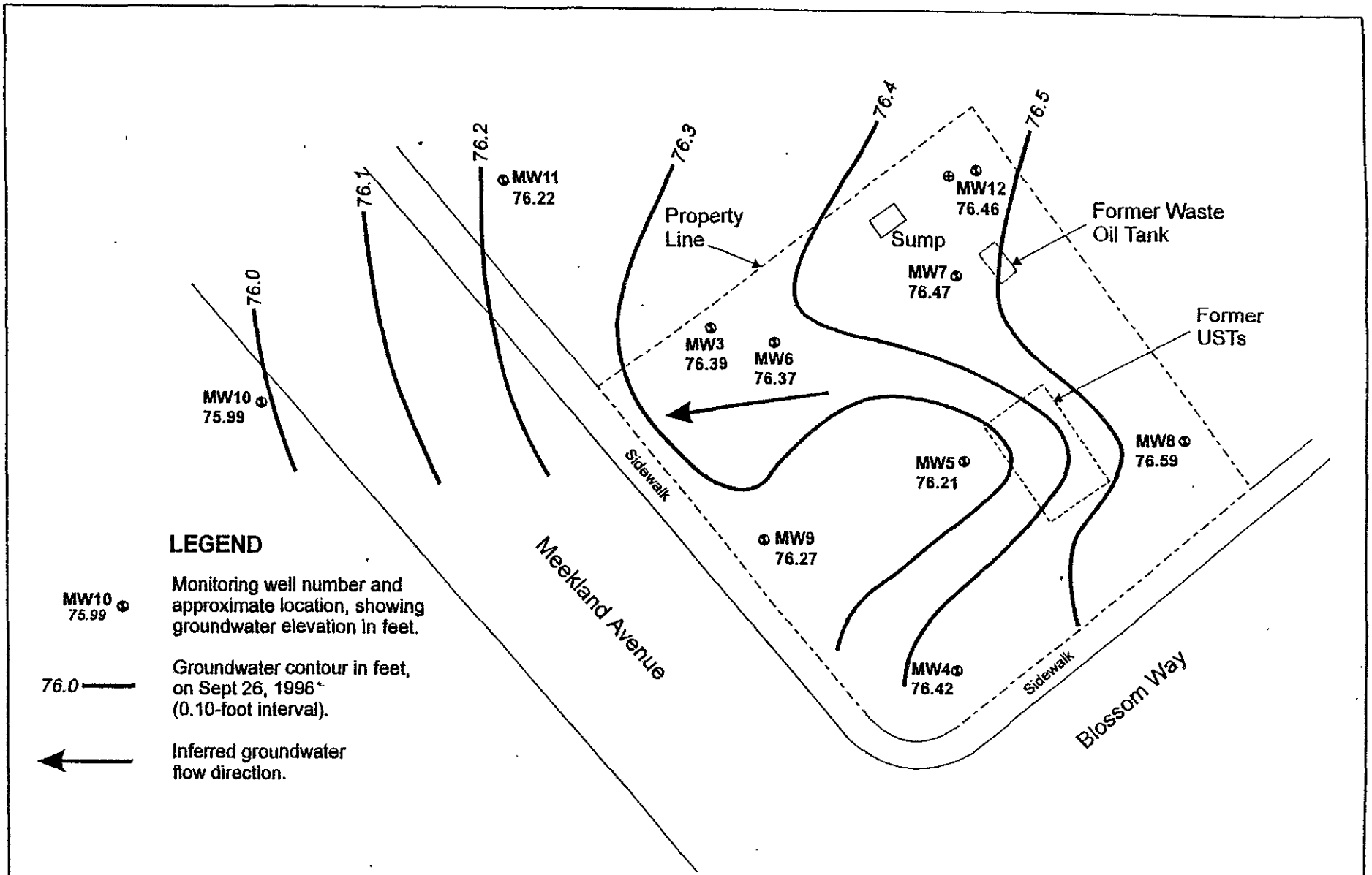
Groundwater Elevation and Contour Map

Harbert Transportation/Meekland Avenue
Hayward, California

3.14.96

FIGURE 3

gw-mar96.cdr	PROJECT NO. 15,833.002	DRAWN DFF	DATE 29 August 94	APPROVED	REVISED ALW	DATE 15 Apr 96



AGI TECHNOLOGIES

Groundwater Elevation and Contour Map

Harbert Transportation/Meekland Avenue
Hayward, California

9.26.96

FIGURE 3

PROJECT NO.	DRAWN	DATE	APPROVED	REVISED	DATE
gw-sep96.cdr	15,833.002	DFF	29 August 94	ALW	15 Apr 96

Appendix C

Certified Analytical Report - Groundwater Samples

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

April 02, 2003

Chad Taylor
Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076

Order:	33750	**Date Collected:**	3/21/2003
Project Name:	Harbert Transportation	**Date Received:**	3/24/2003
Project Number:	H9042.Q	**P.O. Number:**	H9042.Q
Project Notes:	Report re-iisued to include MTBE by EPA 8260B results. Please disregard any previously sumbitted data for work order 33750.		

On March 24, 2003, samples were received under documentented chain of custody. Results for the following analyses are attached:

Matrix	Test	Method
Liquid	EDF Deliverables	EDF
	Gas/BTEX	EPA 8015 MOD. (Purgeable)
		EPA 8020
	MTBE by EPA 8260B	EPA 8260B
	PDF	PDF

Chemical analysis of these samples has been completed. Summaries of the data are contained on the following pages. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#2346). If you have any questions regarding procedures or results, please call me at 408-588-0200.

Sincerely,

Patti Sandrock
QA/QC Manager

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076
Attn: Chad Taylor

Date: 4/2/03
Date Received: 3/24/2003
Project Name: Harbert Transportation
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Chad Taylor

Certified Analytical Report

Order ID: 33750 **Lab Sample ID:** 33750-001 **Client Sample ID:** MW-3

Sample Time: 8:07 AM **Sample Date:** 3/21/2003 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	3.3		2.5	0.5	1.25	µg/L	N/A	3/25/2003	WGC42794	EPA 8020
Toluene	1 4		2.5	0.5	1.25	µg/L	N/A	3/25/2003	WGC42794	EPA 8020
Ethyl Benzene	5.6		2.5	0.5	1.25	µg/L	N/A	3/25/2003	WGC42794	EPA 8020
Xylenes, Total	ND		2.5	1	2.5	µg/L	N/A	3/25/2003	WGC42794	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	141.2	65 - 135
aaa-Trifluorotoluene	84.5	65 - 135

Comment: High surrogate recovery for 4-BFB due to matrix interference. See TFT results.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	1	1	µg/L	N/A	3/26/2003	WMS11995	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	110.0	73 - 151
Dibromofluoromethane	109.0	57 - 156
Toluene-d8	110.0	77 - 150

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	460		2.5	50	125	µg/L	N/A	3/25/2003	WGC42794	EPA 8015 MOD (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	NR	65 - 135
aaa-Trifluorotoluene	117.0	65 - 135

Comment: High surrogate recovery for 4-BFB due to matrix interference. See TFT results.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076
Attn: Chad Taylor

Date: 4/2/03
Date Received: 3/24/2003
Project Name: Harbert Transportation
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Chad Taylor

Certified Analytical Report

Order ID: 33750 **Lab Sample ID:** 33750-002 **Client Sample ID:** MW-5

Sample Time: 10:05 AM **Sample Date:** 3/21/2003 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	190		25	0.5	12.5	µg/L	N/A	3/25/2003	WGC42794	EPA 8020
Toluene	82		25	0.5	12.5	µg/L	N/A	3/25/2003	WGC42794	EPA 8020
Ethyl Benzene	370		25	0.5	12.5	µg/L	N/A	3/25/2003	WGC42794	EPA 8020
Xylenes, Total	700		25	1	25	µg/L	N/A	3/25/2003	WGC42794	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	110.3	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		5	1	5	µg/L	N/A	3/26/2003	WMS11995	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	97 1	73 - 151
Dibromofluoromethane	95.1	57 - 156
Toluene-d8	95.4	77 - 150

Comment: Due to high concentration of TPH as Gasoline, sample required as five fold dilution.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	4800		25	50	1250	µg/L	N/A	3/25/2003	WGC42794	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	118.0	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076
Attn: Chad Taylor

Date: 4/2/03
Date Received: 3/24/2003
Project Name: Harbert Transportation
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Chad Taylor

Certified Analytical Report

Order ID: 33750 **Lab Sample ID:** 33750-003 **Client Sample ID:** MW-6

Sample Time: 9:07 AM **Sample Date:** 3/21/2003 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	6.3		10	0.5	5	µg/L	N/A	3/25/2003	WGC42794	EPA 8020
Toluene	ND		10	0.5	5	µg/L	N/A	3/25/2003	WGC42794	EPA 8020
Ethyl Benzene	54		10	0.5	5	µg/L	N/A	3/25/2003	WGC42794	EPA 8020
Xylenes, Total	ND		10	1	10	µg/L	N/A	3/25/2003	WGC42794	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	112.8	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	1	1	µg/L	N/A	3/26/2003	WMS11995	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	99.0	73 - 151
Dibromofluoromethane	107.0	57 - 156
Toluene-d8	98.0	77 - 150

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	1200		10	50	500	µg/L	N/A	3/25/2003	WGC42794	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	132.4	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076
Attn: Chad Taylor

Date: 4/2/03
Date Received: 3/24/2003
Project Name: Harbert Transportation
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Chad Taylor

