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July 24, 2001
Project H9042.Q

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

Subject: **Groundwater Monitoring Report - Second Quarter 2001**
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 second quarter 2001. 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.

The results of the additional site assessment we conducted in the first quarter 2001 (Weber, Hayes and Associates, June 18, 2001) indicate there is a limited area of petroleum hydrocarbon contaminated soil that is a likely source of continuing groundwater degradation. In our June 18, 2001 Report we recommended that this soil be excavated as an Interim Remedial Action. Environmental Health concurred with our recommendation in a letter dated June 26, 2001. A cost estimate for the Interim Remedial Action has been submitted to the Underground Storage Tank Cleanup Fund for pre-approval of costs.

EXECUTIVE SUMMARY

The groundwater monitoring event for the second quarter 2001 took place on June 20, 2001. Groundwater elevations at the site fell an average of approximately 1.56 feet since the previous quarter (March 2001). The calculated groundwater flow direction on June 20, 2001 was to the west, which appears to be consistent with historical data. Groundwater analytical results from the second quarter 2001 indicate that dissolved petroleum hydrocarbons ("PHCs") are present at concentrations that exceed water quality goals in on-site monitoring wells downgradient of the removed underground storage tanks ("USTs") and dispensers at the site.

Methyl - tert - Butyl Ether (MTBE) was not detected in the groundwater samples collected this quarter. MTBE has not been detected in 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.

As in the fourth quarter 2000, we saw an oscillation in dissolved PHC concentrations in wells MW-5 and 9, which are located downgradient of the removed USTs and dispensers, respectively. Concentrations of PHCs declined in MW-5 and increased in MW-9. Overall we believe that this

does not change the Site Conceptual Model: PHCs remain in the soils beneath the former dispensers and are likely present in the 1989 UST excavation, which was backfilled with the excavated material. These residual PHCs are likely a source of continuing groundwater degradation. **We believe that excavation of these residual PHCs as an Interim Remedial Action is appropriate.**

At this time we reiterate our recommendations from last quarter (Weber, Hayes and Associates, June 18, 2001):

- Continuing quarterly groundwater monitoring of dissolved PHC concentrations at the site.
- Calculating additional cleanup levels for those PHCs which have not yet had cleanup levels set (ethylbenzene, xylenes, and TPH-g, see Weber, Hayes and Associates, June 18, 2001), for comparison with concentrations after the interim remedial excavation.
- Excavating source zone PHC-contaminated soils as an Interim Remedial Action.

Environmental Health concurred with our recommendation in a letter dated June 26, 2001. A cost estimate for the Interim Remedial Action has been submitted to the Underground Storage Tank Cleanup Fund for pre-approval of costs. The excavation will be scheduled after the UST Cleanup Fund pre-approves the costs.

INTRODUCTION

This report documents groundwater monitoring activities at the former Harbert Transportation facility, 19984 Meekland Avenue, Hayward, California (the site), during the second quarter 2001. 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.

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 each of the monitoring wells
4. Submitting 10 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 report

Site Description And Background

The site is located at the corner of Meekland Avenue and Blossom Way in Alameda County California, at an elevation of approximately 55 feet above sea level (Figure 1). The site is relatively flat and is currently vacant.

The site was 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.

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. Ten groundwater monitoring wells currently exist at the site (Figure 2). Groundwater samples were not collected from these wells 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.

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. Analysis of the data collected confirmed that significant concentrations of PHCs remain in soils beneath the former dispensers and are believed present in the 1989 UST excavation which was backfilled with the excavated material. We believe that excavation of these residual PHCs as an Interim Remedial Action is appropriate (Weber, Hayes and Associates, June 18, 2001). Environmental Health concurred with this recommendation in a letter dated June 26, 2001.

SUMMARY OF QUARTERLY ACTIVITIES

Groundwater Monitoring

The groundwater monitoring event for the second quarter 2001 took place on June 20, 2001. Field methods followed Weber, Hayes and Associates' standard field methodology for groundwater monitoring, which is described in Appendix A. Groundwater samples were collected from all monitoring wells at the site 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. 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.

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 1.56 feet since the previous quarter (March 2001). Calculated groundwater elevations from the gauging data collected on June 20, 2001 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 June 20, 2001 was to the west at 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 is presented as Appendix B.

Groundwater Analytical Results

Groundwater samples were collected from all of the 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 Groundwater Sample Analytical Results, June 20, 2001 (µg/L, ppb)

Well ID	TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
MW-3	760	4.4	2.4	62	23	ND*
MW-4	ND	ND	ND	ND	ND	ND
MW-5	6,500	120	130	740	940	ND*
MW-6	1,800	14	4.6	160	79	ND*
MW-7	430	2.4	0.96	30	9.7	ND*
MW-8	ND	ND	ND	ND	ND	ND
MW-9	8,300	330	88	850	1,700	< 0.6*
MW-10	810	3.0	1.6	5.1	13	ND*
MW-11	ND	ND	ND	ND	ND	ND
MW-12	ND	ND	ND	ND	ND	ND
AL/MCL	1,000	1	150	700	1,750	5

* = Confirmed by GC/MS method 8260

The concentration of benzene in well MW-3 exceeds the groundwater quality goal/ Maximum Contaminant Level (MCL).

The concentrations of TPH-g, benzene, and ethylbenzene in well MW-5 exceed the respective groundwater quality goals/Action Level (AL)/MCLs.

The concentrations of TPH-g and benzene in well MW-6 exceed the respective groundwater quality goals/AL/MCLs.

The concentration of benzene in wells MW-7 and 10 slightly exceeds the groundwater quality goal/MCL of 1 microgram per liter (µg/L).

The concentrations of TPH-g, benzene, and ethylbenzene in well MW-9 exceed the respective groundwater quality goals/AL/MCLs.

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

Please see the Conclusions section for a discussion of the groundwater analytical results.

Analytical results for the groundwater samples collected by Weber, Hayes and Associates are summarized in Table 1. 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 5 ppb benzene in groundwater are shown on Figure 4.

The Certified Analytical Report 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.

Dissolved Oxygen Measurements

Dissolved oxygen field measurements were not collected this quarter due to equipment problems. Previous dissolved oxygen measurements at the site indicate lower levels of dissolved oxygen in PHC impacted wells compared to levels in non-impacted, upgradient wells. We believe this, combined with the observed decrease in dissolved PHC concentrations over time, indicates that natural attenuation of PHCs via bioremediation is occurring in groundwater, with microbes using dissolved PHCs as a food source during aerobic respiration (see Bushek and O'Reilly, 1995, Table 1, Figure 3, and Appendix D).

SUMMARY

- Free product was not observed in any of the monitoring wells at the site.
- Groundwater elevations at the site fell an average of approximately 1.56 feet since the previous quarter (March 2001).
- The groundwater flow direction on June 20, 2001 was to the west at a gradient of approximately 0.002 feet per foot. This direction is in general agreement with data collected by us in the past two quarters and previous data collected by others at the site.
- **MTBE was not detected in any of the groundwater samples collected this quarter.**
- TPH-g, benzene and ethylbenzene were detected above their respective AL/MCLs in on-site wells MW-5and MW-9, which are located downgradient of the removed USTs.
- Benzene was detected at a concentration above the MCL in wells MW-3, 6, 7, and 10.
- Previous measurements of dissolved oxygen indicated aerobic bioremediation is occurring in the PHC-impacted wells.

SITE CONCEPTUAL MODEL

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

- Soils encountered at the site generally consisted of fat Clays and sandy Clays. The predominance of these fine grained materials indicate that cleanup of PHCs at the site would ***NOT*** be amenable to soil vapor extraction or related technologies.
- A review and comparison of historical groundwater analytical data with the current and recent data suggests there has been a reduction in PHC concentrations at the site of at least an order of magnitude since September 1996 (see Table 1, Figure 3, and Appendix D). However, dissolved PHC concentrations remain above ALs/MCLs twelve years after the removal of the USTs.
- PHCs are present in three on-site wells downgradient of the removed USTs at concentrations above groundwater quality goals.
- The highest concentrations of PHCs in groundwater are in well MW-9, which is located downgradient of removed USTs and dispensers.

- We believe that natural attenuation/bioremediation has and will continue to remove PHCs from groundwater at the site. However, the USTs were removed almost twelve years ago and groundwater at the site still exceeds ALs/MCLs/groundwater quality goals.

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

The oscillation of PHC concentrations in wells MW-5 and 9 does not alter the Site Conceptual Model. MTBE is ***NOT*** present at the site. There are residual PHCs in soil and groundwater that will likely degrade over time. Excavation of source zone soil near the removed USTs and dispensers should remove the driving force behind migration of PHCs in groundwater and allow natural attenuation of PHCs to complete the cleanup of the site.

RECOMMENDATIONS

We reiterate our recommendations from the previous quarter. Environmental Health concurred with our recommendations for Interim Remedial Action in a letter dated June 26, 2001:

- Continuing quarterly groundwater monitoring of dissolved PHC concentrations at the site.

- Calculating additional cleanup levels for those PHCs which have not yet had cleanup levels set (ethylbenzene, xylenes, and TPH-g), for comparison with concentrations after the interim remedial excavation.

- Excavating the residual PHCs in unsaturated soil as described in Weber, Hayes and Associates June 18, 2001 report ***Additional Site Assessment and Groundwater Monitoring Report - First Quarter 2001***. The estimated volume of soil to be removed is 980 cubic yards.

- Placing Oxygen Releasing Compound in the bottom of the excavation to stimulate natural attenuation/biodegradation of residual PHCs in groundwater.

Because no corrective actions have taken place at the site in the twelve years since the USTs have been removed, **we recommend that the following Interim Remedial Actions take place at the site as soon as costs are pre-approved by the Underground Storage Tank Cleanup Fund.**

SCHEDULE OF ACTIVITIES FOR THE FOLLOWING QUARTER

The following activities are scheduled for the next quarter:

- Quarterly groundwater monitoring of all monitoring wells as directed by Environmental Health, including measuring the depth-to-groundwater, dissolved oxygen concentration, and

physical parameters, and collecting samples from all 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.

- Calculating cleanup levels for PHCs in soil and groundwater at the site for comparison with concentrations after the interim remedial excavation, after cost pre-approval by the UST Cleanup Fund.

- Beginning the Interim Remedial Action excavations, after cost pre-approval by the UST Cleanup Fund.

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: _____
Craig Drizin, P.E.
Senior Engineer

And: _____
Joseph Hayes
Certified Hydrogeologist #373

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
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.

c: Mr. Amir Gholami, 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

AGI Technologies, August 29, 1994. *Quarterly Groundwater Monitoring 19984 Meekland Avenue, Hayward, California*

AGI Technologies, September 19, 1994. *Quarterly Groundwater Monitoring 19984 Meekland Avenue, Hayward, California*

AGI Technologies, February 1, 1995. *Quarterly Groundwater Monitoring 19984 Meekland Avenue, Hayward, California*

AGI Technologies, August 16, 1995. *Development of Risk-Based Cleanup Standards Harbert Transportation Site 19984 Meekland Avenue, Hayward, California*

AGI Technologies, November 9, 1995. *Work Plan Off-Site Contamination Assessment Harbert Transportation Inc. 19984 Meekland Avenue, Hayward, California*

AGI Technologies, November 29, 1995. September 1996 *Quarterly Groundwater Monitoring 19984 Meekland Avenue, Hayward, California*

REFERENCES (continued)

AGI Technologies, April 30, 1996. *Quarterly Groundwater Monitoring 19984 Meekland Avenue, Hayward, California*

AGI Technologies, January 6, 1997. *September 1996 Quarterly Groundwater Monitoring 19984 Meekland Avenue, Hayward, California*

AGI Technologies, February 4, 1998. *Final Report Development of Risk-Based Cleanup Standards Harbert Transportation Site 19984 Meekland Avenue, Hayward, California*

Alameda County Health Care Services Agency, Environmental Health Services, June 17, 1999. *Property at 19984 Meekland Avenue, Hayward, Ca 94541 - Requests for Additions/Modifications to the Risk Assessment*

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*

Alameda County Health Care Services Agency, Environmental Health Services, November 15, 2000. *Property at 19984 Meekland Avenue, Hayward, Ca 94541 - Review of Third Quarter 2000 Groundwater Monitoring Report*

Alameda County Health Care Services Agency, Environmental Health Services, December 4, 2000. *Property at 19984 Meekland Avenue, Hayward, Ca 94541 - Approval of Work Plan for Soil and Groundwater Sampling*

Applied Geosystems, July 20, 1986. *Subsurface Environmental Investigation, Two Soil Borings, and Monitoring Well Installation*

Bushek, Tim, and Kirk O'Reilly, March 1995; *Protocol for Monitoring Intrinsic Bioremediation in Groundwater*, Chevron Research and Development Company, Health, Environment, and Safety Group

CTTS, Inc., Toxic Technology Services, September 13, 1989. *Report on Underground Tank Removal at 19984 Meekland Road, Hayward, California*

REFERENCES (continued)

CTTS, Inc., Toxic Technology Services, November 27, 1990. *Phase II Report for Durham Transportation, 19984 Meekland Road, Hayward, California*

CTTS, Inc., Toxic Technology Services. *Amendment #1, Proposed Remediation for on Site Soil Contamination*

CTTS, Inc., Toxic Technology Services, January 31, 1990. *Report on Well Abandonment and Groundwater Monitoring Well Installations, 19984 Meekland Road, Hayward, California*

CTTS, Inc., Toxic Technology Services, July 2, 1990. *Progress Report #1, Period Covering 3/23/90-6/30/90, 19984 Meekland Road, Hayward, California*

CTTS, Inc., Toxic Technology Services, August 2, 1990 *Progress Report #2, Period Covering 7/l/90-7/31/90, 19984 Meekland Road, Hayward, California*

CTTS, Inc., Toxic Technology Services, September 21, 1990. *Progress Report #3, Period Covering 8/l/90-8/31/90, 19984 Meekland Road, Hayward, California*
REFERENCES (continued)

CTTS, Inc., Toxic Technology Services, November 12, 1990. *Progress Report #4, Period Covering 9/l/90-10/31/90, 19984 Meekland Road, Hayward, California*

CTTS, Inc., Toxic Technology Services, December 28, 1990. *Progress Report #5, Period Covering 11/l/90-11/30/90, 19984 Meekland Road, Hayward, California*

CTTS, Inc., Toxic Technology Services, January 25, 1991. *Progress Report #7, Period Covering 1/l/91-1/31/91, 19984 Meekland Road, Hayward, California*

CTTS, Inc., Toxic Technology Services, February 11, 1991. *Progress Report #6, Period Covering 12/l/90-12/31/90, 19984 Meekland Road, Hayward, California*

CTTS, Inc., Toxic Technology Services, February 19, 1991. *Cost analysis, Remediation Alternatives 19984 19984 Meekland Road, Hayward, California*

CTTS, Inc., Toxic Technology Services, April 4, 1991. *Progress Report #8, Period Covering 2/l/91-3/31/91, 19984 Meekland Road, Hayward, California*

CTTS, Inc., Toxic Technology Services, June 30, 1991. *Progress Report #11, Period Covering 6/l/91-6/30/9, 19984 Meekland Road, Hayward, California*

