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DEC 17 2001

**QUARTERLY GROUNDWATER MONITORING REPORT**  
**October 2001**

**Sheaff's Garage**  
**5930 College Avenue**  
**Oakland, California**  
**STID # 514**

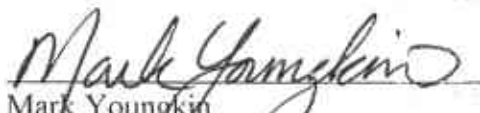
Prepared For:


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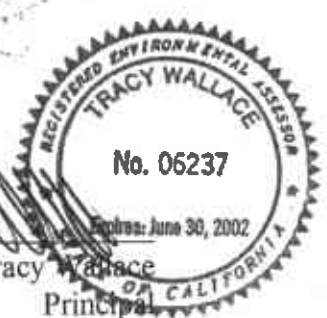
Prepared By:

**Golden Gate Tank Removal, Inc.**  
**255 Shipley Street**  
**San Francisco, CA 94107**

GGTR Project No. 7335  
November 28, 2001

  
Mark Youngkin  
Registered Geologist CEG 1380

  
Tracy Wallace  
Principal



## QUARTERLY GROUNDWATER MONITORING REPORT October 8, 2001

5930 College Avenue, Oakland, California

### Introduction

This report presents the results and findings of the October 8, 2001 groundwater monitoring and sampling activities conducted by Golden Gate Tank Removal, Inc. (GGTR) at 5930 College Avenue in Oakland, California. This was the 7th quarterly monitoring event performed at the site for the three existing monitor wells, MW1 through MW3. The Local Oversight Program of the Alameda County Health Care Services Agency (ACHCSA) Environmental Protection Division designated the site as case STID #514. Figure 1, *Site Location Map*, shows the general location of the subject property in Oakland, California. The site, adjacent properties, and associated features are shown on the revised Figure 2, *Site Plan*. The groundwater elevation and associated gradient is graphically shown on Figure 3, *Groundwater Elevation Contour Map*. Figure 4, *Groundwater Monitoring Results at 5930 College Avenue*, is a tabulated summary of the analytical results of historical groundwater monitoring at the site.

Gettler-Ryan, Inc. of Dublin, California is currently conducting a separate groundwater investigation for the former Chevron Station #20-9339 located adjacent to the north side of the subject property at 5940 College Avenue. Two groundwater monitoring wells are used to evaluate the hydrocarbon concentrations in groundwater at this site. Gettler-Ryan, Inc., in a joint venture with GGTR, monitored and sampled each well on October 8, 2001. Figures 2 and 3 show the location of each well (GR-MW1 & GR-MW2) relative to the subject wells at 5930 College Avenue.

### Results of Groundwater Sampling and Laboratory Analysis

The table shown below summarizes the laboratory analytical results of groundwater samples collected during the October 8, 2001 monitoring event. The table includes results reported for the groundwater samples collected by Gettler-Ryan, Inc. in the monitor wells located at 5940 College Avenue (GR-MW1 and GR-MW2). A copy of the Laboratory Certificate of Analysis and the Chain-of-Custody Record is in the Appendix. Documentation of the well purging and sampling activities is contained in the Field Data Sheets of the Appendix. Included in the Appendix are a facsimile copy of monitor well observation summary sheet for the two wells monitored and sampled by Gettler-Ryan, Inc.

**Table - October 8, 2001 Groundwater Sampling Results**

Sample ID	TPH-G (ug/L)	BTEX (ug/L)	MTBE (ug/L)
MW1	112,000	25,300 / 11,800 / 4,280 / 20,600	374
MW2	40,700	6,310 / 399 / 2,100 / 5,320	6,460*
MW3	4,913	108 / 4 / 99 / 133	52
GR-MW1	200	ND / ND / ND / ND	ND
GR-MW2	4,200	87 / 2.8 / 29 / 9.8	ND

Notes: TPH-G - Total Petroleum Hydrocarbons as Gasoline (EPA Methods 5030/8015M)  
 BTEX - Benzene / Toluene / Ethylbenzene / Xylenes (EPA Methods 5030/8020)  
 MTBE - Methyl Tertiary Butyl Ether (EPA Method 5030/8020)  
 ug/L - micrograms per liter (equivalent to parts per billion - ppb)  
 ND - not detected above laboratory reporting limit (See QC/QA. Lab Report)  
 \* - confirmed by EPA Method 8260

Total Petroleum Hydrocarbons as gasoline (TPH-G) increased in monitor well MW1 from 79,000 to 112,000 micrograms per liter (ug/L), as compared to the July 2001 monitoring event; however, is relatively lower than the concentration reported in October 2000 (130,000 ug/l). TPH-G slightly increased in MW2 from 39,000 to 40,700 ug/L as compared to last quarterly monitoring event and has increased significantly since the October 2000 event (31,000 to 40,700 ug/l). The concentration of TPH-G decreased in MW3 from 12,000 to 4,913 ug/L since the last monitoring event and is similar to the concentration reported in October 2000 (4,500 ug/l). The TPH-G concentration measured in Gettler-Ryan's well MW2 (GR-MW2), located approximately 75 feet north of GGTR well MW1, was 4,200 ug/l.