Certified Analytical Report

Order ID: 33750 **Lab Sample ID:** 33750-004 **Client Sample ID:** MW-9

Sample Time: 11:26 AM **Sample Date:** 3/21/2003 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	190		10	0.5	5	µg/L	N/A	3/28/2003	WGC42801	EPA 8020
Toluene	24		10	0.5	5	µg/L	N/A	3/28/2003	WGC42801	EPA 8020
Ethyl Benzene	470		10	0.5	5	µg/L	N/A	3/28/2003	WGC42801	EPA 8020
Xylenes, Total	630		10	1	10	µg/L	N/A	3/28/2003	WGC42801	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	142.7	65 - 135
aaa-Trifluorotoluene	67.0	65 - 135

Comment: High surrogate recovery for 4-BFB due to matrix interference. See TFT results

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		5	1	5	µg/L	N/A	3/26/2003	WMS11995	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	91.1	73 - 151
Dibromofluoromethane	92.6	57 - 156
Toluene-d8	92.8	77 - 150

Comment: Due to high concentration of TPH as Gasoline, sample required as five fold dilution

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	5900		10	50	500	µg/L	N/A	3/28/2003	WGC42801	EPA 8015 MOD (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	187.2	65 - 135
aaa-Trifluorotoluene	92.3	65 - 135

Comment: High surrogate recovery for 4-BFB due to matrix interference. See TFT results

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Patti Sandrock, QA/QC Manager

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Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076
Attn: Chad Taylor

Date: 4/2/03
Date Received: 3/24/2003
Project Name: Harbert Transportation
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Chad Taylor

Certified Analytical Report

Order ID: 33750 **Lab Sample ID:** 33750-005 **Client Sample ID:** MW-10

Sample Time: 10:37 AM **Sample Date:** 3/21/2003 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	3.4		1	0.5	0.5	µg/L	N/A	3/27/2003	WGC42800	EPA 8020
Toluene	1.4		1	0.5	0 5	µg/L	N/A	3/27/2003	WGC42800	EPA 8020
Ethyl Benzene	0.71		1	0.5	0.5	µg/L	N/A	3/27/2003	WGC42800	EPA 8020
Xylenes, Total	1.0		1	1	1	µg/L	N/A	3/27/2003	WGC42800	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	87.7	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	1	1	µg/L	N/A	3/26/2003	WMS11995	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	117.0	73 - 151
Dibromofluoromethane	101.0	57 - 156
Toluene-d8	109.0	77 - 150

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	700		1	50	50	µg/L	N/A	3/27/2003	WGC42800	EPA 8015 MOD (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	132 4	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

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Quality Control Results Summary

QC Batch #: WGC42794 **Units:** µg/L
Matrix: Liquid **Date Analyzed:** 3/25/2003

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		250		244.	LCS	97.6			65.0 - 135 0
Surrogate			**Surrogate Recovery**			**Control Limits (%)**					
4-Bromofluorobenzene			77.8			65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		8		8.51	LCS	106.4			65 0 - 135.0
Ethyl Benzene	EPA 8020	ND		8		8.84	LCS	110.5			65 0 - 135 0
Toluene	EPA 8020	ND		8		8.62	LCS	107.7			65.0 - 135.0
Xylenes, total	EPA 8020	ND		24		26.6	LCS	110.8			65.0 - 135.0
Surrogate			**Surrogate Recovery**			**Control Limits (%)**					
4-Bromofluorobenzene			95.9			65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		8		8 37	LCS	104.6			65.0 - 135.0
Surrogate			**Surrogate Recovery**			**Control Limits (%)**					
4-Bromofluorobenzene			95.9			65 - 135					
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		250		250 6	LCSD	100.2	2.67	25.00	65.0 - 135.0
Surrogate			**Surrogate Recovery**			**Control Limits (%)**					
4-Bromofluorobenzene			79.5			65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		8		8.73	LCSD	109.1	2.55	25.00	65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		8		8.74	LCSD	109.3	1.14	25.00	65.0 - 135.0
Toluene	EPA 8020	ND		8		8.5	LCSD	106.3	1.40	25.00	65.0 - 135.0
Xylenes, total	EPA 8020	ND		24		26.2	LCSD	109 2	1.52	25.00	65.0 - 135.0
Surrogate			**Surrogate Recovery**			**Control Limits (%)**					
4-Bromofluorobenzene			96.7			65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		8		7.94	LCSD	99.3	5.27	25.00	65.0 - 135.0
Surrogate			**Surrogate Recovery**			**Control Limits (%)**					
4-Bromofluorobenzene			96.7			65 - 135					

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Quality Control Results Summary

QC Batch #: WGC42800 **Units:** µg/L
Matrix: Liquid **Date Analyzed:** 3/27/2003

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		250		248.4	LCS	99.4			65.0 - 135.0
Surrogate			**Surrogate Recovery**			**Control Limits (%)**					
4-Bromofluorobenzene			77 0			65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		8		8.55	LCS	106.9			65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		8		8.9	LCS	111.3			65.0 - 135.0
Toluene	EPA 8020	ND		8		8.57	LCS	107.1			65.0 - 135.0
Xylenes, total	EPA 8020	ND		24		26.8	LCS	111.7			65.0 - 135.0
Surrogate			**Surrogate Recovery**			**Control Limits (%)**					
4-Bromofluorobenzene			98 4			65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		8		8.58	LCS	107.3			65.0 - 135.0
Surrogate			**Surrogate Recovery**			**Control Limits (%)**					
4-Bromofluorobenzene			98.4			65 - 135					
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		250		249.6	LCSD	99.8	0.48	25.00	65.0 - 135.0
Surrogate			**Surrogate Recovery**			**Control Limits (%)**					
4-Bromofluorobenzene			77.0			65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		8		8.43	LCSD	105.4	1.41	25 00	65.0 - 135 0
Ethyl Benzene	EPA 8020	ND		8		8.7	LCSD	108.7	2.27	25.00	65.0 - 135.0
Toluene	EPA 8020	ND		8		8.45	LCSD	105.6	1.41	25.00	65 0 - 135.0
Xylenes, total	EPA 8020	ND		24		26.2	LCSD	109.2	2.26	25.00	65.0 - 135 0
Surrogate			**Surrogate Recovery**			**Control Limits (%)**					
4-Bromofluorobenzene			94.0			65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		8		7.72	LCSD	96 5	10.55	25 00	65.0 - 135.0
Surrogate			**Surrogate Recovery**			**Control Limits (%)**					
4-Bromofluorobenzene			94.0			65 - 135					

Entech Analytical Labs, Inc.

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Quality Control Results Summary

QC Batch #: WGC42801 **Units:** µg/L
Matrix: Liquid **Date Analyzed:** 3/28/2003

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		250		260 8	LCS	104.3			65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	4-Bromofluorobenzene		77.3			65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		8		8.46	LCS	105.8			65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		8		8.78	LCS	109 7			65.0 - 135.0
Toluene	EPA 8020	ND		8		8.47	LCS	105.9			65.0 - 135.0
Xylenes, total	EPA 8020	ND		24		26.4	LCS	110.0			65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	4-Bromofluorobenzene		97.5			65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		8		8.22	LCS	102.8			65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	4-Bromofluorobenzene		97.5			65 - 135					
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		250		259 8	LCSD	103.9	0.38	25.00	65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	4-Bromofluorobenzene		90.3			65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		8		8.31	LCSD	103.9	1 79	25.00	65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		8		8.59	LCSD	107.4	2.19	25.00	65.0 - 135.0
Toluene	EPA 8020	ND		8		8.37	LCSD	104.6	1.19	25.00	65.0 - 135.0
Xylenes, total	EPA 8020	ND		24		26.	LCSD	108.3	1.53	25.00	65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	4-Bromofluorobenzene		95.6			65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		8		7.89	LCSD	98.6	4.10	25.00	65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	4-Bromofluorobenzene		95.6			65 - 135					

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Quality Control Results Summary

QC Batch #: WMS11995
Matrix: Liquid
Units: µg/L
Date Analyzed: 3/26/2003

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: MTBE by EPA 8260B											
Methyl-t-butyl Ether	EPA 8260B	ND		20		25.	LCS	125.0			54 0 - 130 5

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	105.0	73 - 151
Dibromofluoromethane	93.2	57 - 156
Toluene-d8	103.0	77 - 150

Test: MTBE by EPA 8260B											
Methyl-t-butyl Ether	EPA 8260B	ND		20		23.6	LCSD	118.0	5.76	25.00	54.0 - 130.5

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	104.0	73 - 151
Dibromofluoromethane	91.0	57 - 156
Toluene-d8	104.0	77 - 150

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 (831) 662-3100
Fax: (831) 722-1159

CHAIN -OF-CUSTODY RECORD

PROJECT NAME AND JOB #. Harbert Transportation / H9042.Q

SEND CERTIFIED RESULTS TO: Chad Taylor

ELECTRONIC DELIVERABLE FORMAT: [X] YES [ ] NO

Sampler: [signature]

Date: 3/21/03 1130

LABORATORY: Entech

TURNAROUND TIME: (Standard Five-Day) 24hr Rush 48hr Rush 72hr Rush

GLOBAL I.D.: T0600100475

Field Point Name (GeoTracker)	Sample Identification	Sample Depth	Date Sampled	Time Sampled	Matrix	SAMPLE CONTAINERS: 40 mL VOAs (preserved)	1 Liter Amber Jars	___mL Poly Bottle	Liner Acetate or Brass	Total Petroleum Hydrocarbons: Extractable Fuel Scan	Purgeable Fuel Scan	Gasoline & BTEX-MTBE by EPA Method# 8015M-&-8020	Volatile Organics: 1,2-DCA, TCE, and PCE by EPA Method# 8010 (by Method 8260)	TCE and PCE EPA Method# 8260	Fuel Oxygenates EPA Method# 8260	Additional Analysis: Total Dissolved Solids	Title 22 General, Physical and Inorganic Minerals	
MW-3	MW-3	22.59'	3/21/03	0807	Aq	3						X			33750-001			
MW-5	MW-5	27.37'	↓	1005	↓	3						X			002			
MW-6	MW-6	23.57'	↓	0907	↓	3						X			003			
MW-9	MW-9	22.72'	↓	1126	↓	3						X			004			
MW-10	MW-10	22.16'	↓	1037	↓	3						X			005			

	RELEASED BY:	Date & Time	RECEIVED BY:	Date & Time	SAMPLE CONDITION: (circle 1)
1.)	[signature]	3/24/03 1025	Joe Bob [signature]	3/24/03 10:28	Ambient (Refrigerated) Frozen
2.)			[signature] Quadrado	3/24/03 1133	Ambient Refrigerated Frozen
3.)					Ambient Refrigerated Frozen
4.)					Ambient Refrigerated Frozen
5.)					Ambient Refrigerated Frozen

NOTES:

[X] If MTBE is detected by EPA Method 8020, please confirm detections by EPA Method 8260 with a minimum detection limit of 5 ug/L, and report only confirmed 8260 detections

[X] For MTBE-analyzed samples with non-detectable results (ND) but having elevated detection limits, please confirm by EPA Method #8260

[X] Please use MDL (Minimum Detection Limit) for any diluted samples

per Chad 4/1/03

ADDITIONAL COMMENTS

- Please produce and e-mail an EDF of these results to frances@weber-hayes.com.