CTTS, Inc., Toxic Technology Services, September 30, 1991. *Progress Report #12, Period Covering 7/l/91-9/30/91, Durham Transportation 19984 Meekland Road, Hayward, California*

REFERENCES (continued)

CTTS, Inc., Toxic Technology Services, April 2, 1991. *Report of Additional Well Installlations19984 Meekland Road, Hayward, California*

CTTS, Inc., Toxic Technology Services, November 1, 1992. *Health and Safety Plan to Accompany Workplan for the Delineation, Containment and Remediation of Soil and Groundwater Contamination, 19984 Meekland Road, Hayward, California*

CTTS, Inc., Toxic Technology Services, November 1, 1992. *Workplan for the Delineation, Containment and Remediation of Soil and Groundwater Contamination, 19984 Meekland Road, Hayward, California*

CTTS, Inc., Toxic Technology Services, January 21, 1993. *Progress Report #17, Period Covering 10/l/92-12/31/92, Durham Transportation 19984 Meekland Avenue, Hayward, California*

CTTS, Inc., Toxic Technology Services, March 10, 1993. *Progress Report #18, Period Covering 12/l/92-1/31/93, Durham Transportation 19984 Meekland Avenue, Hayward, California*

CTTS, Inc., Toxic Technology Services, March 29, 1993. *Progress Report #19, Period Covering 2/l/93-2/31/93, Durham Transportation 19984 Meekland Avenue, Hayward, California*

CTTS, Inc., Toxic Technology Services, April 1, 1993. *Progress Report #20, Period Covering 3/l/93-3/31/93, Durham Transportation 19984 Meekland Avenue, Hayward, California*

CTTS, Inc., Toxic Technology Services. March 10, 1993. *Remediation Progress Report 1, Period Covering 12/l/92-1/31/93, 19984 Meekland Avenue, Hayward, California*

CTTS, Inc., Toxic Technology Services. July 16, 1993. *Progress Report #21, Period Covering 4/l/93-6/30/93 19984 Meekland Avenue, Hayward, California*

CTTS, Inc., Toxic Technology Services. October 11, 1993. *Progress Report #22, Period Covering 6/l/93-9/30/93, 19984 Meekland Avenue, Hayward, California*

CTTS, Inc., Toxic Technology Services, February 24, 1993. *Progress Report #23, Period Covering 10/l/93-12/31/93, Durham Transportation 19984 Meekland Avenue, Hayward, California*

Howard, Philip, H. 1990. *Handbook of Fate and Exposure Data for Organic Chemicals*, Lewis Publishers. Inc., Chelsea, Michigan

Weber, Hayes and Associates, October 29, 1999. *Clarification of Development of Risk Based Cleanup Standards - Harbert Transportation Site, 19984 Meekland Avenue, Hayward, CA*

REFERENCES (continued)

Weber, Hayes and Associates, September 7, 2000. *Work Plan for Soil and Groundwater Sampling - Harbert Transportation Site, 19984 Meekland Avenue, Hayward, CA*

Weber, Hayes and Associates, November 10, 2000. *Groundwater Monitoring Report - Third Quarter 2000, 19984 Meekland Avenue, Hayward, CA*

Weber, Hayes and Associates, January 30, 2001. *Groundwater Monitoring Report - Fourth Quarter 2000, 19984 Meekland Avenue, Hayward, CA*

Weber, Hayes and Associates, June 18, 2001. *Additional Site Assessment and Groundwater Monitoring Report - First Quarter 2001, 19984 Meekland Avenue, Hayward, CA*

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Letter of Transmittal

to: ✓Mr. Amir K. Gholami
Alameda County Environmental Health Services
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from: Craig Drizin

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

date: January 9, 2001

Number of Copies	Date of Documents	Description
1	July 24, 2001	Groundwater Monitoring Report - Second Quarter 2001

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Table 1: Summary of Groundwater Elevation and PHC Analytical Data
Former Harbert Transportation Facility, 19984 Meekland Avenue, Hayward, Ca.
Weber, Hayes and Associates Project H9042

Well I.D.	Date	Screened Interval (feet below ground surface)	Surveyed T.O.C. Elevation (feet)	Depth to Groundwater (feet below ground surface)	Calculated Groundwater Elevation (feet)	Laboratory Analytical Results							
						TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	F.O.'s (ug/L)	D.O. (mg/L)
MW-3		20 - 40?	55.44										
	20-Jun-2001			23.55	31.89	760	4.4	2.4	62	23	ND*	--	NA
	29-Mar-2001			22.02	33.42	170	1.1	ND	10	1.6	ND	--	0.6
	12-Jan-2001			23.41	32 03	310	2.4	2.2	4.4	10	ND	--	0.7
	27-Sep-2000			23.09	32.35	430	ND	ND	44	ND	ND	ND	1.0
MW-4		20 - 40?	55.71										
	20-Jun-2001			23.74	31 97	ND	ND	ND	ND	ND	ND	--	NA
	29-Mar-2001			22.22	33.49	ND	ND	4.2	ND	ND	ND	--	0.5
	12-Jan-2001			23.60	32.11	ND	ND	ND	ND	ND	ND	--	0.7
	27-Sep-2000			23.25	32.46	ND	ND	ND	ND	ND	ND	ND	2.5
MW-5		25 - 45	56.03										
	20-Jun-2001			24.15	31.88	6,500	120	130	740	940	ND*	--	NA
	29-Mar-2001			22.69	33.34	13,000	220	510	1,000	2,700	ND*	--	0 4
	12-Jan-2001			23 97	32.06	1,100	62	40	150	290	ND*	--	0.3
	27-Sep-2000			23 69	32.34	18,000	840	2.9	1,200	3,500	< 30	ND	0.4
MW-6		25 - 45	56 01										
	20-Jun-2001			24.13	31.88	1,800	14	4.6	160	79	ND*	--	NA
	29-Mar-2001			22.56	33.45	610	2.2	ND	37	4.6	ND*	--	0.5
	12-Jan-2001			23.97	32 04	2,300	16	3.5	290	83	ND*	--	0.5
	27-Sep-2000			23.56	32.45	1,300	ND	4.3	200	17	ND	ND	0.5
MW-7		25 - 45	56.66										
	20-Jun-2001			24.68	31.98	430	2.4	0.96	30	9.7	ND*	--	NA
	29-Mar-2001			23.10	33.56	ND	ND	ND	ND	ND	ND	--	0.5
	12-Jan-2001			24.49	32.17	1,600	13	0 86	150	35	ND*	--	0.5
	27-Sep-2000			24.18	32 48	270	13	6.6	11	ND	ND	ND	0.5

Table 1: Summary of Groundwater Elevation and PHC Analytical Data
Former Harbert Transportation Facility, 19984 Meekland Avenue, Hayward, Ca.
Weber, Hayes and Associates Project H9042

Well I.D.	Date	Screened Interval (feet below ground surface)	Surveyed T.O.C. Elevation (feet)	Depth to Groundwater (feet below ground surface)	Calculated Groundwater Elevation (feet)	Laboratory Analytical Results							
						TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	F.O.'s (ug/L)	D.O. (mg/L)
MW-8		20 - 40	56 16										
	20-Jun-2001			24.09	32.07	ND	ND	ND	ND	ND	ND	--	NA
	29-Mar-2001			22.56	33.60	ND	ND	0.8	ND	ND	ND	--	1.9
	12-Jan-2001			23.93	32.23	ND	ND	ND	ND	ND	ND	--	2.1
	27-Sep-2000			23.59	32.57	ND	ND	ND	ND	ND	ND	ND	1.9
MW-9		20 - 40	55.21										
	20-Jun-2001			23.36	31.85	8,300	330	88.0	850	1,700	< 0.6*	--	NA
	29-Mar-2001			21.61	33.60	1,600	110	14.0	240	150	ND*	--	0 4
	12-Jan-2001			23.17	32.04	10,000	550	110.0	1,200	2,200	ND*	--	0.5
	27-Sep-2000			22.90	32.31	1,000	40	6.7	110	55	ND	ND	0.5
MW-10		25 - 40	54.74										
	20-Jun-2001			23.17	31.57	810****	3	1.6	5.1	13	ND*	--	NA
	29-Mar-2001			21.63	33.11	600****	2	0.65	ND	0.72	ND	--	0.5
	12-Jan-2001			22.99	31.75	530	3.7	1.9	2.1	4.5	ND	--	0 6
	27-Sep-2000			22.72	32 02	880	ND	ND	ND	ND	ND	ND	0 4
MW-11		25 - 40	55.20										
	20-Jun-2001			23.39	31 35	ND	ND	ND	ND	ND	ND	--	NA
	29-Mar-2001			21.84	32.90	ND	ND	4.5	ND	ND	ND	--	0.6
	12-Jan-2001			23.21	31.53	ND	ND	2.1	ND	ND	ND	--	0.6
	27-Sep-2000			22.43	32 31	63	ND	ND	ND	ND	ND	ND	0.6
MW-12		25 - 40	56.49										
	20-Jun-2001			24.47	32.02	ND	ND	ND	ND	ND	ND	--	NA
	29-Mar-2001			22 91	33.58	ND	ND	5.0	ND	ND	ND	--	1.0
	12-Jan-2001			24 28	32.21	ND	ND	1.1	ND	ND	ND	--	1.0
	27-Sep-2000			23 98	32.51	ND	ND	ND	ND	ND	ND	ND	1.2
Laboratory's Practical Quantitation Limit (PQL):						**50**	**0.5**	**0.5**	**0.5**	**0.5**	**5**	**5**	Field Instrument
State Maximum Contaminant Level (MCL):						**1,000****	**1**	**150**	**700**	**1,750**	**5*****	**0.5**	

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 Ethe

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

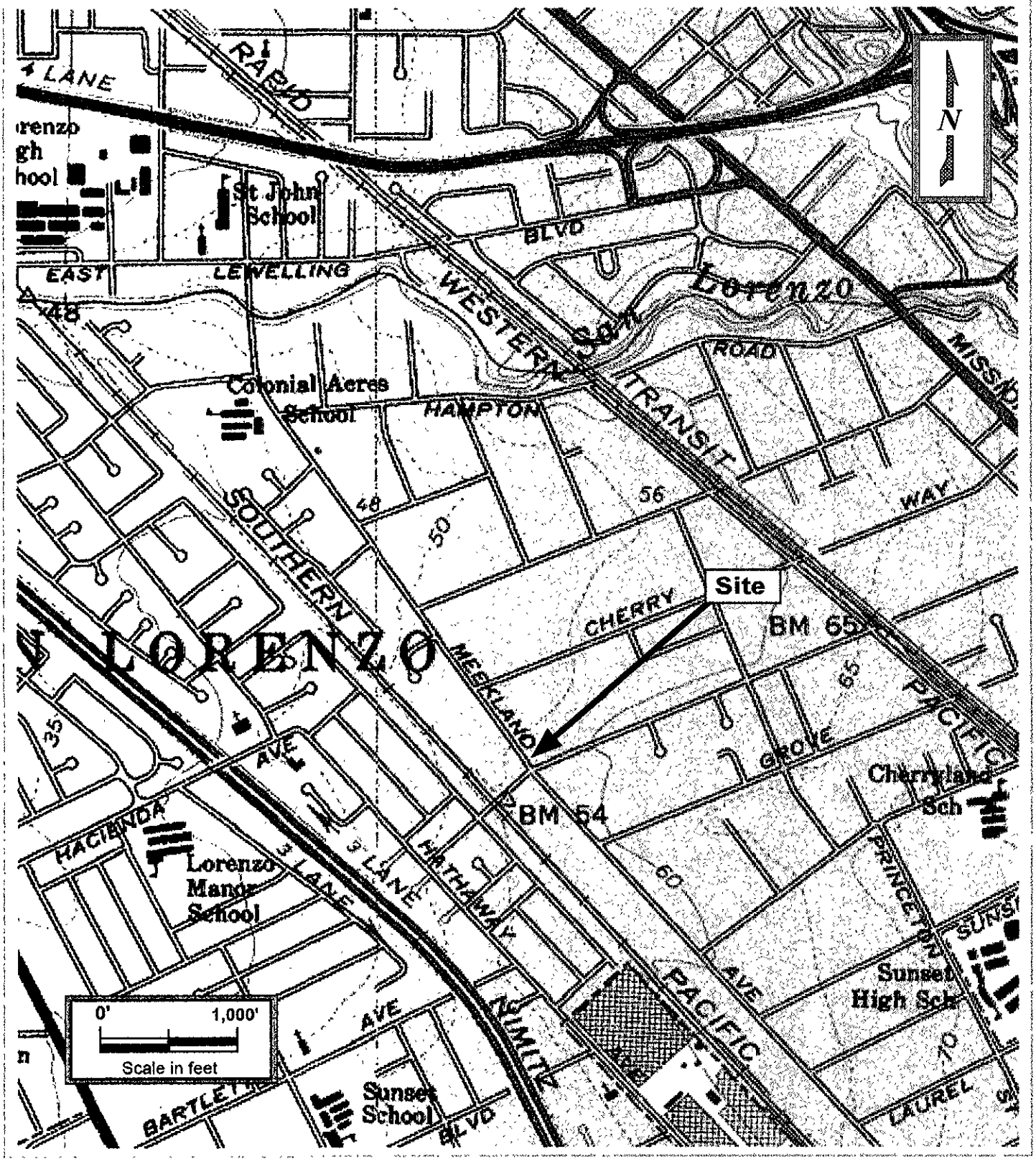
-- = Data not collected or measured, or analysis not conducted