The concentration of methyl tertiary-butyl ether (MTBE) measured in MW1 decreased from 660 to 374 ug/l as compared to the July 2001 event, and is at a historically low level. As compared to the previous monitoring event, the MTBE concentration in MW2 significantly increased from 180 to 6,460 ug/l and that reported in MW3 increased slightly from 35 to 53 ug/l. The benzene concentration measured in MW1 through MW3 increased as compared to the last monitoring event and is similar to the respective concentrations reported in October 2000. The benzene concentration measured in GR-MW2 was 87 ug/l.

Concentrations of total extractable petroleum hydrocarbons (TEPH) and volatile organic compounds (VOCs; including fuel oxygenates) were not detected during previous sampling events (October 1999 and 2000), and by agreement with the ACHCSA, such chemical constituents were again not included in this sampling event.

Free product was not present in the purge water or groundwater samples in MW1 through MW3 during the October 2001 monitoring event. However, noticeable sheen and gasoline-like odor were observed in the purge water removed from each of the three groundwater wells during this monitoring event. According to the monitor well observation summary sheet provided by Gettler-Ryan, Inc., free product was not observed in either of their monitoring wells located to the north and northwest of the subject property.

### Results of Groundwater Elevation Measurements

The groundwater elevations measured relative to the top of well casing in MW1 through MW3 ranged from 184.49 (MW2) to 185.47 (MW3) feet above Mean Sea Level. The associated groundwater gradient calculated for the October 8, 2001 monitoring event was 1.6 feet / 100 feet (0.016 ft/ft) directed approximately 48° east of north. The groundwater gradient and associated elevation contours are shown on Figure 3. The depth to groundwater relative to the top of well casing in GR-MW1 and GR-MW2 was 13.49 and 13.37 feet, respectively. The corresponding groundwater elevations based on Gettler-Ryan's wellhead elevation data is 183.49 and 183.98 feet, respectively, above Mean Sea Level. The associated gradient and flow direction calculated for these wells in conjunction with either GGTR well MW1 or MW3 was approximately 2.1 feet / 100 feet (0.021 ft/ft) directed 55° to 58° west of north.

The table shown below lists the historical data for MW1 through MW3 on mean groundwater elevation, flow direction, and groundwater slope for the site. Note that the groundwater elevations prior to April 25, 2001 are referenced to an arbitrary site-specific datum point (MW1; north side of top of well casing) with an assumed elevation of 50 feet. This arbitrary datum point is not referenced to Mean Sea Level.

**Table - Mean Groundwater Elevation, Flow Direction, and Gradient**

Measurement Date	Mean Groundwater Elevation (feet)	Groundwater Flow Direction	Gradient (feet / 100 feet)
10/07/99	39.87	11° west of south	0.67 feet / 100 feet
01/26/00	43.1	23° west of north	9.12 feet / 100 feet
10/25/00	39.96	40° east of north	0.64 feet / 100 feet
04/25/01	188.6	55° west of north	0.69 feet / 100 feet
07/10/01	186.26	4° east of north	0.5 feet / 100 feet
10/08/01	184.99	48° east of north	1.6 feet / 100 feet

## Discussion of Monitoring Results

The mean groundwater elevation measured at the site during this event was approximately 1.3 feet lower than that measured in July 2001 and is historically at its lowest elevation since June 1998. The lower groundwater elevations at the site may reflect the lack of rainfall recorded between June and October 2001. The groundwater flow direction measured during this event shifted approximately 44 degrees further to the east from north as compared to the last monitoring event. The current flow direction is similar to that measured in October 2000 and the calculated gradient for this event (0.016 ft/ft) is relatively steeper than that measured for the three previous monitoring events. In comparison with the October 2001 data, the gradient established in utilizing Gettler-Ryan's well data is slightly steeper and is directed west of north rather than east of north. Surface sheen was present in MW2 and MW3 for the first time, and in MW1 for the first time since January 2000.

Based on review of the April 2001 Quarterly Groundwater Report prepared by GGTR, the ACHCSA, in a letter dated July 9, 2001, requested additional subsurface investigative activities in the vicinity of the former fuel dispenser and product piping to evaluate whether such structures are a potential and contributing source of gasoline-range hydrocarbons remaining in the groundwater at the site. GGTR will be submitting a work plan addressing these concerns to the ACHCSA shortly following submittal of this report.

GGTR recommends that the monitoring of the three groundwater wells be continued on a quarterly basis as required by the LUFT manual and the HSA. Groundwater samples collected in each well should be analyzed for TPH-G, BTEX and MTBE. GGTR will direct the laboratory to confirm all MTBE concentrations greater than the laboratory reporting limit by EPA Analytical Method 8260.

## Water Sample Analytical Methods

The groundwater samples collected from the three monitoring wells on October 8, 2001 were analyzed for the following fuel constituents:

- TPH as Gasoline (TPH-G; EPA Methods 5030/8015M)
- Benzene, Toluene, Ethylbenzene and total Xylenes (BTEX; EPA Methods 5030/8020)
- Methyl Tertiary Butyl Ether (MTBE; EPA Method 5030/8020)

North State Environmental Laboratory of South San Francisco, California analyzed the groundwater samples on October 9, 2001. The analytical results for this event as well as those reported during each previous monitoring event are tabulated in Figure 4. A copy of the Laboratory Certificate of Analysis, Field Data Sheets and Chain of Custody Forms are included in the Appendix.