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

March 28, 2003

Chad Taylor
Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076

Order:	33749	**Date Collected:**	3/21/2003
Project Name:	Harbert Transportation	**Date Received:**	3/24/2003
Project Number:	H9042.Q	**P.O. Number:**	H9042.Q
Project Notes:			

On March 24, 2003, samples were received under documentented chain of custody. Results for the following analyses are attached:

Matrix	Test	Method
Liquid	EDF Deliverables	EDF
	EPA 8010 by EPA 8260B	EPA 8260B
	PDF	PDF

Chemical analysis of these samples has been completed. Summaries of the data are contained on the following pages. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#2346). If you have any questions regarding procedures or results, please call me at 408-588-0200.

Sincerely,

Patti Sandrock
QA/QC Manager

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076
Attn: Chad Taylor

Date: 3/28/03
Date Received: 3/24/2003
Project Name: Harbert Transportation
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Chad Taylor

Certified Analytical Report

Order ID: 33749 **Lab Sample ID:** 33749-001 **Client Sample ID:** MW-3

Sample Time: 8:07 AM **Sample Date:** 3/21/2003 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1,1-Trichloroethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1,2,2-Tetrachloroethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1,2-Trichloroethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1-Dichloroethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1-Dichloroethene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,2-Dichlorobenzene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,2-Dichloroethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,2-Dichloropropane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,3-Dichlorobenzene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,4-Dichlorobenzene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Bromodichloromethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Bromoform	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Bromomethane	ND		1	1	1	µg/L	3/26/2003	WMS11995	EPA 8260B
Carbon Tetrachloride	ND		1	1	1	µg/L	3/26/2003	WMS11995	EPA 8260B
Chlorobenzene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Chloroethane	ND		1	1	1	µg/L	3/26/2003	WMS11995	EPA 8260B
Chloroform	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Chloromethane	ND		1	1	1	µg/L	3/26/2003	WMS11995	EPA 8260B
cis-1,2-Dichloroethene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
cis-1,3-Dichloropropene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Dibromochloromethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Dichlorodifluoromethane	ND		1	1	1	µg/L	3/26/2003	WMS11995	EPA 8260B
Freon 113	ND		1	1	1	µg/L	3/26/2003	WMS11995	EPA 8260B
Methylene Chloride	ND		1	5	5	µg/L	3/26/2003	WMS11995	EPA 8260B
Tetrachloroethene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
trans-1,2-Dichloroethene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
trans-1,3-Dichloropropene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Trichloroethene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Trichlorofluoromethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Vinyl Chloride	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	110.0	65 - 135
Dibromofluoromethane	109.0	57 - 156
Toluene-d8	110.0	77 - 150

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076
Attn: Chad Taylor

Date: 3/28/03
Date Received: 3/24/2003
Project Name: Harbert Transportation
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Chad Taylor

Certified Analytical Report

Order ID: 33749 **Lab Sample ID:** 33749-002 **Client Sample ID:** MW-5

Sample Time: 9:07 AM **Sample Date:** 3/21/2003 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1,1-Trichloroethane	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1,2,2-Tetrachloroethane	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1,2-Trichloroethane	5.3		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1-Dichloroethane	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1-Dichloroethene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,2-Dichlorobenzene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,2-Dichloroethane	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,2-Dichloropropane	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,3-Dichlorobenzene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,4-Dichlorobenzene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Bromodichloromethane	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Bromoform	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Bromomethane	ND		5	1	5	µg/L	3/26/2003	WMS11995	EPA 8260B
Carbon Tetrachloride	ND		5	1	5	µg/L	3/26/2003	WMS11995	EPA 8260B
Chlorobenzene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Chloroethane	ND		5	1	5	µg/L	3/26/2003	WMS11995	EPA 8260B
Chloroform	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Chloromethane	ND		5	1	5	µg/L	3/26/2003	WMS11995	EPA 8260B
cis-1,2-Dichloroethene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
cis-1,3-Dichloropropene	ND		5	0 5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Dibromochloromethane	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Dichlorodifluoromethane	ND		5	1	5	µg/L	3/26/2003	WMS11995	EPA 8260B
Freon 113	ND		5	1	5	µg/L	3/26/2003	WMS11995	EPA 8260B
Methylene Chloride	ND		5	5	25	µg/L	3/26/2003	WMS11995	EPA 8260B
Tetrachloroethene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
trans-1,2-Dichloroethene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
trans-1,3-Dichloropropene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Trichloroethene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Trichlorofluoromethane	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Vinyl Chloride	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	97.1	65 - 135
Dibromofluoromethane	95.1	57 - 156
Toluene-d8	95.4	77 - 150

Comment: Sample diluted due to high concentrations of non-target compounds.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076
Attn: Chad Taylor

Date: 3/28/03
Date Received: 3/24/2003
Project Name: Harbert Transportation
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Chad Taylor

Certified Analytical Report

Order ID: 33749 **Lab Sample ID:** 33749-003 **Client Sample ID:** MW-6

Sample Time: 10:05 AM **Sample Date:** 3/21/2003 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1,1-Trichloroethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1,2,2-Tetrachloroethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1,2-Trichloroethane	3.9		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1-Dichloroethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1-Dichloroethene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,2-Dichlorobenzene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,2-Dichloroethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,2-Dichloropropane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,3-Dichlorobenzene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,4-Dichlorobenzene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Bromodichloromethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Bromoform	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Bromomethane	ND		1	1	1	µg/L	3/26/2003	WMS11995	EPA 8260B
Carbon Tetrachloride	ND		1	1	1	µg/L	3/26/2003	WMS11995	EPA 8260B
Chlorobenzene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Chloroethane	ND		1	1	1	µg/L	3/26/2003	WMS11995	EPA 8260B
Chloroform	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Chloromethane	ND		1	1	1	µg/L	3/26/2003	WMS11995	EPA 8260B
cis-1,2-Dichloroethene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
cis-1,3-Dichloropropene	ND		1	0 5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Dibromochloromethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Dichlorodifluoromethane	ND		1	1	1	µg/L	3/26/2003	WMS11995	EPA 8260B
Freon 113	ND		1	1	1	µg/L	3/26/2003	WMS11995	EPA 8260B
Methylene Chloride	ND		1	5	5	µg/L	3/26/2003	WMS11995	EPA 8260B
Tetrachloroethene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
trans-1,2-Dichloroethene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
trans-1,3-Dichloropropene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Trichloroethene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Trichlorofluoromethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Vinyl Chloride	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	99.0	65 - 135
Dibromofluoromethane	107.0	57 - 156
Toluene-d8	98.0	77 - 150

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076
Attn: Chad Taylor

Date: 3/28/03
Date Received: 3/24/2003
Project Name: Harbert Transportation
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Chad Taylor

Certified Analytical Report

Order ID: 33749 **Lab Sample ID:** 33749-004 **Client Sample ID:** MW-9

Sample Time: 11:26 AM **Sample Date:** 3/21/2003 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1,1-Trichloroethane	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1,2,2-Tetrachloroethane	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1,2-Trichloroethane	5.3		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1-Dichloroethane	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1-Dichloroethene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,2-Dichlorobenzene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,2-Dichloroethane	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,2-Dichloropropane	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,3-Dichlorobenzene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,4-Dichlorobenzene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Bromodichloromethane	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Bromoform	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Bromomethane	ND		5	1	5	µg/L	3/26/2003	WMS11995	EPA 8260B
Carbon Tetrachloride	ND		5	1	5	µg/L	3/26/2003	WMS11995	EPA 8260B
Chlorobenzene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Chloroethane	ND		5	1	5	µg/L	3/26/2003	WMS11995	EPA 8260B
Chloroform	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Chloromethane	ND		5	1	5	µg/L	3/26/2003	WMS11995	EPA 8260B
cis-1,2-Dichloroethene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
cis-1,3-Dichloropropene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Dibromochloromethane	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Dichlorodifluoromethane	ND		5	1	5	µg/L	3/26/2003	WMS11995	EPA 8260B
Freon 113	ND		5	1	5	µg/L	3/26/2003	WMS11995	EPA 8260B
Methylene Chloride	ND		5	5	25	µg/L	3/26/2003	WMS11995	EPA 8260B
Tetrachloroethene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
trans-1,2-Dichloroethene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
trans-1,3-Dichloropropene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Trichloroethene	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Trichlorofluoromethane	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Vinyl Chloride	ND		5	0.5	2.5	µg/L	3/26/2003	WMS11995	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	91.1	65 - 135
Dibromofluoromethane	92.6	57 - 156
Toluene-d8	92.8	77 - 150

Comment: Sample diluted due to high concentrations of non-target compounds.