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



craig\\c \ajob\h9042\figures\F1-loc cnv

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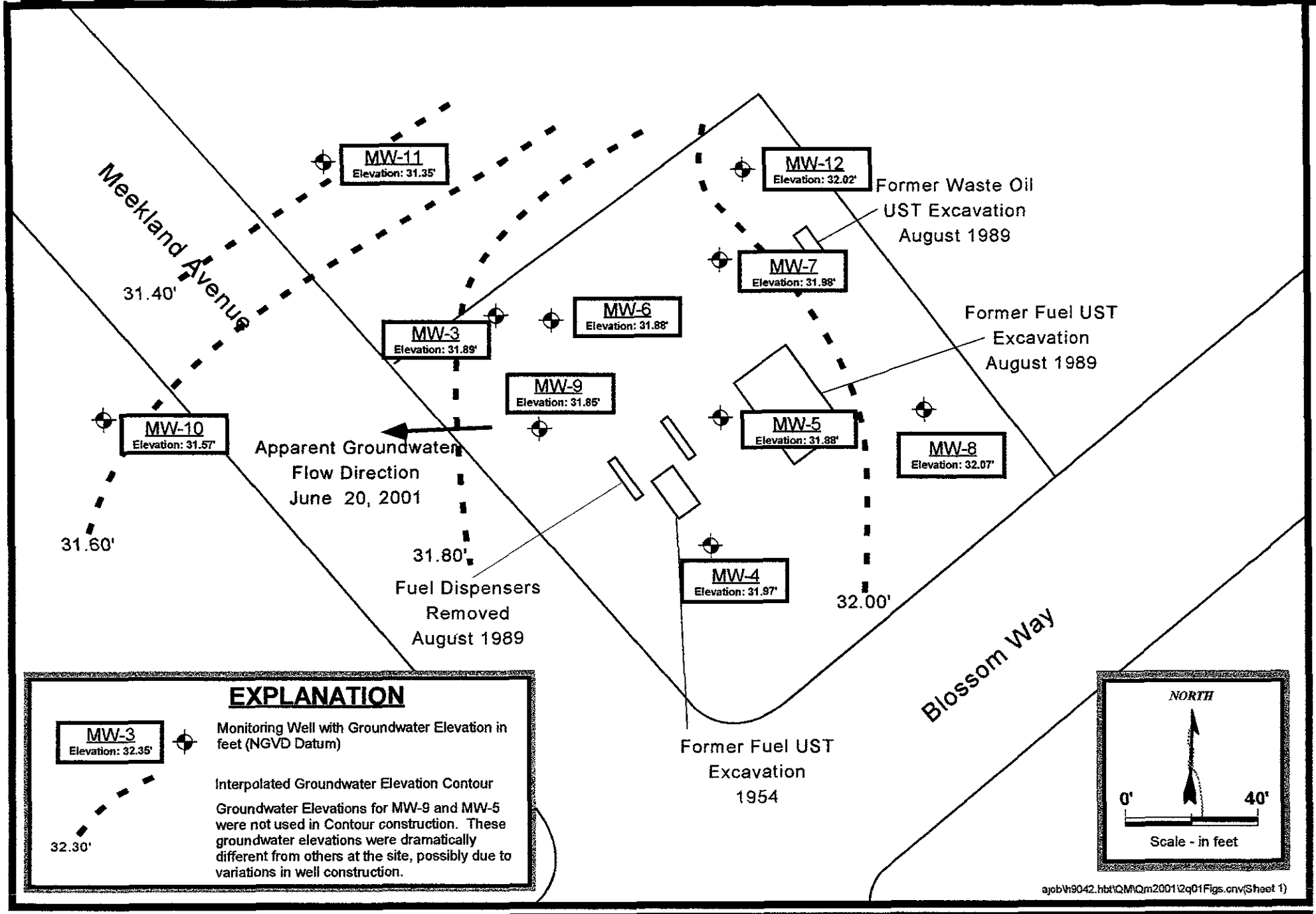
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, Ca. 95076
(831) 722 - 3580 (831) 662 - 3100

LOCATION MAP

Former Harbert Transportation Facility
19984 Meekland Avenue
Hayward, California

Figure 1
Project H9042.Q



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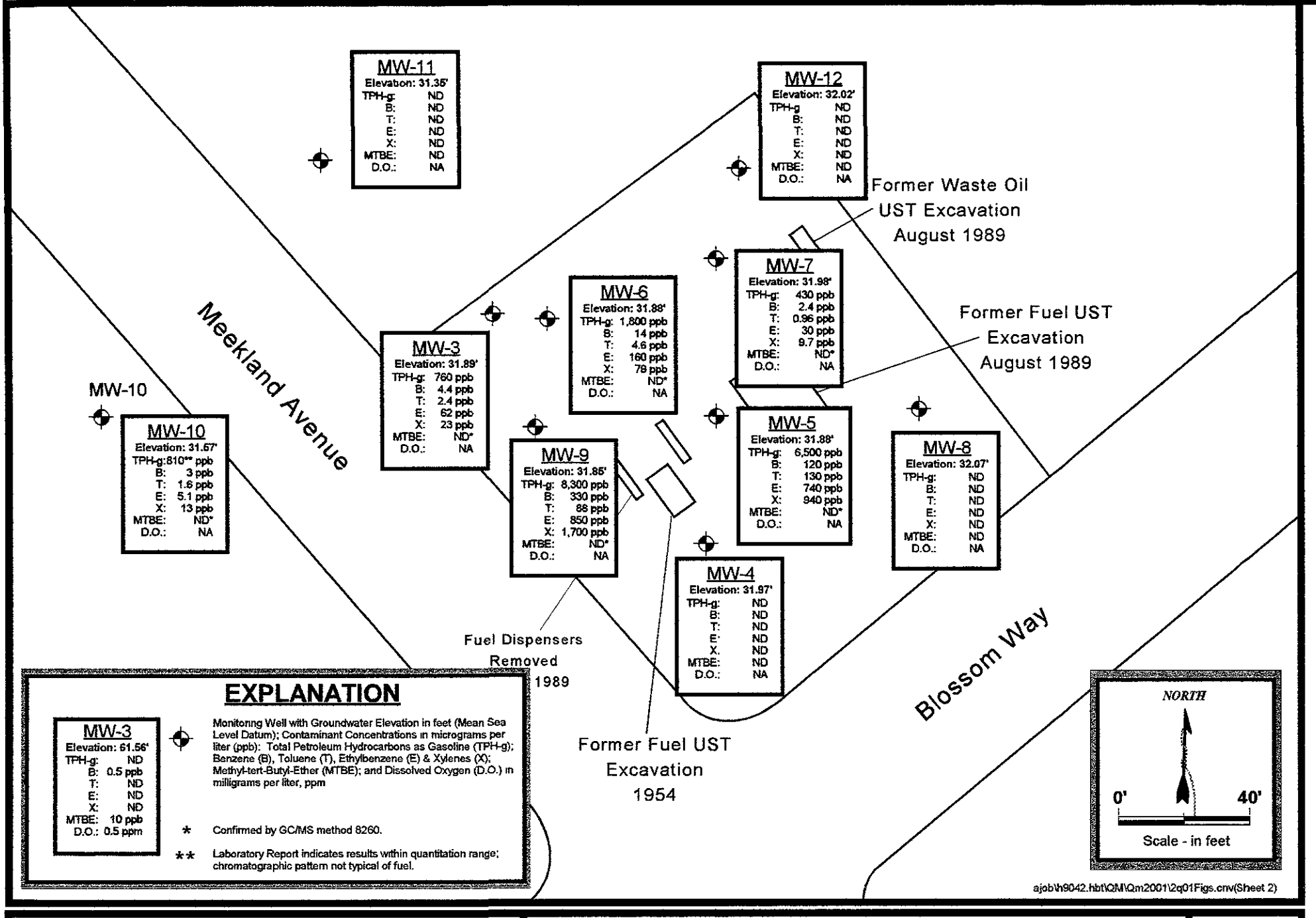
Site Plan with Groundwater Elevations
June 20, 2001
Former Harbert Transportation Facility
19984 Meekland Avenue, Hayward, California

Figure 2
Project H9042



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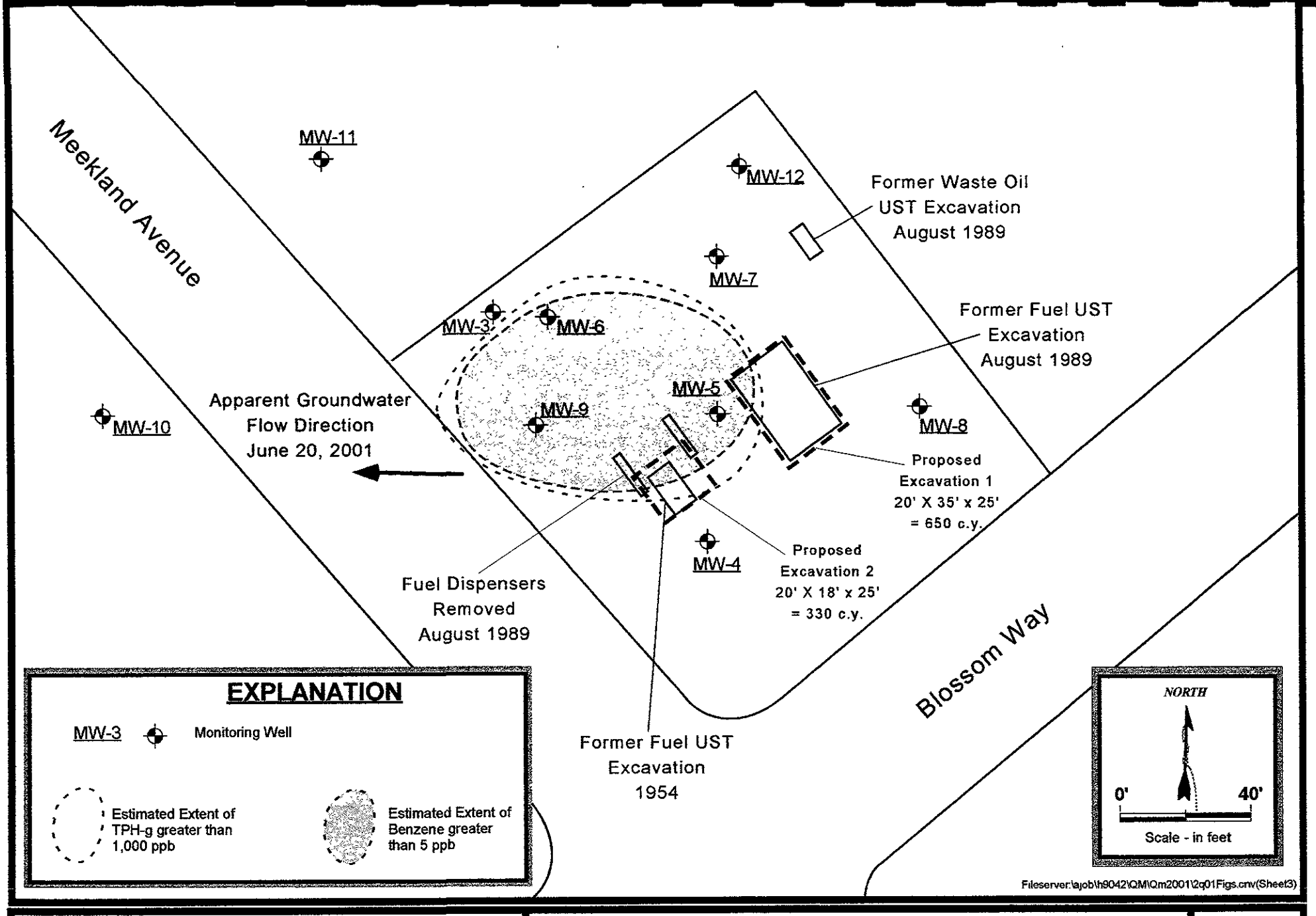
Site Plan with PHC Concentrations in Groundwater

June 20, 2001

Former Harbert Transportation Facility
19984 Meekland Avenue, Hayward, California

Figure 3
Project H9042



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120 Westgate Drive, Watsonville, Ca. 95076
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Site Plan with Extent of TPH-g and Benzene in Groundwater, June 20, 2001
Former Harbert Transportation Facility
19984 Meekland Avenue, Hayward, California

Figure 4 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 of approximately three to five well volumes of water. Purging is accomplished either by hand bailing or with a low flow submersible electric pump. During purging the physical parameters of temperature, conductivity, pH, and Oxidation-Reduction Potential (ORP) of the purge water are monitored with field instruments to insure that these parameters have stabilized (are within 15 percent of the previous measurement). The dissolved oxygen content of the groundwater from each well is measured with a YSI Model 57 field meter (equipped with a membrane covered Clark-type polarographic sensor probe, with built-in thermistors for temperature compensation). 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/0 Data Sheets
X/ COC's
___ Site Map
___ Photo Sheet
___ Chargeable Materials

Job Name: **Former Harbert Transportation Facility**	*Date:* **6/20/01**
Field Location: **19984 Meekland Avenue**	*Study #:* **H9042.Q**
Field Tasks: ❑ *Drilling* ❑ *Sampling* ❑ *Other* ***2nd Quarter 2001 Well Sampling***	*Weather Conditions:* SUNNY HOT
Personnel/Company onsite: (Weber, Hayes and Associates) **Aaron Bierman**	

FIELD WORK PLANNING: Performed on: **6/19/01**

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

Number of wells to be sampled: **Ten Wells**

Sample wells: **MW-3, 4, 5, 6, 7, 8, 9, 10, 11, & 12 for EPA 8015M & 8020 Analysis.**

Proposed sampling date: **6/20/01**

TIME:

6:30 am Arrive onsite to perform 2nd Quarter Monitoring Well Sampling.

COMMENTS:

Send all analytical to Entech Analytical Laboratory.

INITIALS:

AB -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.

-All samples are recorded on field Chain-of-Custody Sheets for transport to Laboratory.

BEGIN CALIBRATION:

pH, EC, Temp Meter # 4: Temp = 65.1 °F pH = 7.0 & 10, EC = 1413

NA Dissolved Oxygen Meter: Red-line____, Zero____, Temp=_____

Therefore, _____mg/L = Solubility of Oxygen in fresh water.

BEGIN SAMPLING ALL WELLS:

MW-8 4 12 11 10 3 7 6 5 9 ___ ___

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

COMMENTS:

All well will be purged of four casing volumes in the column requiring sampling (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.

AB 6/20/01

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)	Floating Product (comments).
			NOT OBTAINED	
MW-3	23.55	40	"	SLIGHT - STRONG @ TPH ODOR
MW-4	23.74	40	"	NO - SLIGHT TPH ODOR
MW-5	24.15	45	"	MODERATE - STRONG TPH ODOR
MW-6	24.13	45	"	MODERATE - STRONG TPH ODOR
MW-7	24.68	40	"	MODERATE-STRONG TPH ODOR
MW-8	24.09	40	"	NO TPH ODOR
MW-9	23.36	~~23.7~~ 40	"	STRONG TPH ODOR
MW-10	23.17	40	"	STRONG ODOR
MW-11	23.39	40	"	NO TPH ODOR
MW-12	24.47	40	"	NO TPH ODOR

HOW MANY PURGE DRUMS WERE LEFT ONSITE 6. APPROXIMATE GAL. 330.
CALL BAYSIDE OIL ON _____ TO HAVE DRUMS PURGED.
DRUMS WILL BE PURGED ON _____.

COMMENTS: WAIT FOR ANALYTICAL OF PURGE WATER COMPOSITE SAMPLE, THEN CALL FOR DISPOSAL OF ~~EB~~ PURGE WATER.