## Field Procedures

GGTR monitored and sampled MW1 through MW3 on October 8, 2001, in accordance with the requirements and procedures of the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) and the ACHCSA. Prior to purging and sampling, GGTR removed the well cover and locking compression cap from each well and allowed the groundwater in each well column to stabilize for approximately 15 minutes. GGTR then measured and recorded the depth to groundwater relative to the north side of the top of each well casing to the nearest 0.01 foot using an electronic water level indicator. GGTR carefully inserted a clear acrylic bailer in each well to approximately 1 foot below the groundwater table and removed a small volume of groundwater to check for the presence of liquid-phase hydrocarbons or sheen within each well.

GGTR then purged a minimum of three casing volumes from each well using a clean, disposable bailer, and simultaneously monitored and recorded the pH, temperature, and specific conductance of the purged well water. After the groundwater in each well recharged to approximately 80% of its original level, GGTR collected a groundwater sample by lowering a disposable, bottom-fill, polyvinyl chloride (PVC) bailer to just below the well's air-water interface. The bailer was immediately removed from the well and the groundwater was carefully decanted from the bailer into pre-cleaned, laboratory-provided sample containers. All volatile organic analysis (VOA) vials were inverted and checked to insure that no entrapped air was present. The samples were sealed with Teflon caps, properly labeled, and stored in a cooler chilled to approximately 4°C. GGTR then submitted the samples under chain-of-custody protocol to the State-certified, North State Environmental Analytical Laboratory (CA ELAP #1753) in South San Francisco, California.

## Quality Assurance / Quality Control

Quality Assurance and Quality Control (QA/QC) details are shown on the laboratory Certificate of Analysis in the Appendix. The laboratory reported no quality assurance or quality control problems during the laboratory analysis procedures. All samples were analyzed within specified laboratory holding times.

## Project History and Chronology

During 1996, GGTR removed two underground storage tanks (UST) and fuel dispenser from a common location at the site. The following table shows a summary of the tank designations, size, type of construction and contents:

Designation	Construction	diameter (feet)	length (feet)	size (gallons)	contents
TANK 1	steel	4	7	675	gasoline
TANK 2	steel	4	3.5	340	waste oil

The ages of the tanks are unknown but are believed to be between 40 and 60 years old. During the UST removal there was evidence of a gasoline leak in surrounding soils and GGTR over-excavated gasoline-contaminated soil from surrounding the former UST location. The removal and over-excavation was documented in the GGTR report dated October 11, 1996.

The following list of activities shows the significant investigation and remedial action performed at the site:

- 08/06/96      Underground storage tanks 1 and 2 were removed and samples recovered
- 08/15/96      A work plan was submitted by GGTR for over excavation and disposal of gasoline-contaminated soil surrounding the UST
- 09/30/96      Over-excavation of gasoline-contaminated soil performed
- 10/01/96      Last of additional excavation soil disposed of at a Class II facility
- 10/11/96      TANK REMOVAL REPORT published by GGTR
- 12/30/96      ACHSA submitted letter requiring soil and groundwater investigation
- 03/10/97      GGTR authorized to prepare a work plan for additional investigation
- 04/01/97      GGTR submitted work plan for a Soil and Groundwater Investigation
- 04/21/97      ACHSA submitted letter authorizing work plan
- 05/06/98      GGTR drills borings B1 through B3
- 05/20/98      GGTR drills borings B4 ( Monitoring Well MW1)
- 05/27/98      GGTR develops monitoring well MW1
- 06/01/98      GGTR measures, purges and samples monitoring well MW1
- 06/17/98      GGTR submitted Soil and Groundwater Investigation Report
- 07/21/98      GGTR submitted Work Plan Addendum for installation of two additional groundwater monitoring wells
- 09/10/98      GGTR measures, purges and samples monitoring well MW1 then submits a groundwater monitoring report
- 10/02/99      GGTR drills two borings (B5 and B6) and converts them to groundwater monitoring Wells (MW2 and MW3)
- 10/04/99      GGTR develops monitoring wells MW2 and MW3