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076
Attn: Chad Taylor

Date: 3/28/03
Date Received: 3/24/2003
Project Name: Harbert Transportation
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Chad Taylor

Certified Analytical Report

Order ID: 33749 **Lab Sample ID:** 33749-005 **Client Sample ID:** MW-10

Sample Time: 10:37 AM **Sample Date:** 3/21/2003 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
1,1,1-Trichloroethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1,2,2-Tetrachloroethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1,2-Trichloroethane	9.0		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1-Dichloroethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,1-Dichloroethene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,2-Dichlorobenzene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,2-Dichloroethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,2-Dichloropropane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,3-Dichlorobenzene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
1,4-Dichlorobenzene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Bromodichloromethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Bromoform	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Bromomethane	ND		1	1	1	µg/L	3/26/2003	WMS11995	EPA 8260B
Carbon Tetrachloride	ND		1	1	1	µg/L	3/26/2003	WMS11995	EPA 8260B
Chlorobenzene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Chloroethane	ND		1	1	1	µg/L	3/26/2003	WMS11995	EPA 8260B
Chloroform	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Chloromethane	ND		1	1	1	µg/L	3/26/2003	WMS11995	EPA 8260B
cis-1,2-Dichloroethene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
cis-1,3-Dichloropropene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Dibromochloromethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Dichlorodifluoromethane	ND		1	1	1	µg/L	3/26/2003	WMS11995	EPA 8260B
Freon 113	ND		1	1	1	µg/L	3/26/2003	WMS11995	EPA 8260B
Methylene Chloride	ND		1	5	5	µg/L	3/26/2003	WMS11995	EPA 8260B
Tetrachloroethene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
trans-1,2-Dichloroethene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
trans-1,3-Dichloropropene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Trichloroethene	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Trichlorofluoromethane	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B
Vinyl Chloride	ND		1	0.5	0.5	µg/L	3/26/2003	WMS11995	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	117.0	65 - 135
Dibromofluoromethane	101.0	57 - 156
Toluene-d8	109.0	77 - 150

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Quality Control Results Summary

QC Batch #: WMS11995 **Units:** µg/L
Matrix: Liquid **Date Analyzed:** 3/26/2003

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: EPA 8010 by EPA 8260B											
1,1-Dichloroethene	EPA 8260B	ND		20		17.4	LCS	87.0			58.7 - 116.5
Chlorobenzene	EPA 8260B	ND		20		19.4	LCS	97.0			80.4 - 112.0
Trichloroethene	EPA 8260B	ND		20		19.7	LCS	98.5			79.7 - 114.4

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	105.0	73 - 151
Dibromofluoromethane	93.2	57 - 156
Toluene-d8	103.0	77 - 150

Test: EPA 8010 by EPA 8260B											
1,1-Dichloroethene	EPA 8260B	ND		20		16.7	LCSD	83.5	4.11	25.00	58.7 - 116.5
Chlorobenzene	EPA 8260B	ND		20		18.6	LCSD	93.0	4.21	25.00	80.4 - 112.0
Trichloroethene	EPA 8260B	ND		20		18.9	LCSD	94.5	4.15	25.00	79.7 - 114.4

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	104.0	73 - 151
Dibromofluoromethane	91.0	57 - 156
Toluene-d8	104.0	77 - 150

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 (831) 662-3100
Fax: (831) 722-1159

CHAIN -OF-CUSTODY RECORD

PROJECT NAME AND JOB #: Harbert Transportation / H9042.Q

SEND CERTIFIED RESULTS TO: Chad Taylor

ELECTRONIC DELIVERABLE FORMAT: [X] YES [ ] NO

Sampler: [signature]

Date: 3/21/03 1130

LABORATORY: Entech

TURNAROUND TIME: (Standard Five-Day) 24hr Rush 48hr Rush 72hr Rush

GLOBAL I.D.: T0600100475

Field Point Name (GeoTracker)	Sample Identification	Sample Depth	Date Sampled	Time Sampled	Matrix	SAMPLE CONTAINERS: 40 mL VOAs (preserved)	1 Liter Amber Jars	___ml. Poly Bottle	Liner Acetate or Brass	REQUESTED ANALYSIS — Total Petroleum Hydrocarbons: Extractable Fuel Scan	Purgeable Fuel Scan	Gasoline & BTEX-MTBE by EPA Method# 8015M-&-8020	Volatile Organics: 1,2-DCA, TCE, and PCE by EPA Method# 8010 (by Method 8260)	TCE and PCE EPA Method# 8260	Fuel Oxygenates EPA Method# 8260	Additional Analysis: Total Dissolved Solids	Title 22, General, Physical and Inorganic Minerals	
MW-3	MW-3	22.54'	3/21/03	0807	Aq	3							X				33749-001	
MW-5	MW-5	27.37'	↓	0907	↓	3							X				002	
MW-6	MW-6	23.57'		1005		3							X				003	
MW-9	MW-9	22.72		1126		3							X				004	
MW-10	MW-10	22.16'		1037		3							X				005	

	RELEASED BY:	Date & Time		RECEIVED BY:	Date & Time	SAMPLE CONDITION: (circle 1)		
1)	[signature]	3/24/03 1025	→	[signature]	3/24/03 10:28	Ambient	Refrigerated	Frozen
2.)			→	[signature]	3/24/03 1133	Ambient	Refrigerated	Frozen
3.)			→			Ambient	Refrigerated	Frozen
4)			→			Ambient	Refrigerated	Frozen
5.)			→			Ambient	Refrigerated	Frozen

NOTES:

- [X] *If MTBE is detected by EPA Method 8020, please confirm detections by EPA Method 8260 with a minimum detection limit of 5 ug/L, and report only confirmed 8260 detections.*
- [X] *For MTBE-analyzed samples with non-detectable results (ND) but having elevated detection limits, please confirm by EPA Method #8260.*
- [X] *Please use MDL (Minimum Detection Limit) for any diluted samples.*

ADDITIONAL COMMENTS

- Please produce and e-mail an EDF of these results to frances@weber-hayes.com.

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

March 27, 2003

Chad Taylor
Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076

Order:	33751	**Date Collected:**	3/21/2003
Project Name:	Harbert Transportation	**Date Received:**	3/24/2003
Project Number:	H9042.Q	**P.O. Number:**	H9042.Q
Project Notes:			

On March 24, 2003, sample was received under documentented chain of custody. Results for the following analyses are attached:

Matrix	Test	Method
Liquid	EDF Deliverables	EDF
	PDF	PDF
	TDS	EPA 160.1

Chemical analysis of these samples has been completed. Summaries of the data are contained on the following pages. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#2346). If you have any questions regarding procedures or results, please call me at 408-588-0200.

Sincerely,

Patti Sandrock
QA/QC Manager

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076
Attn: Chad Taylor

Date: 3/27/03
Date Received: 3/24/2003
Project Name: Harbert Transportation
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Chad Taylor

Certified Analytical Report

Order ID: 33751 **Lab Sample ID:** 33751-001 **Client Sample ID:** MW-3

Sample Time: 8:07 AM **Sample Date:** 3/21/2003 **Matrix:** Liquid

Parameter	Result	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Total Dissolved Solids	460	1	10	10	mg/L	3/26/2003	WTDS030325	EPA 160.1

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

Patti Sandrock, QA/QC Manager

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering

120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 (831) 662-3100
Fax: (831) 722-1159

CHAIN -OF-CUSTODY RECORD

PROJECT NAME AND JOB #: Harbert Transportation / H9042.Q

SEND CERTIFIED RESULTS TO: Chad Taylor

ELECTRONIC DELIVERABLE FORMAT: [X] YES [ ] NO

Sampler: [illegible]

Date: 3/24/03

LABORATORY: Entech

TURNAROUND TIME: (Standard Five-Day) 24hr Rush 48hr Rush 72hr Rush

GLOBAL I.D.: T0600100475

Field Point Name (GeoTracker)	Sample Identification	Sample Depth	Date Sampled	Time Sampled	Matrix	SAMPLE CONTAINERS				REQUESTED ANALYSIS								
										Total Petroleum Hydrocarbons			Volatile Organics			Additional Analysis		
						40 mL VOAs (preserved)	1 Liter Amber Jars	250 mL Poly Bottle	Liner Acetate or Brass	Extractable Fuel Scan	Purgeable Fuel Scan	Gasoline & BTEX-MTBE by EPA Method# 8015M-&-8020	1,2-DCA, TCE, and PCE by EPA Method# 8010 (by Method 8260)	TCE and PCE EPA Method# 8260	Fuel Oxygenates EPA Method# 8260	Total Dissolved Solids	Title 22 General, Physical and Inorganic Minerals	
MW-3	MW-3	22.59'	3/24/03	0807	Aq			1			33757-001					X		

RELEASED BY:

1.) [illegible]
2.) _____
3.) _____
4.) _____
5.) _____

Date & Time

1.) 3/24/03 1025
2.) _____
3.) _____
4.) _____
5.) _____

RECEIVED BY:

1.) Jae Cole
2.) [illegible]
3.) _____
4.) _____
5.) _____

Date & Time

1.) 3/24/03 1030
2.) 3/24/03 1133
3.) _____
4.) _____
5.) _____

SAMPLE CONDITION: (circle 1)

Ambient	(Refrigerated)	Frozen
Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen
Ambient	Refrigerated	Frozen

NOTES:

- [ ] *If MTBE is detected by EPA Method 8020, please confirm detections by EPA Method 8260 with a minimum detection limit of 5 ug/L, and report only confirmed 8260 detections*
- [ ] *For MTBE-analyzed samples with non-detectable results (ND) but having elevated detection limits, please confirm by EPA Method #8260*
- [ ] *Please use MDL (Minimum Detection Limit) for any diluted samples*

ADDITIONAL COMMENTS

- **Please produce and e-mail an EDF of these results to frances@weber-hayes.com.**

Appendix D

Summary of Historical Groundwater Analytical Results - AGI Technologies, Inc.