AB 6/20/01
Signature of Field Personnel & Date

F:\AB\FIELDLOG\QMField.wpd

WATER QUALITY SAMPLING INFORMATION

Project Name/No.: HARBERT / H9042.Q Date: 6/20/01

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

Samplers Name: AJS Recorded by: K. BIERMAN

Purge Equipment:

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

Sample Equipment:

_____ Disposable Bailer
X Whaler # 2
_____ Bladder Pump
_____ Submersible Pump

Analyses Requested (cricle all that apply):

(TPH-gas) (BTEX) (MTBE), 1, 2-DCA, EDB, 8260 Fuel Oxygenates
TPH-diesel, Stoddard Solvent
Intrinsic Bio. Parameters

Number and Types of Bottle Used:

4-40 mL VOAs

Well Number: MW-3
Depth to Water: 23.55 TOC
Well Depth: 40. BGS or TOC
Height W-Column: 16.45 feet (well depth - depth to water)
Volume in Well: 2.63 gallons (casing volume X height)
Gallons to purge: 10.53 gallons (volume X 4)

Well Diameter: 2" 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 ANALYTICAL **Transportation:** COURIER

Time (24 hr.)	Volume Purged (Gallons)	Conductivity (µs/cm)	Temperature (°F)	pH	Turbidity: Color, Fines	D.O. (ppm)
11:30:52	0	702	75.1	6.38	MODERATE-LOW; LT. BROWN, TRACE FINES	SLIGHT ODOR
11:37:15	5	730	72.7	6.86	LOW; LT. BROWN-CLEAR, TRACE FINES	STRONG ODOR
11:42:37	8	758	72.7	6.35	LOW; CLEAR, TRACE FINES	" "
11:45:04	10	711	72.3	6.88	LOW; CLEAR, TRACE-NO FINES	" "
11:48:07	12	704	71.9	6.89	" " " " " "	" "
11:51:12	14	710	72.0	6.87	LOW; CLEAR, TRACE-NO FINES	" "
	AJS 6/20/01					

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 = 16.45 x 0.8 = 13.16 - (Well Depth) 40 = Depth to water 26.84

Time: 11:52:41 1st measured depth to water, 24.17 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: 11:55 Sample ID: MW-3 Depth: 24.17 feet below TOC

Comments: STRONG ODOR NOTICED @ 5 GALLONS PURGE VOLUME. -CONTINUE PURGING

WATER QUALITY SAMPLING INFORMATION

Project Name/No.: HARBERT / H9042.Q **Date:** 6/20/01

Sample No.: MW-4 **Sample Location:** MW-4

Samplers Name: AD **Recorded by:** A. BIERMAN

Purge Equipment:

- ___ Bailer: Disposable or Acrylic
- (X) Whaler # ND
- ___ Bladder Pump
- ___ Submersible Pump

Sample Equipment:

- ___ Disposable Bailer
- (X) Whaler # ND
- ___ Bladder Pump
- ___ Submersible Pump

Analyses Requested (cricle all that apply):

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

TPH-diesel, Stoddard Solvent

Intrinsic Bio. Parameters

Number and Types of Bottle Used: 5-40mL VOAs

Well Number: MW-4
Depth to Water: 23.74 TOC
Well Depth: 40 BGS or TOC
Height W-Column: 16.26 feet (well depth - depth to water)
Volume in Well: 2.60 gallons (casing volume X height)
Gallons to purge: 10.4 gallons (volume X 4)

Well Diameter: 2" 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 ANALYTICAL **Transportation:** COURIER

Time (24 hr.)	Volume Purged (Gallons)	Conductivity (µs/cm)	Temperature (°F)	pH	Turbidity: Color, Fines	D.O. (ppm)
7:52:11	8	648	65.6	6.50	MODERATE; LT. BROWN, FEW FINES	(NA) NO ODOR
7:56:15	5	672	66.2	6.46	MOD-LOW; LT. BROWN, TRACE FINES	" "
7:58:52	8	699	66.4	6.46	LOW; LT. BROWN-CLEAR, TRACE FINES	" "
8:00:17	10	697	66.7	6.47	LOW; CLEAR, TRACE-NO FINES	" "
8:03:05	12	703	61.8	6.46	" " " " "	SLIGHT ODOR
8:05:28	14	695	66.7	6.47	" " " " "	" "
8:08:03	16	685	66.5	6.47	" " " " "	" "
STOP - SEE WELL RECOVERY & SAMPLING INFORMATION BELOW.						

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 = 16.26 x 0.8 = 13.0 - (Well Depth) 40 = Depth to water 26.99

Time: 8:10:40 1st measured depth to water, 25.1 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: 8:15 Sample ID: MW-4 Depth: 25.1 feet below TOC

Comments: TRACE ODOR NOTICED 3/4 OF THE WAY DURING PURGING.

WATER QUALITY SAMPLING INFORMATION

Project Name/No.: HARBERT **Date:** 6/20/01

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

Samplers Name: AB **Recorded by:** AB

Purge Equipment:

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

Sample Equipment:

- ____ Disposable Bailer
- X Whaler # 2
- ____ Bladder Pump
- ____ Submersible Pump

Analyses Requested (cricle all that apply):

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

TPH-diesel, Stoddard Solvent

Intrinsic Bio. Parameters

Number and Types of Bottle Used: 4-40mL VOAs

Well Number: MW-5
Depth to Water: 24.15 TOC
Well Depth: 45 BGS or TOC
Height W-Column: 20.85 feet (well depth - depth to water)
Volume in Well: 13.55 gallons (casing volume X height)
Gallons to purge: 40.66 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 ANALYTICAL **Transportation:** COURIER

Time (24 hr.)	Volume Purged (Gallons)	Conductivity (µs/cm)	Temperature (°F)	pH	Turbidity: Color, Fines	D.O. (ppm)
2:08:44	0	755	73.6	6.97	MODERATE-LOW, LT. BROWN, TRACE FINES	MOD-STRONG ODOR
2:14:36	5	760	73.1	6.99	LOW, LT. BROWN, TRACE FINES	" " "
2:18:44	10	739	73.4	6.98	LOW, CLEAR, TRACE FINES	" " "
2:22:50	30.15	718	73.1	7.03	LOW, CLEAR, TRACE-NO FINES	" " "
2:25:45	35.20	702	73.2	6.92	" " " " "	STRONG ODOR
2:30:10	30.25	729	73.1	6.99	" " " " "	" "
2:36:49	35	720	73.2	7.09	" " " " "	" "
2:40:51	41	731	73.3	7.13	" " " " "	" "
STOP - SEE WELL RECOVERY INFORMATION BELOW.						

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 = 20.85 x 0.8 = 16.68 - (Well Depth) 45 = Depth to water 28.32

Time: 2:41:26 1st measured depth to water, 32.31 feet below TOC. Is well within 80% of original well casing volume: Yes DRY No ✓

Time: 2:45:50 1st measured depth to water, 27.65 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: 2:47 Sample ID: MW-5 Depth: 27.65 feet below TOC

Comments: STRONG ODOR NOTICED @ ONSET OF PURGING, THROUGH-OUT PURGING, AND DURING SAMPLING.

WATER QUALITY SAMPLING INFORMATION

Project Name/No.: Herbert / H9042.Q **Date:** 6/20/01

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

Samplers Name: AB **Recorded by:** AB

Purge Equipment:

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

Sample Equipment:

- ____ Disposable Bailer
- X Whaler # 2
- ____ Bladder Pump
- ____ Submersible Pump

Analyses Requested (cricle all that apply):

TPH-gas, BTEX, MTBE, 1, 2-DCA, EDB, 8260 Fuel Oxygenates

TPH-diesel, Stoddard Solvent

Intrinsic Bio. Parameters

Number and Types of Bottle Used: 4 - 40ml VOAs

Well Number: MW-6
Depth to Water: 24.13 TOC
Well Depth: 45 BGS or TOC
Height W-Column: 20.87 feet (well depth - depth to water)
Volume in Well: 13.57 gallons (casing volume X height)
Gallons to purge: 40.7 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 ANALYTICAL **Transportation:** COURIER

Time (24 hr.)	Volume Purged (Gallons)	Conductivity (µs/cm)	Temperature (°F)	pH	Turbidity: Color, Fines	D.O. (ppm)
1:11:07	0	755	75.1	7.0	MODERATE-LOW; LT. BROWN, TRACE FINES	MODERATE ODOR
1:24:19	10	694	75.0	7.03	LOW; LT. BROWN-CLEAR, TRACE FINES	STRONG ODOR
1:30:50	15	727	74.8	7.01	LOW; CLEAR, TRACE FINES	" "
1:37:49	20	706	74.2	7.06	LOW; CLEAR, TRACE-NO FINES	" "
1:44:04	25	708	74.3	7.05	" " " " "	" "
1:50:55	30	712	74.5	7.0	" " " " "	" "
1:57:09	35	716	74.2	7.02	" " " " "	" "
2:04:40	40	721	74.1	7.04	" " " " "	" "
STOP - SEE WELL RECOVERY & SAMPLING INFORMATION - BELOW.						

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 = 20.87 x 0.8 = 16.70 - (Well Depth) 45 = Depth to water 28.3

Time: 2:05:37 1st measured depth to water, 25.17 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: 2:06pm Sample ID: MW-6 Depth: 25.17 feet below TOC

Comments: MODERATE TO STRONG ODOR THROUGHOUT PURGING & SAMPLING OF WELL.

WATER QUALITY SAMPLING INFORMATION

Project Name/No.: HARBERT / H9042.Q **Date:** 6/20/01

Sample No.: MW-7 **Sample Location:** MW-7

Samplers Name: AB **Recorded by:** A. BIERMAN

Purge Equipment:

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

Sample Equipment:

- ____ Disposable Bailer
- X Whaler # 2
- ____ Bladder Pump
- ____ Submersible Pump

Analyses Requested (cricle all that apply):

(TPH-gas, BTEX, MTBE, 1, 2-DCA, EDB, 8260 Fuel Oxygenates

TPH-diesel, Stoddard Solvent

Intrinsic Bio. Parameters

Number and Types of Bottle Used: 4-40ML VOAS

Well Number: MW-7
Depth to Water: 24.68 TOC
Well Depth: 40 BGS or TOC
Height W-Column: 15.32 feet (well depth - depth to water)
Volume in Well: 2.56 gallons (casing volume X height)
Gallons to purge: 29.87 gallons (volume X 3)

Well Diameter: 2" 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 ANALYTICAL **Transportation:** COURIER

Time (24 hr.)	Volume Purged (Gallons)	Conductivity (µs/cm)	Temperature (°F)	pH	Turbidity: Color, Fines	D.O. (ppm)
12:12:01	0	806	75.0	7.02	MODERATE-LOW; LT. BROWN, TRACE FINES	MOD ODOR
12:19:40	5	632	73.1	6.97	LOW; LT. BROWN-CLEAR, TRACE FINES	STRONG ODOR
12:28:19	10	702	73.2	6.82	LOW; CLEAR, TRACE-NO FINES	" "
12:35:40	15	686	73.1	6.94	" " " " "	" "
12:42:48	20	698	73.4	7.0	" " " " "	" "
12:50:25	25	676	73.1	6.96	LOW; CLEAR, TRACE-NO FINES	" "
12:53:07	30	678	73.2	6.98	" " " " "	" "
	AB 6/20/01					

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 = 15.32 x 0.8 = 12.26 - (Well Depth) 40 = Depth to water 27.74

Time: 12:59 1st measured depth to water, 25.55' 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: 1:00 pm Sample ID: MW-7 Depth: 25.55 feet below TOC

Comments: MODERATE - STRONG ODOR @ ONSET, AND THROUGH-OUT PURGING.

WATER QUALITY SAMPLING INFORMATION

Project Name/No.: FORMER HAGGERT TRANSPIRTATION **Date:** 6/20/01

Sample No.: MW-8 **Sample Location:** MW-8

Samplers Name: AJB **Recorded by:** A. BIERMAN

Purge Equipment:

- ___ Bailer: Disposable or Acrylic
- (X) Whaler # ND or #1
- ___ Bladder Pump
- ___ Submersible Pump

Sample Equipment:

- ___ Disposable Bailer
- (X) Whaler # ND or #1
- ___ Bladder Pump
- ___ Submersible Pump

Analyses Requested (cricle all that apply):

TPH-gas, BTEX, MTBE, 1, 2-DCA, EDB, 8260 Fuel Oxygenates

TPH-diesel, Stoddard Solvent

Intrinsic Bio. Parameters

Number and Types of Bottle Used: 5-40ml VOAs

Well Number: MW-8
Depth to Water: 24.09 TOC
Well Depth: 40 BGS or TOC
Height W-Column: 15.91 feet (well depth - depth to water)
Volume in Well: 10.34 gallons (casing volume X height)
Gallons to purge: 31.02 gallons (volume X 3)

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 ANALYTICAL **Transportation:** COURIER

Time (24 hr.)	Volume Purged (Gallons)	Conductivity (µs/cm)	Temperature (°F)	pH	Turbidity: Color, Fines	D.O. (ppm)
7:02 pm	0	470	64.8	6.42	MODERATE-LOW, LT. BROWN, TRACE FINES	NA
7:06:31	5	525	65.2	6.41	LOW; LT. BROWN-CLEAR, TRACE FINES	NO ODOR
7:10:05	10	545	65.0	6.41	LOW; CLEAR, TRACE-NO FINES	" "
7:13:32	15	545	64.9	6.45	LOW; CLEAR, TRACE-NO FINES	" "
7:17:15	20	555	65.0	6.47	" " " " "	" "
7:21:18	25	524	65.1	6.49	LOW; LT. BROWN-CLEAR, TRACE FINES	" "
7:25:10	30	558	65.2	6.49	LOW; CLEAR, TRACE-NO FINES	" "
7:27:07	32	545	65.2	6.49	" " " " "	" "
STOP-	SEE WELL RECOVERY & SAMPLING INFORMATION - BELOW.					

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 = 40-15.91 x 0.8 = 12.73 - (Well Depth) 40 = Depth to water 27.27

Time: 7:28:27 1st measured depth to water, 26.73 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: 7:30 Sample ID: MW-8 Depth: 26.73 feet below TOC

Comments: CONE OF DEPRESSION ENCOUNTERS PUMP @ 25 GALLONS PURGE VOLUME - WHICH INCREASE TURBIDITY SLIGHTLY - LOWER PUMP / SURGE - CONTINUE PURGING.