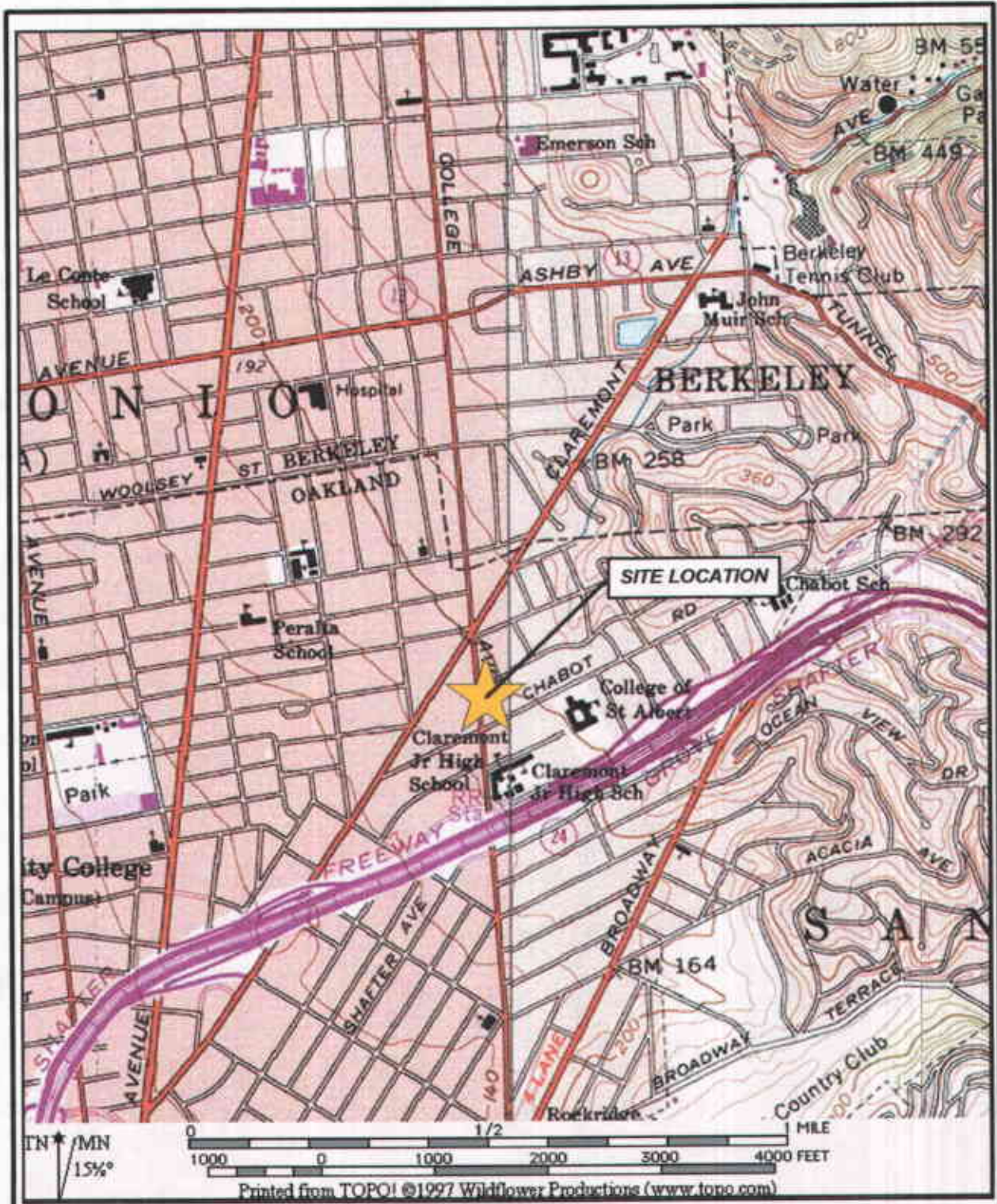
- 10/07/99 GGTR surveys monitoring wells MW2 / MW3; measures, purges and samples monitoring wells MW1, MW2 and MW3 then submits a groundwater monitoring report
- 10/22/99 GGTR submitted Summary Report
- 11/24/99 HCS submitted letter requiring quarterly monitoring and setting parameters for January 2000 analyses
- 01/26/00 GGTR measures, purges and samples monitoring wells MW1, MW2 and MW3 then submits a groundwater monitoring report
- 10/25/00 GGTR and Gettler-Ryan, Inc. perform joint groundwater monitoring activities; GGTR measures, purges and samples monitoring wells MW1, MW2 and MW3 then submits a groundwater monitoring report
- 04/25/01 GGTR and Gettler-Ryan, Inc. perform joint groundwater monitoring activities; GGTR surveys, measures and samples monitoring wells MW1, MW2 and MW3 then submits a groundwater monitoring report
- 07/10/01 GGTR and Gettler-Ryan, Inc. perform joint groundwater monitoring activities; GGTR measures and samples monitoring wells MW1, MW2 and MW3 then submits a groundwater monitoring report
- 10/08/01 **GGTR and Gettler-Ryan, Inc. perform joint groundwater monitoring activities; GGTR monitors and samples MW1, MW2 and MW3.**
- 11/28/01 **GGTR submits October 2001 Groundwater Monitoring Report to the ACHCSA**

### **Report Submittal to Regulatory Agencies**

As per local environmental guidelines, GGTR recommends that a copy of this quarterly groundwater monitoring report be submitted to the local regulatory agency as soon as possible:

Alameda County Health Care Services Agency  
Environmental Health Services  
Environmental Protection  
1131 Harbor Bay Parkway Suite 250  
Alameda, CA 94502-6577  
*Attention: Ms. Eva Chu*





**GOLDEN GATE TANK REMOVAL, INC.**  
 255 Shipley Street  
 San Francisco, California 94107  
 Ph (415) 512-1555 Fx (415) 512-0964