Table 2
Summary of Historical Groundwater Analytical Data
Harbert Transportation/Meekland Avenue
Hayward, California

AGI TECHNOLOGIES

Well	Date Sampled	EPA Test Methods										Other
		8015 Modified			8020				8010			
		TPH-G	TPH-D	TPH-MO	Benzene	Ethylbenzene	Toluene	Total Xylenes	TCE	PCE	1,2-DCA	
		µg/L			µg/L				µg/L			µg/L
MW1	07/86	42,000	NA	NA	5,500	NA	4,900	6,100	NA	NA	NA	
	03/90	27,000	NA	NA	2,700	491	840	800	ND	ND	ND	
	07/90	27,000	11,000	ND	4,000	ND	1,500	4,400	ND	ND	62	
	10/90	43,000	8,500	ND	3,400	1,200	2,700	5,300	0.4	ND	26	
	01/91	22,000	2,700	ND	3,000	990	1,800	2,800	ND	ND	27	
	04/91	42,000	3,100 [a]	NA	5,100	1,200	3,700	3,200	ND	ND	120	
	07/91	46,000	4,300 [a]	NA	6,500	830	2,900	3,700	ND	ND	64	
	10/91	27,000	4,300 [a]	NA	4,400	1,100	1,400	3,200	ND	ND	25	
	01/92	27,000	14,000 [a]	NA	3,300	1,200	1,600	3,800	ND	ND	24	
	04/92	33,000	11,000 [a]	NA	8,900	1,200	3,500	3,700	ND	ND	120	
	07/92	41,000	19,000 [a]	NA	5,600	1,300	2,600	4,000	ND	ND	49	
	10/92	33,000	3,500 [a]	NA	4,400	1,200	2,100	4,000	ND	ND	61	
MW3	11/89	29,000	NA	NA	4,600	680	1,100	1,100	ND	ND	36	Lead 40
	11/89	NA	NA	NA	NA	NA	NA	NA	ND	ND	36	Lead 40
	03/90	12,000	NA	NA	2,300	59	300	490	ND	ND	ND	
	07/90	7,300	990	ND	5,200	ND	440	480	ND	ND	67	
	10/90	6,200	970	ND	75	7.5	150	250	ND	ND	48	
	10/90	NA	NA	NA	NA	NA	NA	NA	ND	ND	22	Lead 3
	01/91	4,600	680	ND	2,200	220	110	89	ND	ND	40	
	04/91	8,300	640 [a]	NA	2,800	370	490	760	ND	ND	43	
	07/91	6,600	890 [a]	NA	2,000	250	230	380	ND	ND	29	
	10/91	6,300	1,700 [a]	NA	2,000	410	330	550	ND	ND	27	
	01/92	4,000	790 [a]	NA	1,200	250	60	200	ND	ND	22	
	04/92	7,400	1,800 [a]	NA	730	370	180	640	ND	ND	19	
	07/92	3,000	2,400 [a]	NA	190	ND	2.8	410	ND	ND	30	
	10/92	5,000	970 [a]	NA	1,300	320	45	340	ND	ND	26	
	01/93	2,300	680 [a]	NA (2)	630	180	31	330	ND	ND	13	
	06/93	5,000	1,100 [a]	ND	730	240	43	380	ND	ND	13	

Table 2
Summary of Historical Groundwater Analytical Data
Harbert Transportation/Meekland Avenue
Hayward, California

AGI TECHNOLOGIES

Well	Date Sampled	EPA Test Methods										Other
		8015 Modified			8020				8010			
		TPH-G	TPH-D	TPH-MO	Benzene	Ethylbenzene	Toluene	Total Xylenes	TCE	PCE	1,2-DCA	
		µg/L			µg/L				µg/L			µg/L
MW4	11/89	ND	NA	NA	33	1.3	1	5.2	NA	NA	NA	Lead 12
	03/90	ND	NA	NA	7.4	2	2	1.1	ND	ND	ND	
	07/90	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9	
	10/90	ND	ND	ND	ND	ND	ND	ND	0.7	ND	0.5	
	01/91	80	ND	ND	9.2	2.4	1.7	0.7	ND	ND	ND	
	04/91	1,400	130 [a]	NA	2,200	72	ND	17	ND	ND	ND	
	07/91	130	ND	NA	14	3.3	9.7	ND	ND	ND	0.81	
	10/91	ND	ND	NA	5.3	1	ND	0.8	ND	ND	ND	
	01/92	ND	ND	NA	6.8	1.3	ND	ND	ND	ND	ND	
	04/92	780	130 [a]	NA	ND	51	ND	4.8	ND	ND	1.6	
	07/92	ND	ND	NA	ND	ND	ND	ND	ND	ND	1.3	
	10/92	100	ND	NA	9.5	ND	ND	2.6	ND	ND	ND	
	01/93	960	240 [a]	NA	200	41	4.6	9.4	ND	ND	1	
	06/93	650	140 [a]	ND	150	21	ND	ND	ND	ND	3.7	
MW5	10/90	9,600	1,900	ND	1,200	70	160	520	ND	ND	22	Lead 3
	01/91	10,000	1,200	ND	1,600	720	200	510	ND	ND	33	
	04/91	18,000	860 [a]	NA	2,500	550	580	500	ND	ND	61	
	07/91	15,000	2,200 [a]	NA	4,800	610	1,100	760	ND	ND	62	
	10/91	14,000	3,300 [a]	NA	5,000	530	820	800	ND	ND	49	
	01/92	12,000	1,900 [a]	NA	4,300	390	380	590	ND	ND	56	
	04/92	23,000	6,400 [a]	NA	8,600	ND	2,600	1,900	ND	ND	125	
	07/92	27,000	5,900 [a]	NA	6,000	ND	1,500	1,600	ND	ND	93	
	10/92	13,000	2,100 [a]	NA	4,600	140	470	550	ND	ND	59	
	01/93	18,000	1,900 [a]	NA	5,800	560	1,900	1,600	ND	ND	110	
	01/93	19,000	2,100 [a]	NA	4,600	370	1,600	1,400	ND	ND	120	
	06/93	22,000	2,900 [a]	ND	8,300	740	2,500	1,900	ND	ND	110	
	06/93	23,000	2,300 [a]	ND	9,600	730	3,000	1,900	ND	ND	110	

Table 2
Summary of Historical Groundwater Analytical Data
Harbert Transportation/Meekland Avenue
Hayward, California

AGI TECHNOLOGIES

Well	Date Sampled	EPA Test Methods: 8015 Modified TPH-G (µg/L)	8015 Modified TPH-D (µg/L)	8015 Modified TPH-MO (µg/L)	8020 Benzene (µg/L)	8020 Ethylbenzene (µg/L)	8020 Toluene (µg/L)	8020 Total Xylenes (µg/L)	8010 TCE (µg/L)	8010 PCE (µg/L)	8010 1,2-DCA (µg/L)	Other (µg/L)
MW6	10/90	27,000	4,700	ND	2,700	450	2,900	3,300	ND	ND	40	Lead 9
	01/91	7,200	1,600	ND	1,400	ND	200	830	ND	ND	23	
	04/91	17,000	800 [a]	NA	2,800	610	1,200	1,800	ND	ND	53	
	07/91	11,000	1,400 [a]	NA	1,200	ND	380	750	ND	ND	29	
	10/91	4,800	1,600 [a]	NA	380	69	340	730	ND	ND	22	
	01/92	6,100	1,200 [a]	NA	460	180	200	590	ND	ND	26	
	04/92	7,200	1,800 [a]	NA	340	350	460	920	ND	ND	30	
	07/92	8,600	1,700 [a]	NA	1,300	380	280	1,100	ND	ND	35	
	10/92	1,600	110 [a]	NA	230	70	20	88	ND	ND	24	
	01/93	13,000	2,100 [a]	NA	2,500	370	540	2,400	ND	ND	36	
	06/93	7,400	1,900 [a]	ND	1,500	480	120	1,400	ND	ND	29	
MW7	10/90	14,000	2,700	ND	390	ND	18	1,200	ND	1.3	14	Lead 11
	01/91	4,500	1,400	ND	320	42	48	350	ND	ND	10	
	04/91	2,400	NA	NA	320	77	62	130	ND	0.6	11	
	07/91	2,000	910 [a]	NA	470	ND	24	88	ND	ND	9.7	
	10/91	ND	370 [a]	NA	ND	ND	ND	ND	ND	0.68	4.5	
	01/92	1,100	290 [a]	NA	230	45	7	88	ND	3.5	6.4	
	04/92	1,700	520 [a]	NA	310	78	28	170	ND	0.5	3.2	
	07/92	1,900	590 [a]	NA	410	78	21	170	ND	2.1	8.7	
	07/92 (dup)	1,200	700 [a]	NA	21	1	2.6	90	ND	2	8.2	
	10/92	1,800	320 [a]	NA	410	31	11	75	ND	1	7.4	
	01/93	2,100	660 [a]	NA	390	100	21	270	ND	0.6	3.7	
	06/93	4,400	1,100 [a]	ND	830	330	49	620	ND	ND	8.6	

Table 2
Summary of Historical Groundwater Analytical Data
Harbert Transportation/Meekland Avenue
Hayward, California