WATER QUALITY SAMPLING INFORMATION

Project Name/No.: HARBERT / H9042 **Date:** 6/20/01

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

Samplers Name: AB **Recorded by:** A. BIEDERMAN

Purge Equipment:

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

Sample Equipment:

- ____ Disposable Bailer
- X Whaler # 2
- ____ Bladder Pump
- ____ Submersible Pump

Analyses Requested (circle all that apply):

TPH-gas, BTEX, MTBE, 1, 2-DCA, EDB, 8260 Fuel Oxygenates

TPH-diesel, Stoddard Solvent

Intrinsic Bio. Parameters

Number and Types of Bottle Used:

Well Number: MW-9
Depth to Water: 23.36 TOC
Well Depth: 40 BGS or TOC
Height W-Column: 16.64 feet (well depth - depth to water)
Volume in Well: 10.82 gallons (casing volume X height)
Gallons to purge: 32.45 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 ANALYTICAL **Transportation:**

Time (24 hr.)	Volume Purged (Gallons)	Conductivity (µs/cm)	Temperature (°F)	pH	Turbidity: Color, Fines	D.O. (ppm)
2:56:54	0	724	73.7	7.02	MODERATE-LOW; LT. BROWN; TRACE FINES	STRONG ODOR
2:59:25	5	693	73.5	7.02	LOW; LT. BROWN; TRACE FINES	" "
3:02:54	10	669	73.5	7.07	LOW; CLEAR, LT. BROWN; TRACE FINES	" "
3:05:55	15	675	73.2	7.16	LOW; CLEAR, TRACE-NO FINES	" "
3:08:32	20	663	72.9	7.17	" " " " "	" "
3:11:08	25	665	73.1	7.24	LOW; CLEAR, TRACE-NO FINES	" "
3:13:47	30	668	73.2	7.26	" " " " "	" "
3:15:37	33	672	73.2	7.21		
STOP - SEE						

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 = 16.64 x 0.8 = 13.31 - (Well Depth) 40 = Depth to water 26.69

Time: 3:17 1st measured depth to water, 24.74 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: 3:20 Sample ID: MW-9 Depth: 24.74 feet below TOC

Comments: STRONG ODOR NOTICED @ ONSET OF PURGING, THROUGH-OUT PURGING & DURING SAMPLING

WATER QUALITY SAMPLING INFORMATION

Project Name/No.: HARBERT / H9042 **Date:** 6/20/01

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

Samplers Name: AB **Recorded by:** A. BIERMAN

Purge Equipment:

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

Sample Equipment:

- ___ Disposable Bailer
- ___ Whaler # 2
- ___ Bladder Pump
- ___ Submersible Pump

Analyses Requested (cricle all that apply):

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

TPH-diesel, Stoddard Solvent

Intrinsic Bio. Parameters

Number and Types of Bottle Used: 4 ~~#~~ - 40 ML VOAS

Well Number: MW-10
Depth to Water: 23.17 TOC
Well Depth: 40 BGS or TOC
Height W-Column: 16.83 feet (well depth - depth to water)
Volume in Well: 10.93 gallons (casing volume X height)
Gallons to purge: 32.82 gallons (volume X ~~4~~ 3)

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 ANALYTICAL **Transportation:** COURIER

Time (24 hr.)	Volume Purged (Gallons)	Conductivity (µs/cm)	Temperature (°F)	pH	Turbidity: Color, Fines	D.O. (ppm)
10:29:22	X	900	71.5	6.95	LOW-MOD; LT. BROWN, TRACE FINES	NO ODOR
10:33:10	5	878	70.9	6.83	LOW; LT. BROWN-CLEAR, TRACE FINES	STRONG ODOR
10:36:51	10	879	70.4	6.86	LOW; CLEAR, TRACE-NO FINES	" "
10:40:30	15	878	70.1	6.91	LOW; LT. BROWN-CLEAR, TRACE FINES	" "
10:44:35	20	873	69.7	6.95	LOW; CLEAR, TRACE-NO FINES	" "
10:49:40	25	885	70.2	6.93	LOW; CLEAR, TRACE-NO FINES	" "
10:55:35	30	891	70.1	6.92	" " " " "	" "
11:00:07	35	886	70.1	6.93	" " " " "	" "
STOP - SEE WELL RECOVERY & SAMPLING INFORMATION - BELOW.						

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 = 16.83 x 0.8 = 13.46 - (Well Depth) 40 = Depth to water 26.54

Time: 11:02 1st measured depth to water, 23.45 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: 11:05 Sample ID: MW-10 Depth: 23.45 feet below TOC

Comments: @ 4 GALLONS PURGE VOLUME - STRONG ODOR. - CONTINUE PURGING.

WATER QUALITY SAMPLING INFORMATION

Project Name/No.: HARBERT / H9042 Date: 6/20/01

Sample No.: MW-11 Sample Location: MW-11

Samplers Name: AB Recorded by: A. BIERMAN

Purge Equipment:

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

Sample Equipment:

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

Analyses Requested (cricle all that apply):

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

TPH-diesel, Stoddard Solvent

Intrinsic Bio. Parameters

Number and Types of Bottle Used:

5 - 40 mL VOAs

Well Number: MW-11
Depth to Water: 23.39 TOC
Well Depth: 40 BGS or TOC
Height W-Column: 16.61 feet (well depth - depth to water)
Volume in Well: 2.657 gallons (casing volume X height)
Gallons to purge: 10.63 gallons (volume X 4)

Well Diameter: 2" 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 ANALYTICAL Transportation: COURIER

Time (24 hr.)	Volume Purged (Gallons)	Conductivity (µs/cm)	Temperature (°F)	pH	Turbidity: Color, Fines	D.O. (ppm)
9:14:00	8	1066	76.3	6.57	MOD-LOW; LT. BROWN, TRACE FINES	NO ODOR
9:20:05	5	973	73.0	6.63	LOW; LT. BROWN-CLEAR, TRACE FINES	" "
9:23:06	8	997	72.4	6.69	LOW; CLEAR, TRACE-NO FINES	" "
9:24:45	10	996	72.3	6.71	" " " " "	" "
9:26:42	12	995	72.7	6.74	" " " " "	" "
STOP - SEE WELL RECOVERY & SAMPLING INFORMATION BELOW.						
	AB 6/20/01					

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 = 16.61 x 0.8 = 13.28 - (Well Depth) 40 = Depth to water 26.71

Time: 9:30 1st measured depth to water, 24.86 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: 9:33 am Sample ID: MW-11 Depth: 24.86 feet below TOC

Comments:

AB - APPEARED CLEAR.

WATER QUALITY SAMPLING INFORMATION

Project Name/No.: HARBERT / H9042.Q **Date:** 6/20/01

Sample No.: MW-12 **Sample Location:** MW-12

Samplers Name: AD **Recorded by:** A. BIERMAN

Purge Equipment:

- ___ Bailer: Disposable or Acrylic
- (X) Whaler # ND
- ___ Bladder Pump
- ___ Submersible Pump

Sample Equipment:

- ___ Disposable Bailer
- (X) Whaler # ND
- ___ Bladder Pump
- ___ Submersible Pump

Analyses Requested (cricle all that apply):

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

TPH-diesel, Stoddard Solvent

Intrinsic Bio. Parameters

Number and Types of Bottle Used: 5 - 40 mL VOAs

Well Number: MW-12

Depth to Water: 24.47 TOC

Well Depth: 40 BGS or TOC

Height W-Column: 15.53 feet (well depth - depth to water)

Volume in Well: 2.484 gallons (casing volume X height)

Gallons to purge: 9.94 gallons (volume X 4)

Well Diameter: 2" 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 ANALYTICAL **Transportation:** COURIER

Time (24 hr.)	Volume Purged (Gallons)	Conductivity (µs/cm)	Temperature (°F)	pH	Turbidity: Color, Fines	D.O. (ppm)
8:34:20	(X)	633	74.2	6.52	MODERATE - LOW; LT. BROWN, TRACE FINES	NOT CHECK
8:37:50	5	644	72.5	6.50	LOW; LT. BROWN, TRACE FINES	" "
8:40:14	9	627	72.1	6.50	LOW; CLEAR, TRACE FINES	" "
8:42:48	10	637	72.4	6.54	" " " "	" "
8:45:20	12	631	72.4	6.55	" " " "	" "
STOP - SEE WELL RECOVERY & SAMPLING INFORMATION BELOW						

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 = 15.53 x 0.8 = 12.42 - (Well Depth) 40 = Depth to water 25.58

Time: 8:50 1st measured depth to water, 24.97 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: 8:52 Sample ID: MW-12 Depth: 24.97 feet below TOC

Comments:

AD 6/20/01

Appendix B

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

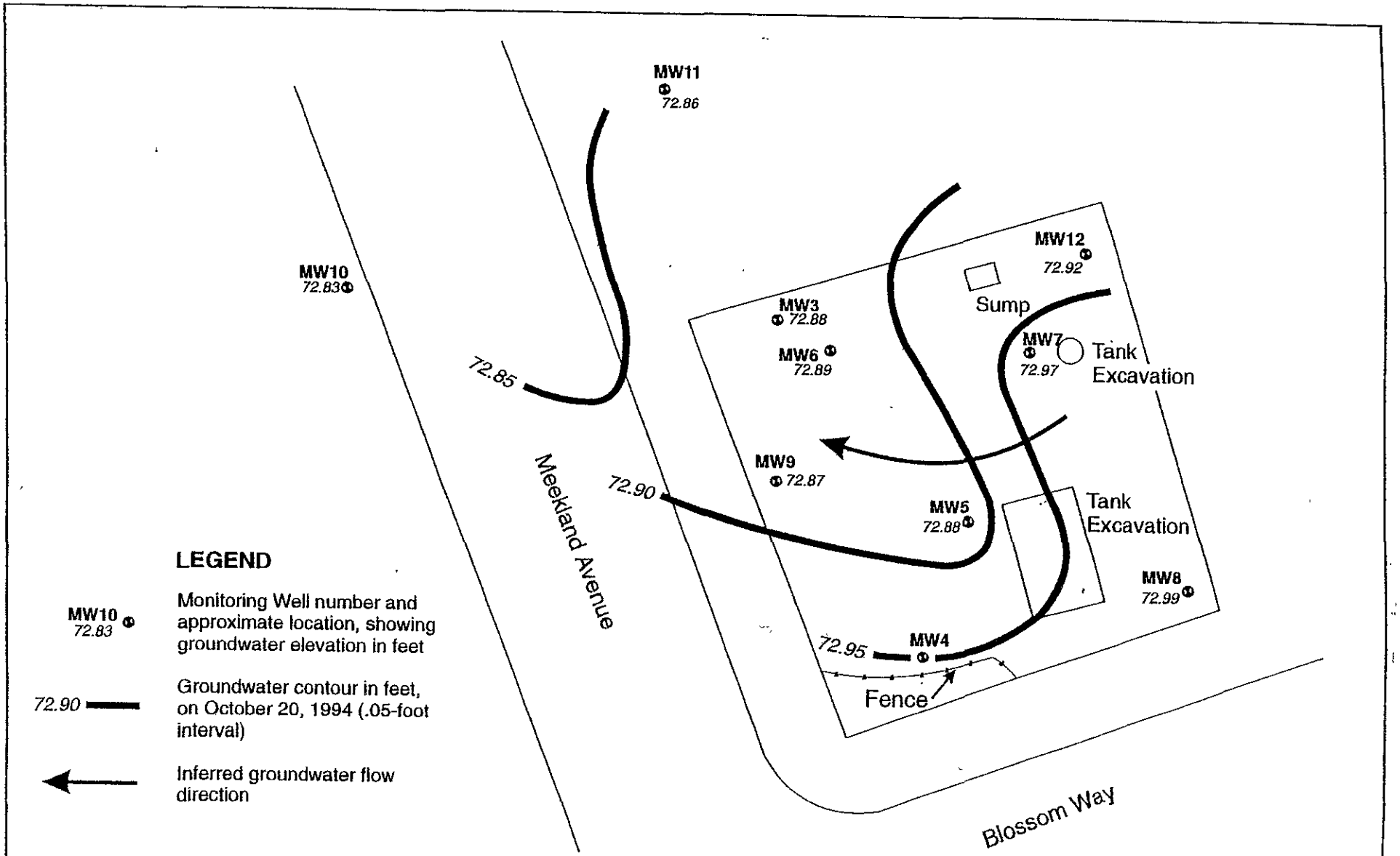
AGI TECHNOLOGIES

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.