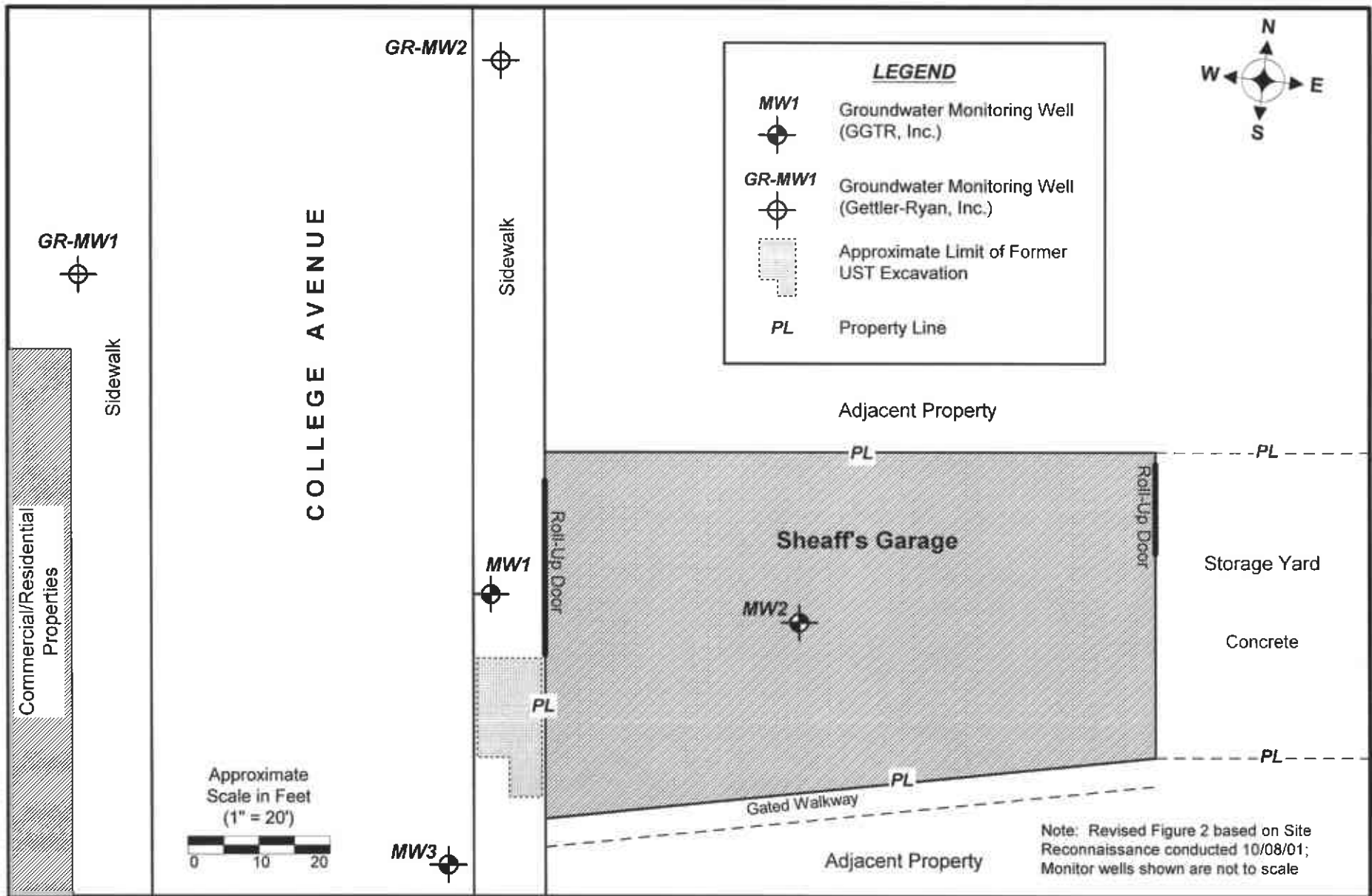
**SITE LOCATION MAP**  
 Sheaff's Garage  
 5930 College Avenue  
 Oakland, California

GGTR Project No. 7335

Dwg: baw/11.01

December 2001

Figure 1



**GOLDEN GATE TANK REMOVAL**  
 255 Shipley Street  
 San Francisco, California 94107  
 Phone (415) 512-1555 Fax (415) 512-1555

**SITE PLAN**  
 Sheaff's Garage  
 5930 College Avenue, Oakland, California

GGTR Project No. 7335

Drawing By: baw/11.01

November 2001

**FIGURE 2**

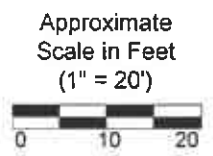
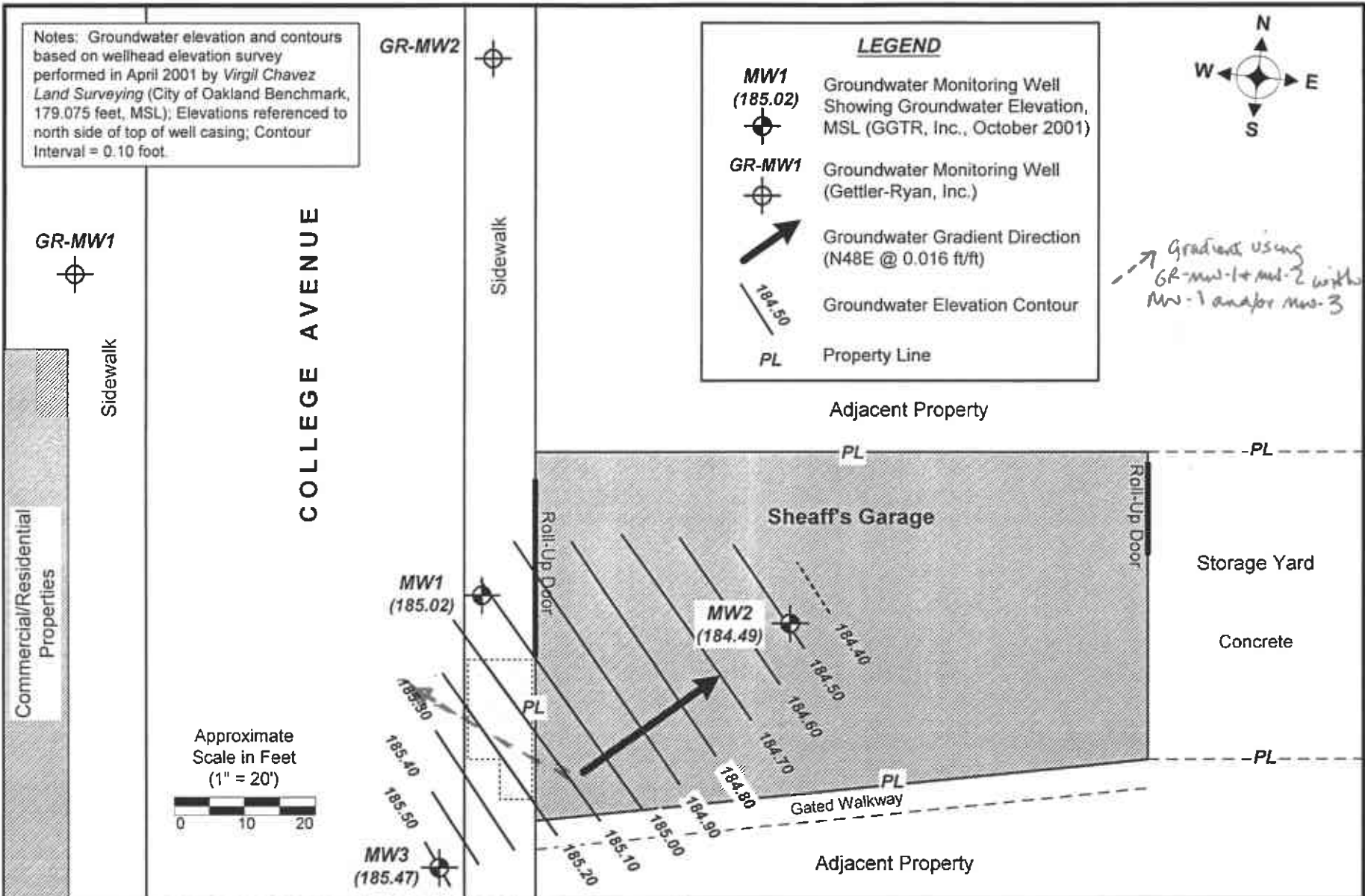
Notes: Groundwater elevation and contours based on wellhead elevation survey performed in April 2001 by *Virgil Chavez Land Surveying* (City of Oakland Benchmark, 179.075 feet, MSL); Elevations referenced to north side of top of well casing; Contour Interval = 0.10 foot.