AGI TECHNOLOGIES

Well	Date Sampled	EPA Test Methods										
		8015 Modified			8020				8010			
		TPH-G	TPH-D	TPH-MO	Benzene	Ethylbenzene	Toluene	Total Xylenes	TCE	PCE	1,2-DCA	Other
		µg/L			µg/L				µg/L			µg/L
MW8	02/91	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
	04/91	ND	ND	NA	ND	ND	ND	ND	ND	0.5	ND	
	07/91	ND	ND	NA	ND	ND	2	ND	ND	1.2	ND	
	10/91	ND	ND	NA	ND	ND	0.6	ND	ND	0.4	ND	
	01/92	ND	ND	NA	ND	ND	ND	ND	ND	0.68	ND	
	04/92	ND	ND	NA	ND	ND	ND	ND	ND	0.8	ND	
	07/92	ND	ND	NA	ND	ND	3.3	ND	ND	1.6	ND	
	10/92	ND	ND	NA	ND	ND	ND	ND	ND	1.4	ND	
	01/93	ND	ND	NA	ND	ND	ND	ND	ND	0.8	ND	
	06/93	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	
MW9	02/91	6,000	1,600	NA	180	19	170	200	ND	ND	13	
	04/91	4,200	410 [a]	NA	520	130	410	580	ND	ND	26	
	07/91	1,900	180 [a]	NA	190	12	52	77	ND	6.5	12	
	10/91	880	300 [a]	NA	160	31	44	83	ND	ND	10	
	01/92	380	120 [a]	NA	14	7.6	2.2	14	ND	ND	9.6	
	04/92	2,900	700 [a]	NA	510	80	260	260	ND	ND	11	
	07/92	4,400	1,300 [a]	NA	860	210	340	640	ND	ND	22	
	10/92	200	290 [a]	NA	6.8	1.4	2.1	7.8	ND	ND	12	
	01/93	8,500	740 [a]	NA	2,400	390	620	1,500	ND	ND	29	
	06/93	8,200	1,300 [a]	ND	2,400	360	480	1,500	ND	ND	29	
MW10	01/92	13,000	3,700 [a]	NA	130	580	110	3,000	ND	ND	33	
	05/92	15,000	5,000 [a]	NA	180	ND	18	2,700	ND	ND	20	
	05/92 (dup)	13,000	7,500 [a]	NA	240	490	65	2,500	ND	ND	22	
	07/92	8,100	4,400 [a]	NA	74	360	ND	1,100	ND	ND	29	
	10/92	3,200	1,500 [a]	NA	ND	ND	ND	320	ND	ND	25	
	01/93	7,500	2,200 [a]	NA	130	170	20	710	ND	ND	18	
	06/93	8,000	2,100 [a]	ND	69	7.9	ND	490	ND	ND	16	

Table 2
Summary of Historical Groundwater Analytical Data
Harbert Transportation/Meekland Avenue
Hayward, California

AGI TECHNOLOGIES

Well	Date Sampled	EPA Test Methods										Other
		8015 Modified			8020				8010			
		TPH-G	TPH-D	TPH-MO	Benzene	Ethylbenzene	Toluene	Total Xylenes	TCE	PCE	1,2-DCA	
		µg/L			µg/L				µg/L			µg/L
MW11	01/92	8,200	3,200 [a]	NA	23	250	ND	1,100	ND	ND	ND	
	04/92	160	1,200 [a]	NA	ND	ND	ND	ND	ND	ND	ND	
	07/92	2,100	710 [a]	NA	39	100	2.3	53	ND	ND	ND	
	10/92	660	220 [a]	NA	2.9	19	ND	3.8	ND	ND	ND	
	10/92	770	230 [a]	NA	3.2	26	ND	5.7	ND	ND	ND	
	01/93	780	370 [a]	NA	10	2.1	ND	39	ND	ND	ND	
	06/93	2,500	160 [a]	ND	27	99	ND	34	ND	ND	ND	
MW12	12/92	2,800	1,700 [a]	NA	14	ND	ND	ND	ND	ND	ND	
	06/93	1,100	750 [a]	ND	19	21	ND	57	ND	ND	ND	
B1	01/93	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
	06/93	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
F3	02/93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Well Abandoned	12/89	1,800	NA	NA	200	24	18	34	ND	ND	0.15	Lead 2,100
Average [b]		8,865	1,883	250	1,562	235	517	871	0.21	0.41	24.8	
Laboratory Detection Limit		50	50	500	0.5	0.5	0.5	0.5	0.4	0.4	0.4	

Notes:

a) The detection for petroleum hydrocarbons as diesel appears to be due to the presence of lighter hydrocarbons rather than diesel.
b) Average of sampled data, ND equals 1/2 detection limit.
µg/L - Micrograms per liter is approximately equivalent to parts per billion, depending on density of water.
NA - Not analyzed.
ND - Not detected.
TPH-G - Total petroleum hydrocarbons quantified as gasoline.
TPH-D - Total petroleum hydrocarbons quantified as diesel.
TPH-MO - Total petroleum hydrocarbons quantified as motor oil.
TCE - Trichloroethylene.
PCE - Tetrachloroethylene.
1,2-DCA - 1,2-Dichloroethane.

AGI TECHNOLOGIES

Table 2
Summary of Groundwater Chemical Analyses
Harbert Transportation/Meekland Avenue
Hayward, California

Well	Date Sampled	EPA Test Methods: 8015 M TPH Gasoline µg/L	8015 M TPH Diesel µg/L	BETX 5030/8020 Benzene µg/L	Ethylbenzene µg/L	Toluene µg/L	Xylenes µg/L	8010 1,2-DCA µg/L	8010 PCE µg/L	8010 TCE µg/L
MW3	07/28/94	7,700	970 [a]	1,800	810	ND	600	22	ND	ND
	10/21/94	7,400	810	1,900	900	37	780	25	ND	ND
	09/15/95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	03/14/96	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/26/96	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW4	07/28/94	120	ND	7.9	0.7	1.1	ND	ND	ND	ND
	10/21/94	69	ND	3.4	ND	ND	ND	ND	ND	ND
	09/15/95	110	ND	2.5	ND	0.85	ND	2.3	ND	ND
	03/14/96	300	69 [b]	3.3	0.74	ND	ND	1.6	ND	ND
	09/26/96	ND	ND	ND	ND	ND	ND	1.2	ND	ND
MW5	07/29/94	30,000	2,200 [a]	9,300	1,100	1,800	2,300	110	ND	ND
	10/21/94	23,000	1,500	7,900	780	1,500	2,900	85	ND	ND
	09/15/95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	03/14/96	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/26/96	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW6	07/29/94	15,000	2,100 [b]	3,100	1,100	71	2,000	37	ND	ND
	10/21/94	18,000	1,500	3,900	1,200	170	3,200	35	ND	ND
	09/15/95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	03/14/96	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/26/96	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW7	07/29/94	2,600	530 [c]	470	220	ND	310	2.7	6	ND
	10/21/94	1,700	280	290	140	4.5	240	1.8	0.74	ND
	09/15/95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	03/14/96	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/26/96	NS	NS	NS	NS	NS	NS	NS	NS	NS

AGI TECHNOLOGIES

Table 2
Summary of Groundwater Chemical Analyses
Harbert Transportation/Meekland Avenue
Hayward, California

Well	Date Sampled	EPA Test Methods								
		8015 M		BETX 5030/8020				8010		
		TPH Gasoline	TPH Diesel	Benzene	Ethylbenzene	Toluene	Xylenes	1,2-DCA	PCE	TCE
		µg/L	µg/L	µg/L				µg/L	µg/L	µg/L
MW8	07/28/94	ND	78 [a]	ND	ND	ND	ND	ND	ND	ND
	10/21/94	ND	ND	ND	ND	ND	ND	ND	0.72	ND
	09/15/95	ND	ND	ND	ND	ND	ND	ND	0.74	ND
	03/14/96	ND	ND	ND	ND	ND	ND	ND	0.63	ND
	09/26/96	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW9	07/28/94	6,000	1,300 [c]	90	170	27	370	26	ND	ND
	10/21/94	6,900	600	1,800	280	220	1,500	31	ND	ND
	09/15/95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	03/14/96	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/26/96	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW10	07/28/94	6,700	2,000 [c]	99	180	57	430	13	ND	ND
	10/21/94	8,600	2,000	93	200	ND	680	12	ND	ND
	09/15/95	2,100	1,900	9.9	49	ND	4.9	ND	ND	ND
	03/14/96	6,800	2,000 [b]	64	98	ND	33	6.5	ND	ND
	09/26/96	7,100	420	140	210	ND	32	9.1	ND	5.9
MW11	07/28/94	450	150 [a]	6.2	20	1.1	6.6	ND	ND	ND
	10/21/94	460	190	4.9	14	ND	12	ND	ND	ND
	09/15/95	9,600	550	130	180	ND	130	8.8	ND	5.6
	03/15/96	780	310 [b]	0.74	25	ND	1.8	ND	ND	ND
	09/26/96	480	710	ND	50	ND	ND	ND	ND	ND