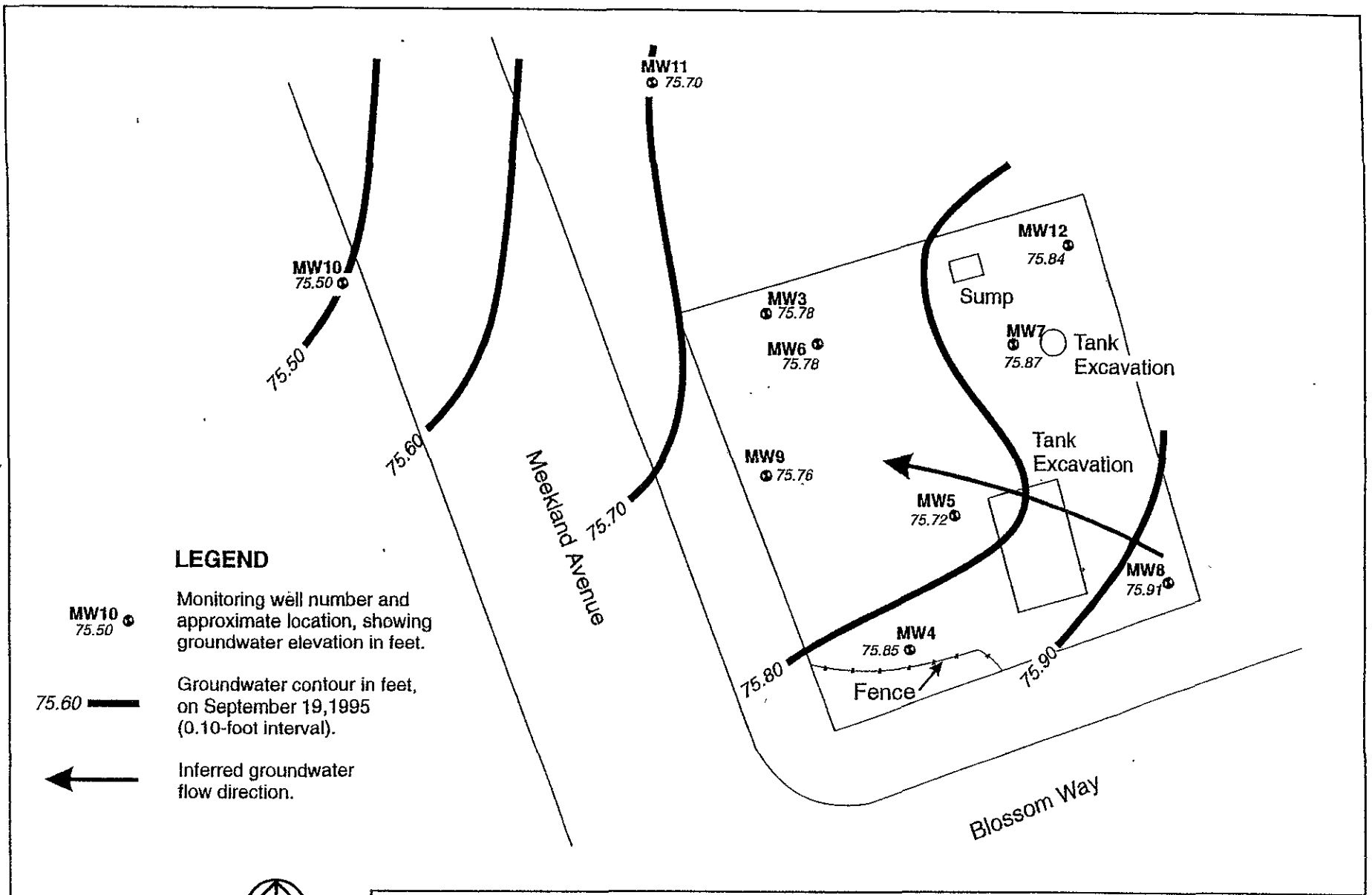
Groundwater Elevation and Contour Map

Harbert Transportation/Meekland Avenue
Hayward, California

10/20/94

FIGURE 3

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



AGI TECHNOLOGIES

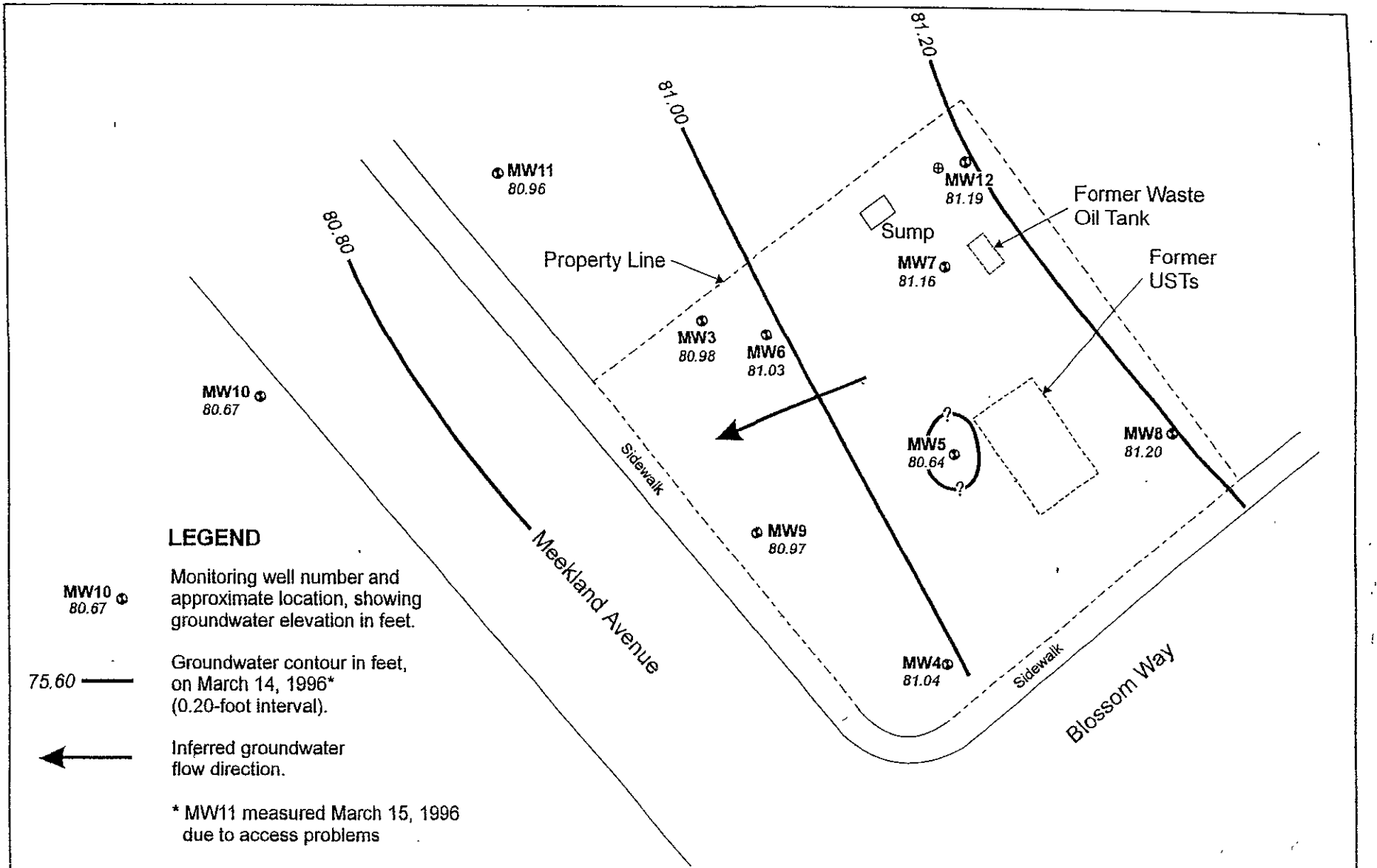
Groundwater Elevation and Contour Map

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

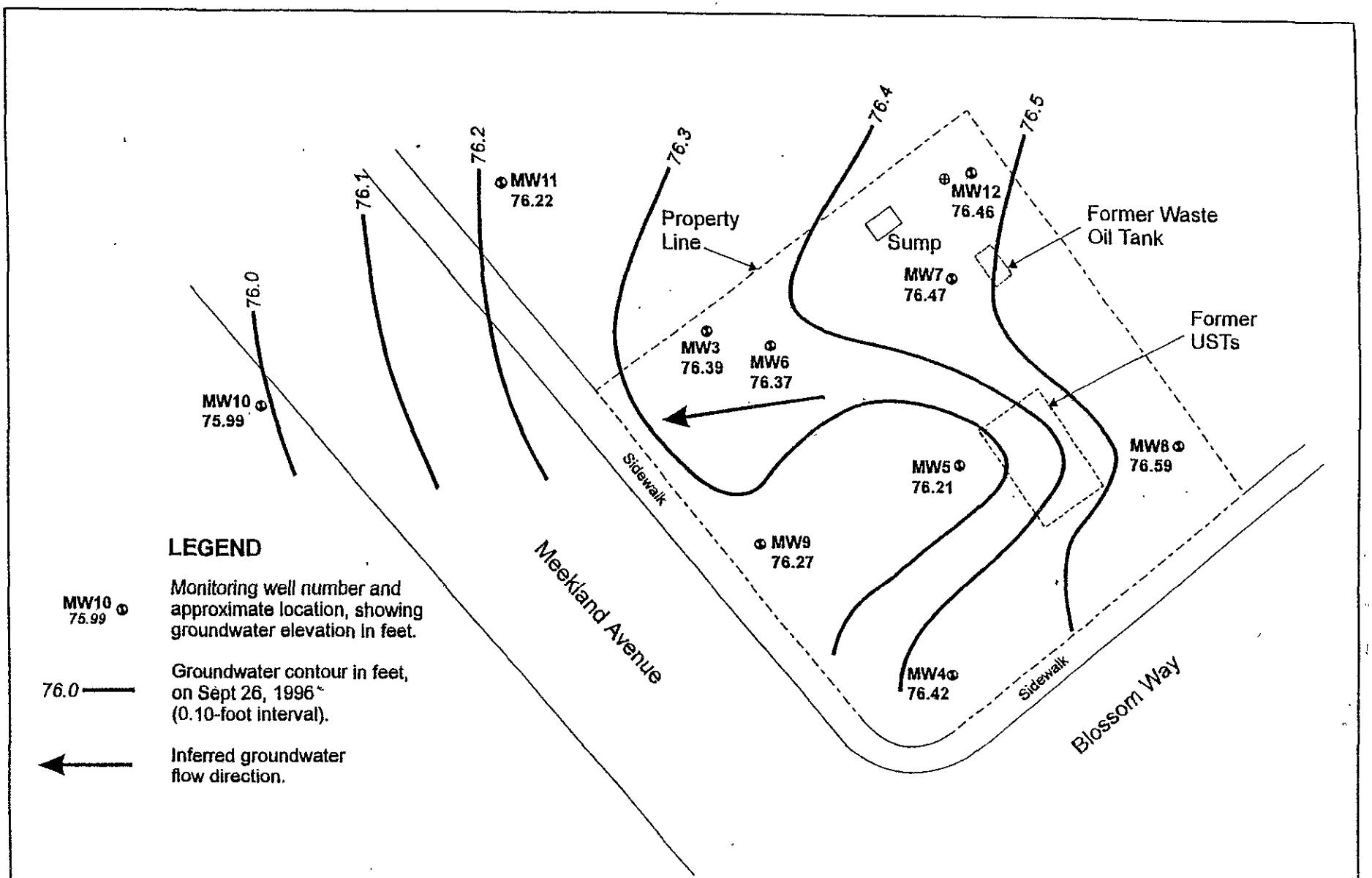
Groundwater Elevation and Contour Map

Harbert Transportation/Meekland Avenue
Hayward, California

3.14.96

FIGURE 3

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

June 27, 2001

Aaron Bierman
Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076

Order:	25999	**Date Collected:**	6/20/01
Project Name:	Former Harbert Transportation Facility	**Date Received:**	6/20/01
Project Number:	*H9042.Q*	**P.O. Number:**	*H9042.Q*
Project Notes:			

On June 20, 2001, samples were received under documentented chain of custody. Results for the following analyses are attached:

Matrix	Test	Method
Liquid	Gas/BTEX/MTBE	EPA 8015 MOD. (Purgeable)
		EPA 8020

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,

Michelle L. Anderson
Laboratory Director

Weber, Hayes & Associates
RECEIVED JUL 16 2001

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: Aaron Bierman

Date: 06/27/01
Date Received: 6/20/01
Project Name: Former Harbert Transportation Facilit
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Aaron Bierman

Certified Analytical Report

Order ID: 25999 **Lab Sample ID:** 25999-001 **Client Sample ID:** MW-3

Sample Time: **Sample Date:** 6/20/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	4.4		2	0.5	1	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Toluene	2.4		2	0.5	1	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Ethyl Benzene	62		2	0.5	1	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Xylenes, Total	23		2	0.5	1	µg/L	N/A	6/21/01	WGC42062	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	88	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		2	5	10	µg/L	N/A	6/21/01	WGC42062	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	88	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	760		2	50	100	µg/L	N/A	6/21/01	WGC42062	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	75	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)

Michelle L. Anderson, Laboratory Director

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: Aaron Bierman

Date: 06/27/01
Date Received: 6/20/01
Project Name: Former Harbert Transportation Facilit
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Aaron Bierman

Certified Analytical Report

Order ID: 25999 **Lab Sample ID:** 25999-002 **Client Sample ID:** MW-4

Sample Time: **Sample Date:** 6/20/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Toluene	ND		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Xylenes, Total	ND		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	95	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	5	5	µg/L	N/A	6/21/01	WGC42062	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	95	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	50	50	µg/L	N/A	6/21/01	WGC42062	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	101	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)

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Date: 06/27/01
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Project Name: Former Harbert Transportation Facilit
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Aaron Bierman

Certified Analytical Report

Order ID: 25999 **Lab Sample ID:** 25999-003 **Client Sample ID:** MW-5

Sample Time: **Sample Date:** 6/20/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	120		20	0.5	10	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Toluene	130		20	0.5	10	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Ethyl Benzene	740		20	0.5	10	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Xylenes, Total	940		20	0.5	10	µg/L	N/A	6/21/01	WGC42062	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	95	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		20	5	100	µg/L	N/A	6/21/01	WGC42062	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	95	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	6500		20	50	1000	µg/L	N/A	6/21/01	WGC42062	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	101	65 - 135

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

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Attn: Aaron Bierman

Date: 06/27/01
Date Received: 6/20/01
Project Name: Former Harbert Transportation Facilit
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Aaron Bierman

Certified Analytical Report

Order ID: 25999 **Lab Sample ID:** 25999-004 **Client Sample ID:** MW-6

Sample Time: **Sample Date:** 6/20/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	14		5	0.5	2.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Toluene	4.6		5	0.5	2.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Ethyl Benzene	160		5	0.5	2.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Xylenes, Total	79		5	0.5	2.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020

Surrogate	*Surrogate Recovery*	*Control Limits (%)*
aaa-Trifluorotoluene	92	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		5	5	25	µg/L	N/A	6/21/01	WGC42062	EPA 8020

Surrogate	Surrogate Recovery	*Control Limits (%)*
aaa-Trifluorotoluene	92	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	1800		5	50	250	µg/L	N/A	6/21/01	WGC42062	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	85	65 - 135

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

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Attn: Aaron Bierman

Date: 06/27/01
Date Received: 6/20/01
Project Name: Former Harbert Transportation Facilit
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Aaron Bierman

Certified Analytical Report

Order ID: 25999 **Lab Sample ID:** 25999-005 **Client Sample ID:** MW-7

Sample Time: **Sample Date:** 6/20/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	2.4		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Toluene	0.96		1	0.5	0 5	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Ethyl Benzene	30		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Xylenes, Total	9.7		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	89	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	6 0		1	5	5	µg/L	N/A	6/21/01	WGC42062	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	89	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	430		1	50	50	µg/L	N/A	6/21/01	WGC42062	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	81	65 - 135

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

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Attn: Aaron Bierman

Date: 06/27/01
Date Received: 6/20/01
Project Name: Former Harbert Transportation Facilit
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Aaron Bierman

Certified Analytical Report

Order ID: 25999 **Lab Sample ID:** 25999-006 **Client Sample ID:** MW-8

Sample Time: **Sample Date:** 6/20/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Toluene	ND		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Xylenes, Total	ND		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	94	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	5	5	µg/L	N/A	6/21/01	WGC42062	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	94	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	50	50	µg/L	N/A	6/21/01	WGC42062	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	102	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)

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Attn: Aaron Bierman

Date: 06/27/01
Date Received: 6/20/01
Project Name: Former Harbert Transportation Facilit
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Aaron Bierman

Certified Analytical Report

Order ID: 25999 **Lab Sample ID:** 25999-007 **Client Sample ID:** MW-9

Sample Time: **Sample Date:** 6/20/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	330		25	0.5	12.5	µg/L	N/A	6/22/01	WGC42064	EPA 8020
Toluene	88		25	0.5	12.5	µg/L	N/A	6/22/01	WGC42064	EPA 8020
Ethyl Benzene	850		25	0.5	12.5	µg/L	N/A	6/22/01	WGC42064	EPA 8020
Xylenes, Total	1700		25	0.5	12.5	µg/L	N/A	6/22/01	WGC42064	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	95	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		25	5	125	µg/L	N/A	6/22/01	WGC42064	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	95	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	8300		25	50	1250	µg/L	N/A	6/22/01	WGC42064	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	97	65 - 135

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

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Watsonville, CA 95076
Attn: Aaron Bierman

Date: 06/27/01
Date Received: 6/20/01
Project Name: Former Harbert Transportation Facilit
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Aaron Bierman

Certified Analytical Report

Order ID: 25999 **Lab Sample ID:** 25999-008 **Client Sample ID:** MW-10

Sample Time: **Sample Date:** 6/20/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	3.0		2	0.5	1	µg/L	N/A	6/23/01	WGC42064	EPA 8020
Toluene	1.6		2	0.5	1	µg/L	N/A	6/23/01	WGC42064	EPA 8020
Ethyl Benzene	5.1		2	0.5	1	µg/L	N/A	6/23/01	WGC42064	EPA 8020
Xylenes, Total	13		2	0.5	1	µg/L	N/A	6/23/01	WGC42064	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	93	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		2	5	10	µg/L	N/A	6/23/01	WGC42064	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	93	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	810	x	2	50	100	µg/L	N/A	6/23/01	WGC42064	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	96	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)

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Attn: Aaron Bierman

Date: 06/27/01
Date Received: 6/20/01
Project Name: Former Harbert Transportation Facilit
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Aaron Bierman

Certified Analytical Report

Order ID: 25999 **Lab Sample ID:** 25999-009 **Client Sample ID:** MW-11

Sample Time: **Sample Date:** 6/20/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Toluene	ND		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Xylenes, Total	ND		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	94	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	5	5	µg/L	N/A	6/21/01	WGC42062	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	94	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	50	50	µg/L	N/A	6/21/01	WGC42062	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	100	65 - 135

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

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Attn: Aaron Bierman

Date: 06/27/01
Date Received: 6/20/01
Project Name: Former Harbert Transportation Facilit
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Aaron Bierman

Certified Analytical Report

Order ID: 25999 **Lab Sample ID:** 25999-010 **Client Sample ID:** MW-12

Sample Time: **Sample Date:** 6/20/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Toluene	ND		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020
Xylenes, Total	ND		1	0.5	0.5	µg/L	N/A	6/21/01	WGC42062	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	95	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	5	5	µg/L	N/A	6/21/01	WGC42062	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	95	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	50	50	µg/L	N/A	6/21/01	WGC42062	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	101	65 - 135

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

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Attn: Aaron Bierman

Date: 06/27/01
Date Received: 6/20/01
Project Name: Former Harbert Transportation Facilit
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Aaron Bierman

Certified Analytical Report

Order ID: 25999 **Lab Sample ID:** 25999-011 **Client Sample ID:** Purge Water Comp.