**LEGEND**

- MW1 (185.02)** Groundwater Monitoring Well Showing Groundwater Elevation, MSL (GGTR, Inc., October 2001)
- GR-MW1** Groundwater Monitoring Well (Gettler-Ryan, Inc.)
- Groundwater Gradient Direction (N48E @ 0.016 ft/ft)
- Groundwater Elevation Contour
- PL** Property Line



*Gradient using GR-MW-1 + MW-2 with MW-1 and/or MW-3*



**GOLDEN GATE TANK REMOVAL**  
 255 Shipley Street  
 San Francisco, California 94107  
 Phone (415) 512-1555 Fax (415) 512-0964

**GROUNDWATER ELEVATION CONTOUR MAP**  
 Sheaff's Garage  
 5930 College Avenue, Oakland, California

**Figure 4 - Groundwater Monitoring Results at 5930 College Avenue**

Well ID	Sample Date	Casing Elevation (feet)	DTW (feet)	Water Elevation (feet)	Product/Odor/Sheen	TPH-G (ug/L)	TEPH (ug/L)	VOC (ug/L)	MTBE (ug/L)	B/T/E/X (ug/L)
MW1	06/01/98	50.00*	4.81	45.19	slight sheen	160,000	ND	--	1,900	28,000 / 21,000 / 3,800 / 21,000
	09/10/98	50.00*	7.50	42.50	odor	290,000	ND	--	440	<50 / 25,000 / 7,100 / 32,000
	10/07/99	50.00*	10.04	39.96	odor	85,000	ND	--	1,100	20,000 / 13,000 / 3,800 / 17,000
	01/26/00	50.00*	8.26	41.74	slight sheen	130,000	--	--	470	25,000 / 18,000 / 4,500 / 22,000
	10/25/00	50.00*	10.10	39.90	odor	130,000	--	ND	1,300	23,000 / 12,000 / 3,900 / 18,000
	02/02/01	50.00*	9.61	40.39	odor	128,000	--	--	780	19,000 / 11,000 / 3,800 / 18,000
	04/25/01	195.90	7.39	188.51	odor	120,000	--	--	900	21,000 / 13,000 / 390 / 18,000
	07/10/01	195.90	9.72	186.18	odor	79,000	--	--	660	15,000 / 7,800 / 3000 / 15,000
	<b>10/08/01</b>	<b>195.90</b>	<b>10.88</b>	<b>185.02</b>	<b>sheen/odor</b>	<b>112,000</b>	<b>--</b>	<b>--</b>	<b>374</b>	<b>25,300 / 11,800 / 4,280 / 20,600</b>
MW2	10/07/99	51.42*	11.49	39.93	slight/odor	18,000	ND	--	490	3,000 / 1,700 / 1,000 / 3,900
	01/26/00	51.42*	7.85	43.57	none	42,000	--	--	560	9,300 / 2,200 / 2,300 / 7,700
	10/25/00	51.42*	11.57	39.85	slight/odor	31,000	--	ND	500	5,500 / 370 / 1,700 / 2,600
	02/02/01	51.42*	10.77	40.65	odor	36,000	--	--	400	4,300 / 530 / 1,800 / 4,500
	04/25/01	197.28	8.52	188.76	odor	56,000	--	--	460	6,700 / 1700 / 2,600 / 8,200
	07/10/01	197.28	11.05	186.23	odor	39,000	--	--	180	6,200 / 730 / 2,300 / 6,100
		<b>10/08/01</b>	<b>197.28</b>	<b>12.79</b>	<b>184.49</b>	<b>sheen/odor</b>	<b>40,700</b>	<b>--</b>	<b>--</b>	<b>6,460</b>
MW3	10/07/99	49.39*	9.67	39.72	none	6,600	ND	--	390	310 / 110 / 430 / 1,000
	01/26/00	49.39*	5.40	43.99	none	3,300	--	--	40	110 / 8 / 100 / 32
	10/25/00	49.39*	9.24	40.15	slight odor	4,500	--	ND	ND	100 / 2 / 120 / 130
	02/02/01	49.39*	8.73	40.66	slight odor	2,900	--	--	35	35 / 3 / 160 / 298
	04/25/01	195.22	6.61	188.61	slight odor	8,400	--	--	56	260 / 33 / 290 / 510
	07/10/01	195.22	8.85	186.37	slight odor	12,000	--	--	35	39 / 10 / 690 / 1600
		<b>10/08/01</b>	<b>195.22</b>	<b>9.75</b>	<b>185.47</b>	<b>sheen/odor</b>	<b>4,913</b>	<b>--</b>	<b>--</b>	<b>52</b>