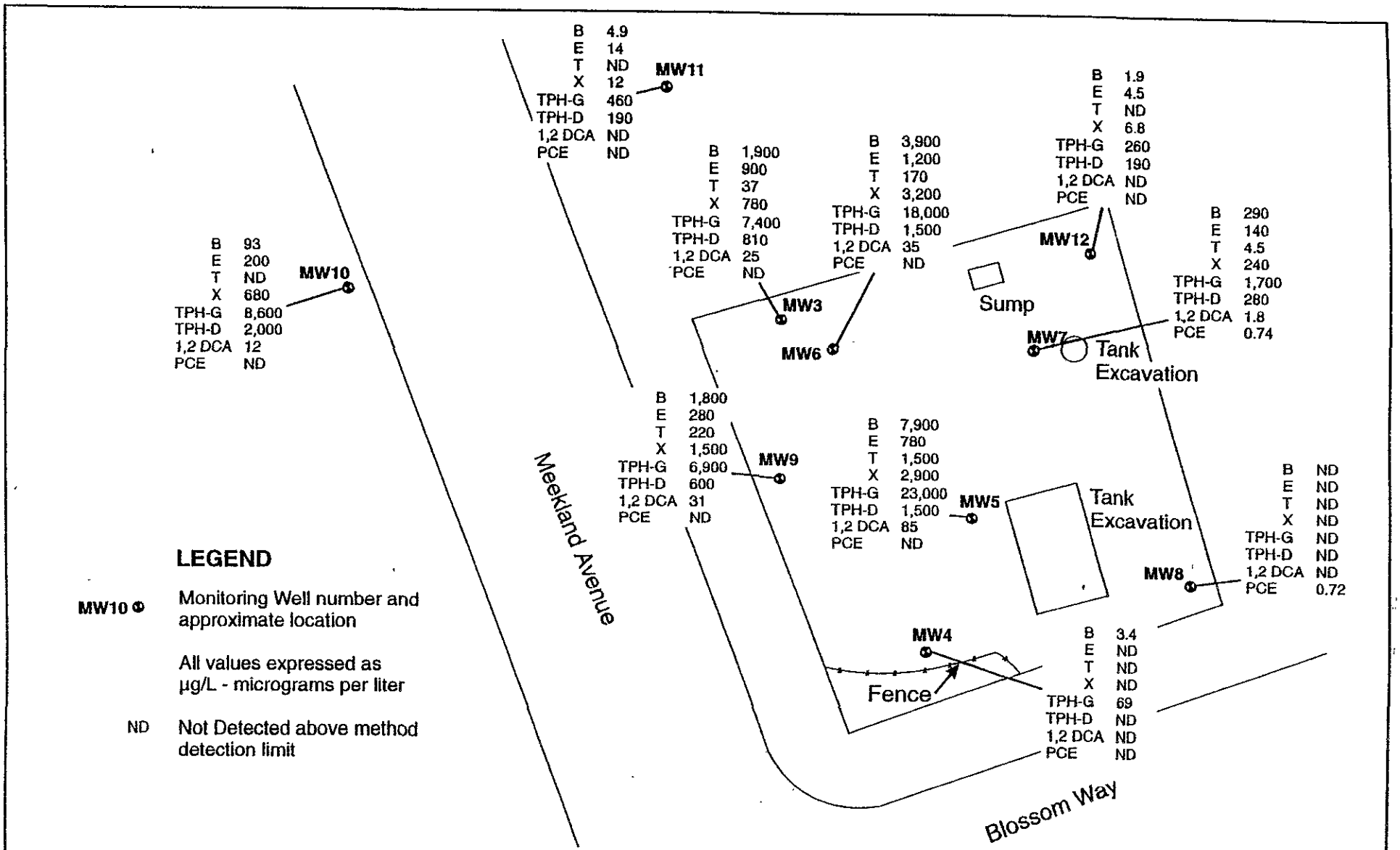
AGI TECHNOLOGIES

Table 2
Summary of Groundwater Chemical Analyses
Harbert Transportation/Meekland Avenue
Hayward, California

Well	Date Sampled	EPA Test Methods: 8015 M TPH Gasoline µg/L	8015 M TPH Diesel µg/L	BETX 5030/8020 Benzene µg/L	Ethylbenzene µg/L	Toluene µg/L	Xylenes µg/L	8010 1,2-DCA µg/L	8010 PCE µg/L	8010 TCE µg/L
MW12	07/28/94	240	160	1.9	12	ND	5.8	ND	ND	ND
	10/21/94	260	190	1.9	4.5	ND	6.8	ND	ND	ND
	09/15/95	NS	NS	NS	NS	NS	NS	NS	NS	NS
	03/14/96	NS	NS	NS	NS	NS	NS	NS	NS	NS
	09/26/96	NS	NS	NS	NS	NS	NS	NS	NS	NS
Method Detection Limit		50	50	0.5	0.5	0.5	0.5	0.5	0.5	0.5

Notes:

a) Hydrocarbons quantified as diesel are primarily due to discrete peaks not indicative of diesel fuel.
b) Hydrocarbons quantified as diesel are primarily due to the presence of a lighter petroleum product (C_6-C_{12}), possibly gasoline.
c) Hydrocarbons quantified as diesel are due to the presence of a lighter petroleum product (C_6-C_{12}) and discrete peaks not indicative of diesel fuel.
1,2-DCE - 1,2-dichloroethane.
PCE - Tetrachloroethene.
TCE - Trichloroethene.
ND - Not detected at or above method detection limit.
NS - Not sampled.
TPH-Gasoline - Total petroleum hydrocarbons quantified as gasoline.
TPH-Diesel - Total petroleum hydrocarbons quantified as diesel.
µg/L - Micrograms per liter, equivalent to parts per billion.



10·20·94

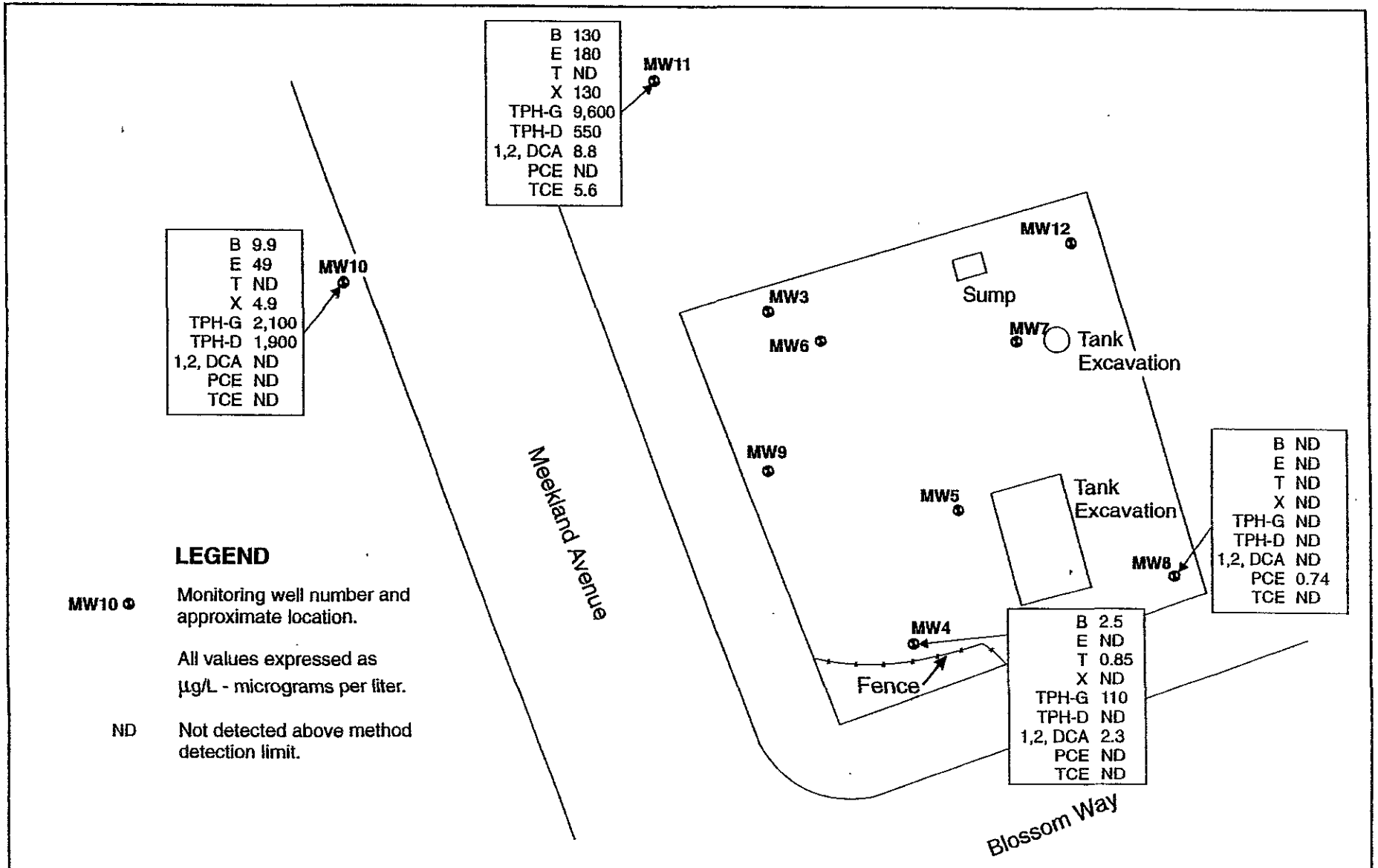
AGI TECHNOLOGIES

Site Plan

Harbert Transportation/Meekland Avenue
Hayward, California

FIGURE 4

PROJECT NO	DRAWN	DATE	APPROVED	REVISED	DATE
siteplan.cdr	15,833.002	DFF/ALW	01 February 95		