Sample Time: **Sample Date:** 6/20/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	39		5	0.5	2.5	µg/L	N/A	6/23/01	WGC42064	EPA 8020
Toluene	85		5	0 5	2.5	µg/L	N/A	6/23/01	WGC42064	EPA 8020
Ethyl Benzene	160		5	0.5	2.5	µg/L	N/A	6/23/01	WGC42064	EPA 8020
Xylenes, Total	430		5	0.5	2.5	µg/L	N/A	6/23/01	WGC42064	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	94	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		5	5	25	µg/L	N/A	6/23/01	WGC42064	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	94	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	1700		5	50	250	µg/L	N/A	6/23/01	WGC42064	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	97	65 - 135

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

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STANDARD LAB QUALIFIERS (FLAGS)

All Entech lab reports now reference standard lab qualifiers. These qualifiers are noted in the adjacent column to the analytical result and are adapted from the U.S. EPA CLP program. The current qualifier list is as follows:

Qualifier (Flag)	Description
U	Compound was analyzed for but not detected
J	Estimated value for tentatively identified compounds or if result is below PQL but above MDL
N	Presumptive evidence of a compound (for Tentatively Identified Compounds)
B	Analyte is found in the associated Method Blank
E	Compounds whose concentrations exceed the upper level of the calibration range
D	Multiple dilutions reported for analysis; discrepancies between analytes may be due to dilution
X	Results within quantitation range; chromatographic pattern not typical of fuel

Entech Analytical Labs, Inc.

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July 02, 2001

Aaron Bierman
Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076

Order:	25999	**Date Collected:**	6/20/01
Project Name:	Former Harbert Transportation Facility	**Date Received:**	6/20/01
Project Number:	H9042.Q	**P.O. Number:**	H9042.Q
Project Notes:			

On June 20, 2001, samples were received under documentented chain of custody. Results for the following analyses are attached:

Matrix	Test	Method
Liquid	MTBE by EPA 8260B	EPA 8260B

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,

Michelle L. Anderson
Laboratory Director

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: Aaron Bierman

Date: 7/2/01
Date Received: 6/20/01
Project Name: Former Harbert Transportation Fac
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Aaron Bierman

Certified Analytical Report

Order ID: 25999 **Lab Sample ID:** 25999-001 **Client Sample ID:** MW-3

Sample Time: **Sample Date:** 6/20/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	5	5	µg/L	6/26/01	WMS31057	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	99	65 - 135
Dibromofluoromethane	108	57 - 139
Toluene-d8	101	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)

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Project Name: Former Harbert Transportation Fac
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Aaron Bierman

Certified Analytical Report

Order ID: 25999 **Lab Sample ID:** 25999-003 **Client Sample ID:** MW-5

Sample Time: **Sample Date:** 6/20/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	5	5	µg/L	6/26/01	WMS31057	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	100	65 - 135
Dibromofluoromethane	108	57 - 139
Toluene-d8	101	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)

Michelle L. Anderson, Laboratory Director

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: Aaron Bierman

Date: 7/2/01
Date Received: 6/20/01
Project Name: Former Harbert Transportation Fac
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Aaron Bierman

Certified Analytical Report

Order ID: 25999 **Lab Sample ID:** 25999-004 **Client Sample ID:** MW-6

Sample Time: **Sample Date:** 6/20/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	5	5	µg/L	6/26/01	WMS31057	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	99	65 - 135
Dibromofluoromethane	106	57 - 139
Toluene-d8	100	65 - 135

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

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120 Westgate Drive
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Attn: Aaron Bierman

Date: 7/2/01
Date Received: 6/20/01
Project Name: Former Harbert Transportation Fac
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Aaron Bierman

Certified Analytical Report

Order ID: 25999 **Lab Sample ID:** 25999-005 **Client Sample ID:** MW-7

Sample Time: **Sample Date:** 6/20/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	5	5	µg/L	6/26/01	WMS31057	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	99	65 - 135
Dibromofluoromethane	107	57 - 139
Toluene-d8	100	65 - 135

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

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Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076
Attn: Aaron Bierman

Date: 07/02/01
Date Received: 6/20/01
Project Name: Former Harbert Transportation Fac
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Aaron Bierman

Certified Analytical Report

Order ID: 25999 **Lab Sample ID:** 25999-007 **Client Sample ID:** MW-9

Sample Time: **Sample Date:** 6/20/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	MDL	DLR	Units	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		2	0.3	0.6	µg/L	6/28/01	WMS31061	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	94	65 - 135
Dibromofluoromethane	102	57 - 139
Toluene-d8	121	65 - 135

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

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

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Watsonville, CA 95076
Attn: Aaron Bierman

Date: 7/2/01
Date Received: 6/20/01
Project Name: Former Harbert Transportation Fac
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Aaron Bierman

Certified Analytical Report

Order ID: 25999 **Lab Sample ID:** 25999-008 **Client Sample ID:** MW-10

Sample Time: **Sample Date:** 6/20/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	5	5	µg/L	6/28/01	WMS31061	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	96	65 - 135
Dibromofluoromethane	103	57 - 139
Toluene-d8	123	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)

Michelle L. Anderson, Laboratory Director

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Weber, Hayes and Associates
120 Westgate Drive
Watsonville, CA 95076
Attn: Aaron Bierman

Date: 7/2/01
Date Received: 6/20/01
Project Name: Former Harbert Transportation Fac
Project Number: H9042.Q
P.O. Number: H9042.Q
Sampled By: Aaron Bierman

Certified Analytical Report

Order ID: 25999 **Lab Sample ID:** 25999-011 **Client Sample ID:** Purge Water Comp.

Sample Time: **Sample Date:** 6/20/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	5	5	µg/L	6/28/01	WMS31061	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	94	65 - 135
Dibromofluoromethane	105	57 - 139
Toluene-d8	122	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)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

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Quality Control Results Summary

QC Batch #: WGC42062 **Units:** µg/L
Matrix: Liquid **Date Analyzed:** 6/21/01

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		561		468.1	LCS	83.4			65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	aaa-Trifluorotoluene		98			65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		6.2		5.86	LCS	94.5			65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		7.8		7.23	LCS	92.7			65.0 - 135.0
Toluene	EPA 8020	ND		35.8		33.4	LCS	93.3			65.0 - 135.0
Xylenes, total	EPA 8020	ND		43		38.8	LCS	90.2			65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	aaa-Trifluorotoluene		98			65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		52.8		48.5	LCS	91.9			65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	aaa-Trifluorotoluene		98			65 - 135					
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		561		456.9	LCSD	81.4	2.42	25.00	65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	aaa-Trifluorotoluene		101			65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		6.2		5.83	LCSD	94.0	0.51	25.00	65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		7.8		6.79	LCSD	87.1	6.28	25.00	65.0 - 135.0
Toluene	EPA 8020	ND		35.8		32.8	LCSD	91.6	1.81	25.00	65.0 - 135.0
Xylenes, total	EPA 8020	ND		43		36.8	LCSD	85.6	5.29	25.00	65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	aaa-Trifluorotoluene		98			65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		52.8		50.5	LCSD	95.6	4.04	25.00	65.0 - 135.0
	Surrogate		**Surrogate Recovery**			**Control Limits (%)**					
	aaa-Trifluorotoluene		98			65 - 135					

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Quality Control Results Summary

QC Batch #: WGC42064 **Units:** µg/L
Matrix: Liquid **Date Analyzed:** 6/22/01

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		561		468.39	LCS	83.5			65.0 - 135.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	aaa-Trifluorotoluene			103		65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		6.2		6.058	LCS	97.7			65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		7.8		6.979	LCS	89.5			65.0 - 135.0
Toluene	EPA 8020	ND		35.8		33.691	LCS	94.1			65.0 - 135.0
Xylenes, total	EPA 8020	ND		43		37.437	LCS	87.1			65.0 - 135.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	aaa-Trifluorotoluene			102		65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		52.8		50.426	LCS	95.5			65.0 - 135.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	aaa-Trifluorotoluene			102		65 - 135					
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		561		459.21	LCSD	81.9	1.98	25.00	65.0 - 135.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	aaa-Trifluorotoluene			103		65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		6.2		5.686	LCSD	91.7	6.34	25.00	65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		7.8		6.830	LCSD	87.6	2.16	25.00	65.0 - 135.0
Toluene	EPA 8020	ND		35.8		33.037	LCSD	92.3	1.96	25.00	65.0 - 135.0
Xylenes, total	EPA 8020	ND		43		36.819	LCSD	85.6	1.66	25.00	65.0 - 135.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	aaa-Trifluorotoluene			100		65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		52.8		48.596	LCSD	92.0	3.70	25.00	65.0 - 135.0
	Surrogate			**Surrogate Recovery**		**Control Limits (%)**					
	aaa-Trifluorotoluene			100		65 - 135					

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Quality Control Results Summary

QC Batch #: WMS31061 **Units:** µg/L
Matrix: Liquid **Date Analyzed:** 6/28/01

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: Oxygenates by EPA 8260B											
Methyl-t-butyl Ether	EPA 8260B	ND		20		19.72	LCS	98.6			65.0 - 135.0

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	95	65 - 135
Dibromofluoromethane	108	57 - 139
Toluene-d8	116	65 - 135

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: Oxygenates by EPA 8260B											
Methyl-t-butyl Ether	EPA 8260B	ND		20		18.94	LCSD	94.7	4.04	25.00	65.0 - 135.0

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	93	65 - 135
Dibromofluoromethane	105	57 - 139
Toluene-d8	124	65 - 135

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Quality Control Results Summary

QC Batch #: WMS31057 **Units:** µg/L
Matrix: Liquid **Date Analyzed:** 6/26/01

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: Oxygenates by EPA 8260B											
Methyl-t-butyl Ether	EPA 8260B	ND		20		13.9	LCS	69.5			65.0 - 135.0

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	98	65 - 135
Dibromofluoromethane	112	57 - 139
Toluene-d8	99	65 - 135

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: Oxygenates by EPA 8260B											
Methyl-t-butyl Ether	EPA 8260B	ND		20		14.5	LCSD	72.5	4.23	25.00	65.0 - 135.0

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	98	65 - 135
Dibromofluoromethane	111	57 - 139
Toluene-d8	97	65 - 135

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 #: FORMER HARBERT TRANSPORTATION FACILITY / H9042.09

LABORATORY: Entech Analytical

SEND CERTIFIED RESULTS TO: _____

TURNAROUND TIME: (Normal) 24hr Rush 48hr Rush 72hr Rush

	Sample ID# & Depth		Date	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 (w/Standard Silica Gel Cleanup)	Purgeable Fuel Scan (w/MTBE & BTEX)	Gasoline & MTBE-BTEX by EPA Method# 8015M & 8020	Volatile Organics: MTBE by EPA Method# 8260	SOLVENTS by EPA Method# 8010	Additional Analysis: Fuel Oxygenates by EPA Method 8260	Title 22 General Physical and Inorganic Minerals	
25999 -001	MW-3	24.17	6/20/01	x 4						X					
-002	MW-4	25.1	"	x 5						X					
-003	MW-5	27.65	"	x 4						X					
-004	MW-6	25.17	"	x 4						X					
-005	MW-7	25.55	"	x 4						X					
-006	MW-8	26.77	"	x 5						X					
-007	MW-9	24.74'	"	x 4						X					
-008	MW-10	23.45	"	x 4						X					
-009	MW-11	24.86	"	x 5						X					
-010	MW-12	24.97	"	x 5						X					
-011	PURGE WATER COMPOSITE		"	x 4						X					

RECEIVED BY:	Date & Time	RELEASED BY:	Date & Time	SAMPLE CONDITION: (circle 1)		
1.) Sampler: Karen Berry	6/20/01 @ 2:20pm	Kara Brennan	6/20/01 @ 3:30pm	Ambient	(Refrigerated)	Frozen
2.) Erin Walton	6-20-01-3:30	Erin Walton	6/20/01 16:52pm	Ambient	Refrigerated	Frozen
3.) Joseph Machado	6/20/01 1637			Ambient	Refrigerated	Frozen
4.)				Ambient	Refrigerated	Frozen
5.)				Ambient	Refrigerated	Frozen

NOTES - Lab to complete the following if box is checked:

- [✓] *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

PURGE WATER COMPOSITE SAMPLE IS FOR DISPOSAL OF PURGE WATER. THIS SAMPLE WAS COMPOSITED FROM SIX FULL 55-GALLON DRUMS.