**NOTES:**

DTW - depth to water relative to top of well casing; ug/L - micrograms per liter (equivalent to parts per billion)  
 TPH-G - Total Petroleum Hydrocarbons as Gasoline; TEPH - Total Extractable Petroleum Hydrocarbons (EPA Methods 5030/8015M)  
 Volatile Organic Compounds by EPA Method 8260  
 MTBE - Methyl Tertiary Butyl Ether; BTEX - Benzene / Toluene / Ethylbenzene / Total Xylenes (EPA Methods 5030/8020)  
 \* - arbitrary datum point with assumed elevation of 50 feet used prior to MSL survey on April 26, 2001  
 ND - not detected above laboratory reporting limit  
 -- not analyzed for this constituent

# **APPENDIX**

## **LABORATORY CERTIFICATE OF ANALYSIS, CHAIN OF CUSTODY FORM, & GGTR & GETTLER-RYAN FIELD DATA SHEETS**

### **QUARTERLY GROUNDWATER MONITORING REPORT OCTOBER 2001**

Sheaff's Garage  
5930 College Avenue  
Oakland, California  
STID # 514

GGTR Project No. 7335  
November 28, 2001



# North State Environmental Laboratory

90 South Spruce Avenue, Suite V • South San Francisco, CA 94080 • (650) 266-4563 • FAX (650) 266-4560

CA ELAP# 1753

## C E R T I F I C A T E O F A N A L Y S I S

Lab Number: 01-1471  
Client: Golden Gate Tank  
Project: 7335/5930 COLLEGE AVE. OAKLAND, CA

Date Reported: 10/11/2001

Gasoline, BTEX and MTBE by Methods 8015M and 8020

Analyte	Method	Result	Unit	Date Sampled	Date Analyzed
Sample: 01-1471-01 Client ID: 7335-MW1					
				10/08/2001	WATER
Gasoline	8015M	112000	ug/L		10/09/2001
Benzene	8020	25300	ug/L		10/09/2001
Ethylbenzene	8020	4280	ug/L		10/09/2001
MTBE	8020	374	ug/L		10/09/2001
Toluene	8020	11800	ug/L		10/09/2001
Xylenes	8020	20600	ug/L		10/09/2001
Sample: 01-1471-02 Client ID: 7335-MW2					
				10/08/2001	WATER
Gasoline	8015M	40700	ug/L		10/09/2001
Benzene	8020	6310	ug/L		10/09/2001
Ethylbenzene	8020	2100	ug/L		10/09/2001
MTBE	8020	*6460	ug/L		10/09/2001
Toluene	8020	399	ug/L		10/09/2001
Xylenes	8020	5320	ug/L		10/09/2001
Sample: 01-1471-03 Client ID: 7335-MW3					
				10/08/2001	WATER
Gasoline	8015M	4913	ug/L		10/09/2001
Benzene	8020	108	ug/L		10/09/2001
Ethylbenzene	8020	99	ug/L		10/09/2001
MTBE	8020	52	ug/L		10/09/2001
Toluene	8020	4	ug/L		10/09/2001
Xylenes	8020	133	ug/L		10/09/2001

\*Confirmed by GC/MS.



# North State Environmental Laboratory

CA ELAP# 1753

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## C E R T I F I C A T E O F A N A L Y S I S

Quality Control/Quality Assurance

Lab Number: 01-1471  
Client: Golden Gate Tank  
Project: 7335/5930 COLLEGE AVE. OAKLAND, CA

Date Reported: 10/11/2001

Gasoline, BTEX and MTBE by Methods 8015M and 8020

Analyte	Method	Reporting Limit	Unit	Blank	Avg MS/MSD Recovery	RPD
Gasoline	8015M	50	ug/L	ND	84	1
Benzene	8020	0.5	ug/L	ND	85	3
Toluene	8020	0.5	ug/L	ND	92	1
Ethylbenzene	8020	0.5	ug/L	ND	92	10
Xylenes	8020	1.0	ug/L	ND	98	1
MTBE	8020	0.5	ug/L	ND	87	1

ELAP Certificate NO:1753

Reviewed and Approved

John A. Murphy, Laboratory Director







## GROUNDWATER WELL MONITORING FIELD DATA SHEET

Project Number 7335 Site Name 5930 COLLEGE AVE Date 10/8/01  
 Well Number MW1 Sampler B. WILFELDER

Notes, including field conditions, persons on site, methods used, weather MONITOR DTW  
+ PRESENCE OF FREE PRODUCT IN MW1 THROUGH MW3;  
PURGE ≥ 3 WELL CASING VOLUMES FROM EACH WELL  
+ TRANSFER PUMP WATER TO 5-GALLON BUCKETS;  
MONITOR pH, TEMP, CONDUCTIVITY OF PURGE WATER;  
COLLECT GW SAMPLE USING DISPOSABLE BAYLAR.