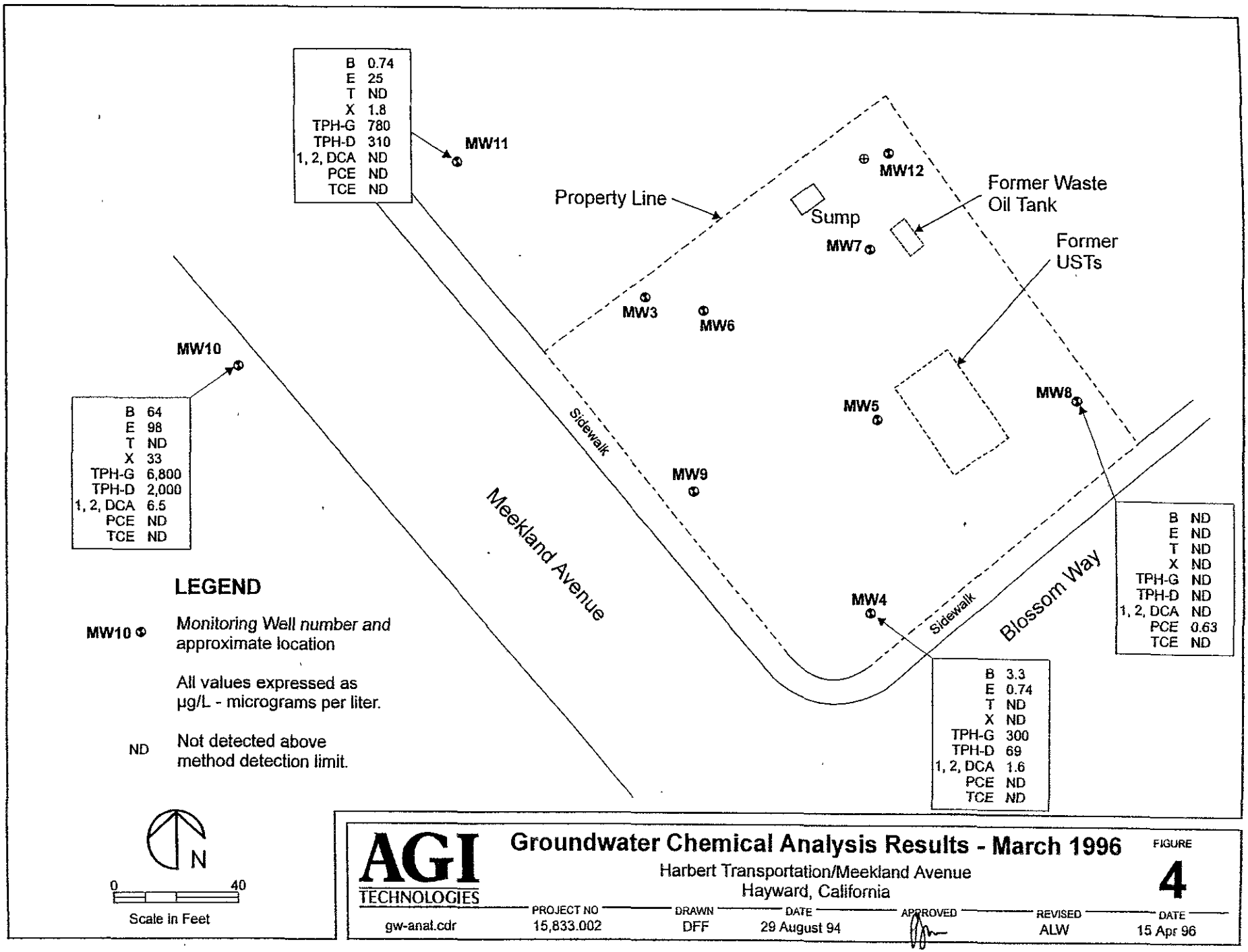
AGI TECHNOLOGIES

Groundwater Chemical Analysis Results - 9/15/95

Harbert Transportation/Meekland Avenue
Hayward, California

FIGURE 4

PROJECT NO.	DRAWN	DATE	APPROVED	REVISED	DATE
83300201.cdr	15,833.002	DFF	1 Feb 95	BJA	8 Nov 95



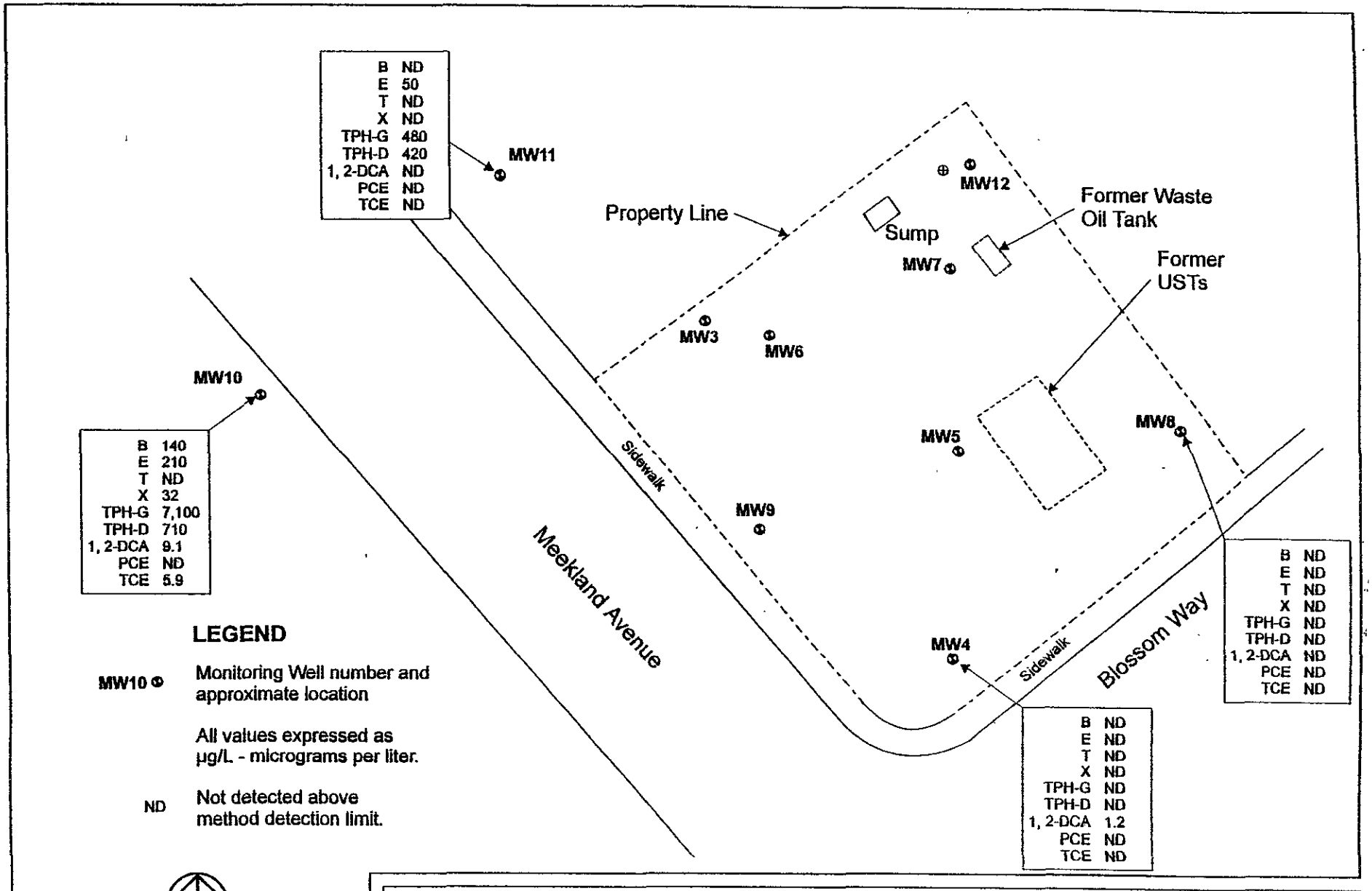
AGI TECHNOLOGIES

Groundwater Chemical Analysis Results - March 1996

Harbert Transportation/Meekland Avenue
Hayward, California

FIGURE 4

PROJECT NO	DRAWN	DATE	APPROVED	REVISED	DATE
gw-anal.cdr	15,833.002	DFF	29 August 94	ALW	15 Apr 96



Groundwater Chemical Analysis Results - September 1996

FIGURE 4

Harbert Transportation/Meekland Avenue
Hayward, California

AGI TECHNOLOGIES

PROJECT NO.	DRAWN	DATE	APPROVED	REVISED	DATE
gw-anal.cdr	15,833.002	DFF	29 August 94	ALW	15 Apr 96

Appendix E

Risk Based Screening Level for 1, 1, 2-Trichloroethane from *Application of Risk-Based Screening Levels and Decision Making to Sites with Impacted Soil and Groundwater*

TABLE F-1. COMPONENTS FOR GROUNDWATER SCREENING LEVELS
(groundwater IS a current or potential drinking water resource)
(ug/l)

CHEMICAL PARAMETER	[1]Final RSBL Drinking Water Resource Threatened	Ceiling Value (taste & odors, etc.) Table I-1	Human Toxicity Table F-3	Indoor Air Impacts USEPA Model	Aquatic Life Protection Table F-4a	[2]Elevated Threat to Surface Water Table F-4d
TETRACHLOROETHANE, 1,1,1,2-	1.3	50000	1.3	-	930	-
TETRACHLOROETHANE, 1,1,2,2-	1.0	500	1.0	640 (5400)	420	11
TETRACHLOROETHYLENE	5.0	170	5.0	170 (3200)	120	8.85
THALLIUM	2.0	50000	2.0	-	40	6.3
TOLUENE	40	40	150	76000 (530000 sol)	130	200000
TPH (gasolines)	100	100	100	-	500	-
TPH (middle distillates)	100	100	100	-	640	
TPH (residual fuels)	100	100	100	-	640	-
TRICHLOROBENZENE, 1,2,4-	50	3000	70	300000 sol	50	-
TRICHLOROETHANE, 1,1,1-	62	970	200	77000 (1.3E+06 sol)	62	-
TRICHLOROETHANE, 1,1,2-	5.0	50000	5.0	930 (8200)	9400	42
TRICHLOROETHYLENE	5.0	310	5.0	750 (13000)	360	81
TRICHLOROPHENOL, 2,4,5-	11	200	700	1200000 sol	11	-
TRICHLOROPHENOL, 2,4,6-	0.50	100	0.50	-	970	6.5
VANADIUM	19	50000	63	-	19	-

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from: Craig Drizin

re: Harbert Transportation, 19984 Meekland Avenue, Hayward, California

date: July 2, 2003

Number of Copies	Date of Documents	Description
1	July 2, 2003	*Groundwater Monitoring Report - First Quarter 2003*

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