

# BLYMYER ENGINEERS, INC.

1829 Clement Avenue

Alameda, California 94501-1396

(510) 521-3773 FAX: (510) 865-2594

## LETTER OF TRANSMITTAL

<b>R E C E I V E D</b>	DATE	April 6, 2004	BEI Job No.	88288.1
	ATTENTION	Ms. Eva Chu		
	SUBJECT:	GI. Trucking Facility		
		San Leandro, California		
			STID # 1373	
SOLID MEDICAL WASTE MANAGEMENT COUNTY OF ALAMEDA				

ACHCSA

1131 Harbor Bay Parkway, 2nd Floor

Alameda, CA 94502-6577

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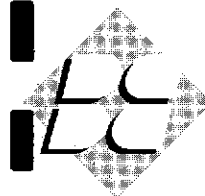
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COPY TO: File  
 Mr. Mike Rogers; Arkansas Best Corporation  
 Mr. Mike Bakaldin; Alameda County Fire Department

SIGNED: Mark Detterman

If enclosures are not as noted, kindly notify Blymyer Engineers, Inc. at once.



Mr. Mike Rogers  
Arkansas Best Corporation  
3801 Old Greenwood Road  
P.O. Box 10048  
Fort Smith, AR 72917-0048

**Subject: 2004 Annual Groundwater Sampling Event  
G.I. Trucking Facility  
1750 Adams Avenue  
San Leandro, California  
STID 1373**

Dear Mr. Rogers:

This letter documents the 2004 Annual Groundwater Monitoring Event at the subject site (Figure 1). The purpose of this work was to determine if free product remained in the former UST complex and to assess the changes in concentrations of dissolved hydrocarbons in groundwater surrounding the former UST complex.

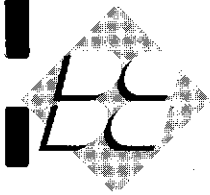
## **1.0 Introduction**

### **1.1 Background**

For a complete background please refer to previous monitoring reports by Blymyer Engineers, Inc., such as the monitoring report entitled *First Semi-Annual Groundwater Monitoring Event of 1998*, dated May 13, 1998. An abbreviated description of more recent events is covered in this background section.

On June 6, 1996, Blymyer Engineers installed a second free product recovery well, RW-2, in the southwestern corner of the UST complex and encountered a thin layer of relatively fresh free product in both recovery wells, along with a darker product layer. The discovery of an apparent diesel release was subsequently reported to the Alameda County Health Care Services Agency (ACHCSA).

As discussed in the Blymyer Engineers letter entitled *Unauthorized Release*, dated July 16, 1996, the source of the release appears to have been localized in the westernmost fuel pump manway. Specifically, gaskets in the fuel pump appeared to have been the source of the leak. According to site personnel, the fuel pump was repaired and placed back in service. An unknown volume of diesel product was released from this point. Based on an approximate UST basin area of 60 feet by 30 feet, 75% occupied by the existing USTs, an initial 0.25-foot thickness of clear free product, an assumed porosity of 30% for the pea gravel backfill, and a relatively flat gradient, an estimate for the release



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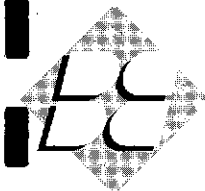
volume of approximately 250 gallons was calculated. In November 1996, during ongoing product recovery operations, site personnel verbally reported a total inventory loss of approximately 165 gallons. This compares well with the recovery of approximately 178 gallons of free product since that time.

Native soils surrounding the UST basin consist of multiple layers of silty clay, clayey silt, and clayey fine sand. The hydraulic conductivity appears to be relatively low, based upon the trapping of older free product within the UST basin years after the initial release, the low dissolved concentrations of total petroleum hydrocarbons (TPH) as diesel and benzene, toluene, ethylbenzene, and total xylenes (BTEX) in groundwater downgradient of the UST complex years after the initial release, and the continued mounding of water in the UST basin.

In response to a Tier I risk assessment and request for case closure contained in a previous monitoring report, the ACHCSA issued a letter dated February 3, 1998, requesting additional groundwater sampling. The ACHCSA requested in particular that, lacking free product, the recovery wells should be included in the analytical program. The concern was expressed that although no significant contaminant concentrations appear to be escaping the UST basin, the fresher free product in the UST basin may present a localized health risk. Using all water quality data from the recovery and monitoring wells located at the site and in the UST basin, specifically the nondetectable concentrations of BTEX inside and outside the UST basin, a comparison to the Tier I Table, as modified for California Maximum Contaminant Levels (MCLs) by the San Francisco Bay Regional Water Quality Control Board (RWQCB) from the American Society for Testing and Materials (ASTM) 1739-95 document entitled *Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites* (RBCA), dated November 1995, indicated that no apparent health risk was present at the site due to the documented releases of diesel hydrocarbons.