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										
		8015 Modified			8020				8010			Other
		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										
		8015 Modified			8020				8010			Other
		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	11/88	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			8020				8010			Other
		TPH-G	TPH-D	TPH-MO	Benzene	Ethylbenzene	Toluene	Total Xylenes	TCE	PCE	1,2-DCA	
		µg/L			µg/L				µg/L			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			Other
		TPH-G	TPH-D	TPH-MO	Benzene	Ethylbenzene	Toluene	Total Xylenes	TCE	PCE	1,2-DCA	
		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										
		8015 Modified			8020				8010			Other
		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		BETX 5030/8020				8010		
		TPH Gasoline µg/L	TPH Diesel µg/L	Benzene	Ethylbenzene	Toluene	Xylenes	1,2-DCA	PCE	TCE
				µg/L				µg/L	µg/L	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 µg/L	TPH Diesel µg/L	Benzene	Ethylbenzene	Toluene	Xylenes	1,2-DCA	PCE	TCE
				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	8.1	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

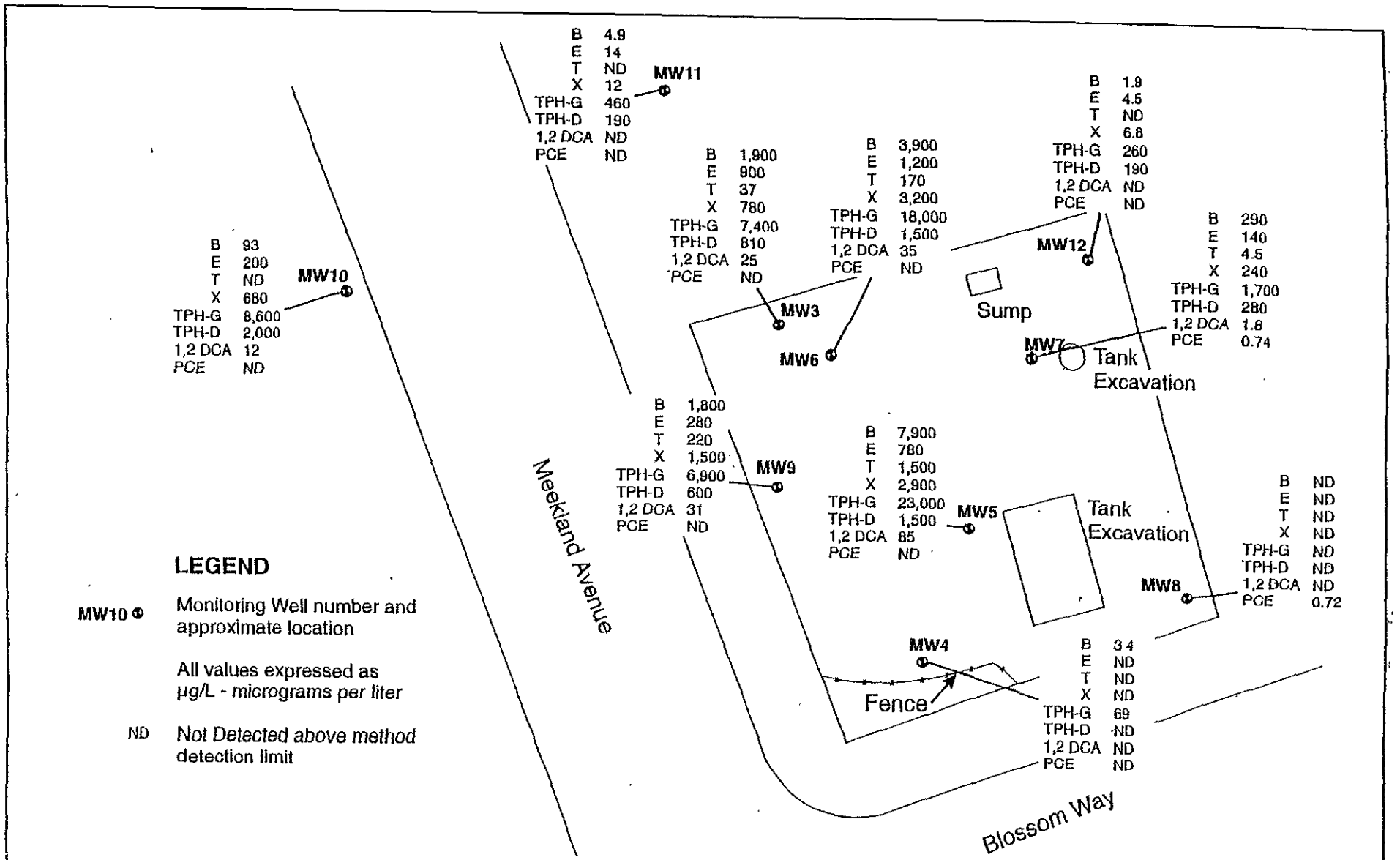
Well	Date Sampled	EPA Test Methods								
		8015 M		BETX 5030/8020				8010		
		TPH Gasoline	TPH Diesel	Benzene	Ethylbenzene	Toluene	Xylenes	1,2-DCA	PCE	TCE
		µg/L	µg/L	µg/L				µg/L	µg/L	µg/L
MW12	07/28/94	240	160	1.9	12	ND	5.8	ND	ND	ND
	10/21/94	260	190	1.9	4.5	ND	6.8	ND	ND	ND
	09/15/95	NS	NS	NS	NS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

5833.004/CHEM SUMM.XLS



10·20·94

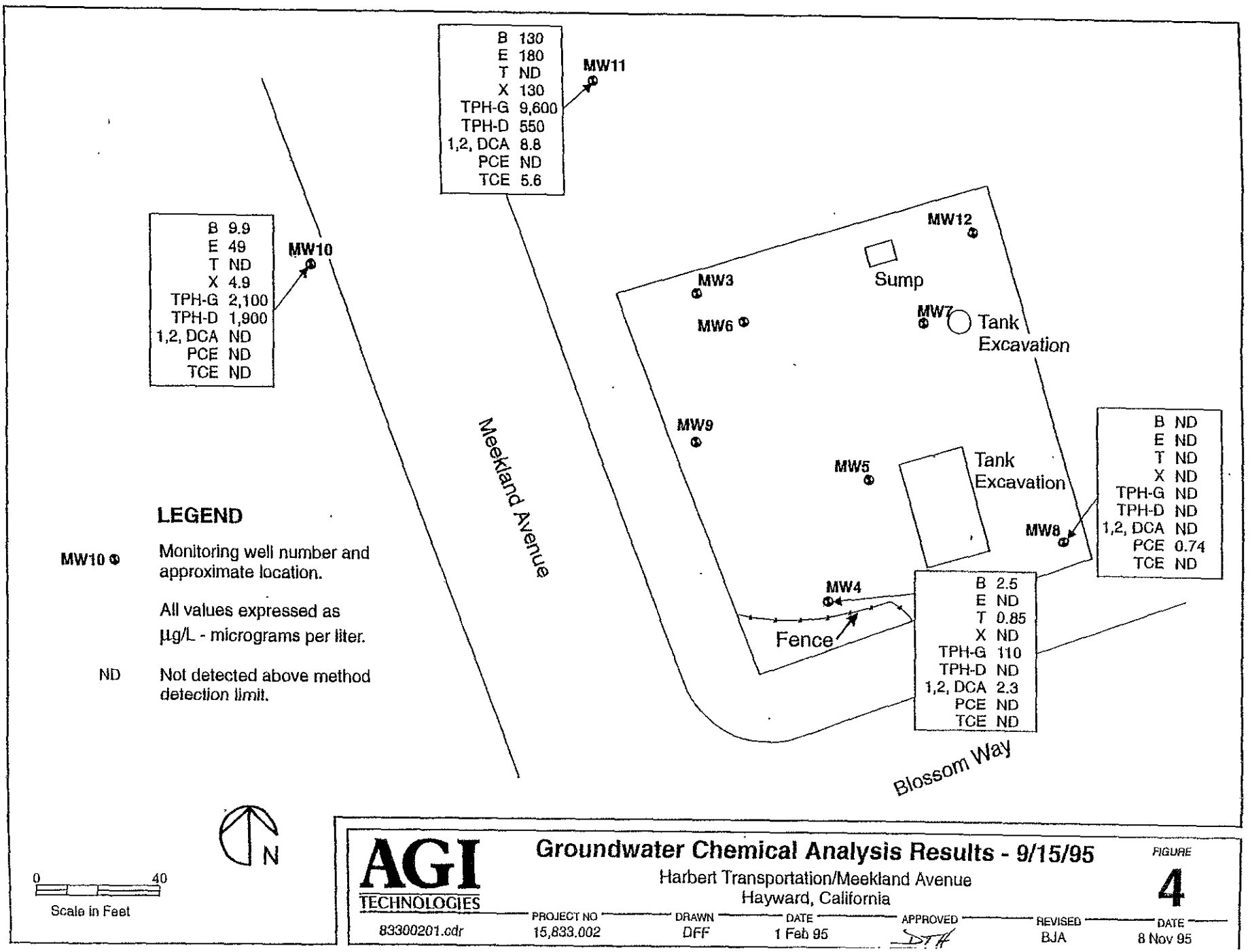
AGI TECHNOLOGIES

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
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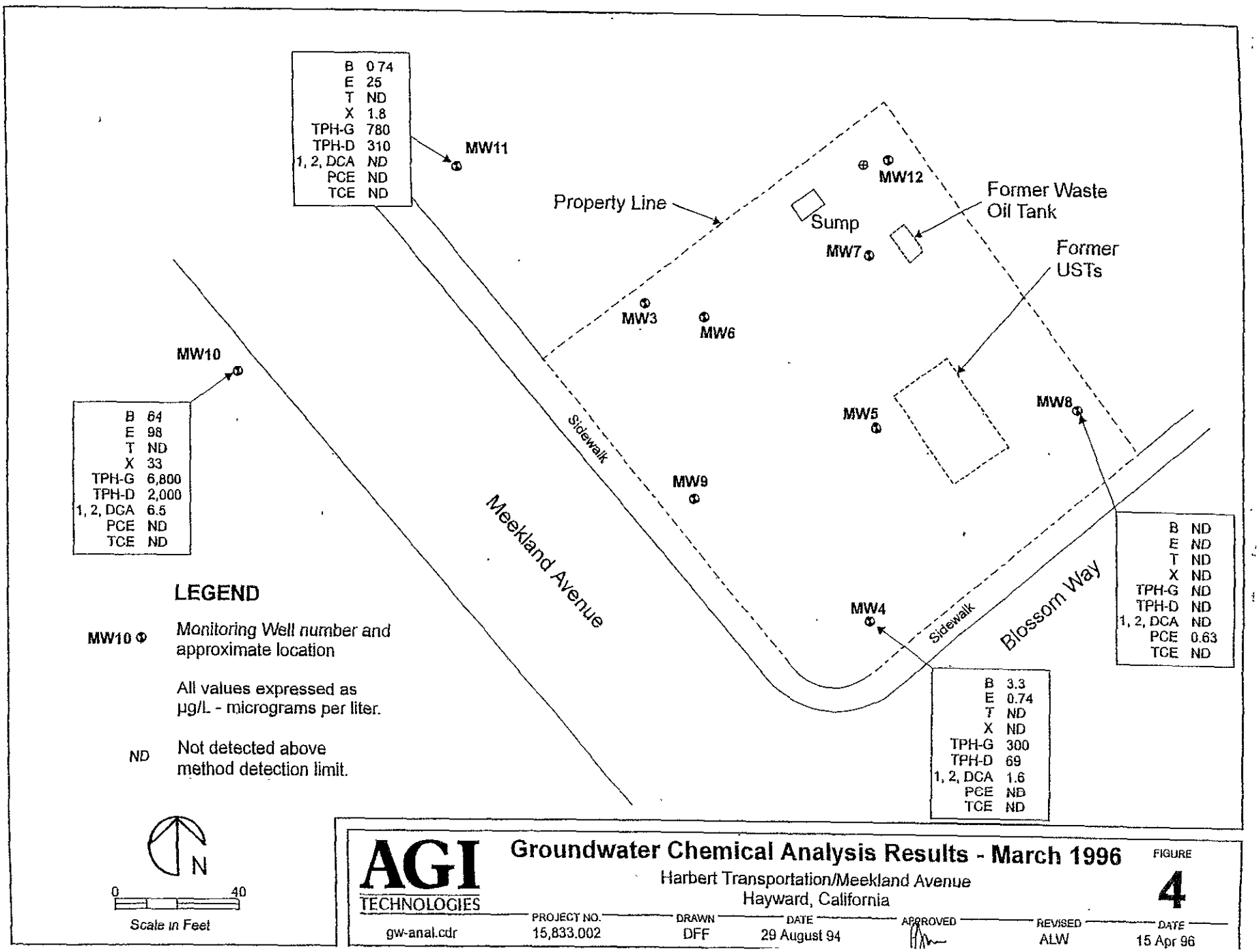


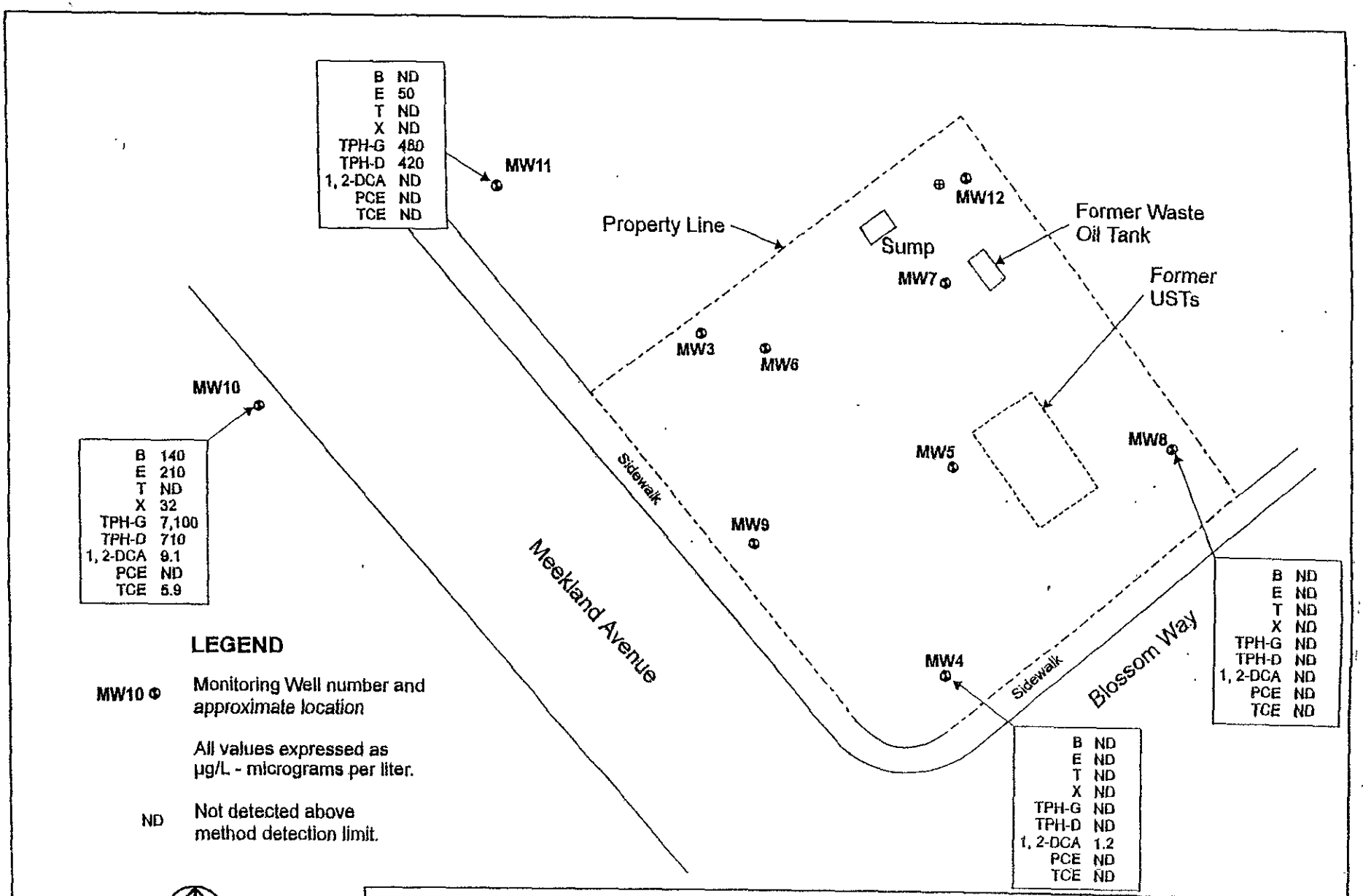
Groundwater Chemical Analysis Results - March 1996

FIGURE 4

Harbert Transportation/Meekland Avenue
Hayward, California

AGI TECHNOLOGIES

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



AGI TECHNOLOGIES

Groundwater Chemical Analysis Results - September 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