Well Depth 14.5 ft. time of sample 10:30 Depth to water 10.33 ft (8:37)  
 Well Diameter 2" sheen or free product NONE

Volume Height of water	Diameter		Volume	Number of well volumes	total gallons to purge
	2 inch	4 inch			
Column <u>3.62</u> ft.	(0.16)	0.65	<u>0.58</u> gals.	<u>3</u>	<u>1.7</u> gal

Quality of purge water MODERATE TURBIDITY; SLIGHT SHEEN + OOR

TIME	VOLUME PURGED	pH	CONDUCTIVITY	TEMP	NOTES
<u>10:10</u>	<u>0</u> gals	<u>9.17</u>	<u>696</u>	<u>64.9</u>	
<u>10:13</u>	<u>1</u> gals	<u>8.13</u>	<u>725</u>	<u>64.7</u>	
<u>10:17</u>	<u>1.5</u> gals	<u>8.20</u>	<u>740</u>	<u>65.1</u>	
<u>10:20</u>	<u>2</u> gals	<u>8.03</u>	<u>739</u>	<u>64.9</u>	
	gals				
	gals				
	gals				
	gals				

Additional comments RE-MEASURE SITE, SITE WELLS, AND  
GETLAR RYAN WELLS FOR REWELLED SITE  
PLAN.  
WEATHER: CLEAR SKIES LIGHT WIND



## GROUNDWATER WELL MONITORING FIELD DATA SHEET

Project Number 7335 Site Name 5930 COLLEGE AVE Date 10/8/01  
 Well Number MW2 Sampler B. WARELER

Notes, including field conditions, persons on site, methods used, weather SEE DATA SHEET FOR MW1

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Well Depth 19.8 ft. time of sample 9:55 Depth to water 12.79 ft (to 3A)  
 Well Diameter 2" sheen or free product SLIGHT SHEEN

Volume Height of water	Diameter		Volume	Number of well volumes	total gallons to purge
	2 inch	4 inch			
Column <u>7.01 ft.</u>	(0.16)	0.65	<u>1.12 gals.</u>	<u>3</u>	<u>3A gal</u>

Quality of purge water CLEAR w/ MODERATE SURFACE SHEEN + ODR

TIME	VOLUME PURGED	pH	CONDUCTIVITY	TEMP	NOTES
<u>7:30</u>	<u>0</u> gals	<u>8.97</u>	<u>759</u>	<u>63.9</u>	
<u>9:34</u>	<u>1</u> gals	<u>8.42</u>	<u>702</u>	<u>64.7</u>	
<u>9:38</u>	<u>2</u> gals	<u>8.15</u>	<u>770</u>	<u>64.8</u>	
<u>9:41</u>	<u>3</u> gals	<u>7.98</u>	<u>774</u>	<u>64.6</u>	
<u>9:44</u>	<u>3.5</u> gals	<u>7.87</u>	<u>76A</u>	<u>64.5</u>	
	gals				
	gals				
	gals				

Additional comments 18.05

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## GROUNDWATER WELL MONITORING FIELD DATA SHEET

Project Number 7835 Site Name 5930 COLLEGE AVE Date 10/20/01  
 Well Number MW3 Sampler B. WAMPLER

Notes, including field conditions, persons on site, methods used, weather SEE DATA SHEET FOR MW1

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Well Depth 17.2 ft time of sample 9:15 Depth to water 9.75 ft (B:W)  
 Well Diameter 2" sheen or free product SLIGHT SHEEN

Volume Height of water	Diameter		Volume	Number of well volumes	total gallons to purge
	2 inch	4 inch			
Column <u>9.75 ft</u>	(0.16)	0.65	<u>1.5</u> gals.	<u>3</u>	<u>4.5</u> gal

Quality of purge water CLEAR w/ SURFACE SHEEN + MOD. ODR

TIME	VOLUME PURGED	pH	CONDUCTIVITY	TEMP	NOTES
<u>8:50</u>	<u>7</u> gals	<u>7.47</u>	<u>505</u>	<u>62.6</u>	
<u>8:54</u>	<u>1</u> gals	<u>7.44</u>	<u>514</u>	<u>62.9</u>	
<u>8:58</u>	<u>2</u> gals	<u>7.75</u>	<u>516</u>	<u>63.3</u>	
<u>9:01</u>	<u>3</u> gals	<u>8.01</u>	<u>528</u>	<u>63.4</u>	
<u>9:03</u>	<u>4</u> gals	<u>8.17</u>	<u>524</u>	<u>62.8</u>	
<u>9:06</u>	<u>4.5</u> gals	<u>8.33</u>	<u>521</u>	<u>62.9</u>	
	gals				
	gals				

Additional comments \_\_\_\_\_

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