Beginning on July 22, 1998, a series of conversations were held between Blymyer Engineers and the ACHCSA regarding the future direction of activities at the site. On August 7, 1998, the ACHCSA issued a letter requesting a more aggressive method of free product recovery from the UST basin and the addition of polynuclear aromatic compounds (PNAs) to the analytical program due to health risks associated with these compounds. These compounds were only recently being requested in analytical programs in the state of California due to the consideration of risk analysis as a case closure method.

In November 1998, Ms. Eva Chu replaced Mr. Brian Oliva as the ACHCSA project manager for the site. Ms. Chu revisited site data and consulted with Mr. Chuck Headlee of the RWQCB regarding possible closure of the site. Due to the continued minimal presence of free product in the recovery wells located in the UST basin, case closure was not recommended. However, the monitoring and sampling interval was reduced from semi-annual to an annual basis for a minimum period of two years beginning with the Spring 1999 monitoring event. If free product was not present in the recovery wells located in the UST basin during the annual monitoring events, and should analytical



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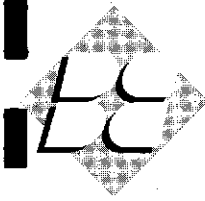
results for samples collected from the recovery wells due to lack of free product indicate no significant health risks, then the case would be evaluated for closure once a risk management plan had been prepared for the site.

On February 22, 1999, Arkansas Best Corporation (ABC; parent company of G.I. Trucking) reported that two of the four USTs were taking on water and that tightness testing was being conducted. On March 16, 1999, ABC reported that the two USTs taking on water had failed tightness testing. The cause and source of the most recent failure had not been identified; however, the USTs that failed were removed from service, remaining fuel had been pumped in to the USTs that had not failed the testing, and no free product was observed in the two recovery wells in the UST basin after the failure. It appeared that the location of the points of failure in the USTs did not allow diesel product to leak into the UST basin.

In June 1999, as a result of the tightness testing failure, all four of the USTs were removed, and UST closure soil samples were collected. Elevated concentrations of TPH as diesel were present in soil at locations around the basin perimeter. Concentrations of TPH as diesel were detected in excavation soil samples ranging from 85 milligrams per kilogram (mg/kg) to 4,500 mg/kg. Low concentrations of TPH as gasoline were also detected in these same excavation soil samples, but were reported to contain significant concentrations of strongly aged gasoline or diesel range components. Very low concentrations of ethylbenzene, toluene, and total xylenes were detected in several soil samples. Gasoline is not known to have ever been stored in the USTs. Thus, the TPH as gasoline concentrations are assumed to be representative of the lighter end of diesel fuel. Methyl tert-butyl ether (MTBE) was not detected in any of the soil samples.

Additionally, product was observed to be seeping from the sidewall. In consultation with the ACHCSA and ABC, Blymyer Engineers directed the contractor to remove approximately 2 additional linear feet of native soil along the eastern, western, southern, and northeastern excavation sidewalls to attempt to clean up the soil further. The concentrations of TPH as diesel along the sidewalls were effectively reduced, but still ranged from 620 to 2,400 mg/kg. Free product, however, was no longer seeping into the excavation. A very low concentration of toluene was detected in one sample, and very low concentrations of total xylenes were detected in most samples (maximum of 0.096 mg/kg). Groundwater monitoring well MW-4 was destroyed as a result of the removal of the northwestern UST basin sidewall.

In September 1999, at the request of the ACHCSA, Blymyer Engineers requested the analytical laboratory to review the March 1999 groundwater analytical data to help determine if MTBE was present in the groundwater samples. The laboratory reviewed the data from wells MW-2, MW-3, and RW-2 and reported that only well MW-3 contained a detectable concentration of MTBE. MTBE was present at a concentration of 17 micrograms per liter ( $\mu\text{g/L}$ ) in well MW-3. The detection of MTBE was not confirmed by gas chromatograph/mass spectrometer (GC/MS) analysis (EPA Method 8260). This confirmation is required as MTBE coelutes with 3-methyl-pentane. During the June 2002 sampling event, MTBE was confirmed in well MW-3 at a concentration of 3.1  $\mu\text{g/L}$  by EPA Method 8260. All other fuel oxygenates were not present at good limits of detection.



During the June 2002 sampling event, BTEX were nondetectable in all wells. BTEX were also nondetectable in recovery well RW-2, at slightly elevated limits of detection. PNAs were also nondetectable at slightly elevated limits of detection in RW-2. Approximately 50 milliliters (ml) of free product were recovered from the skimmer in well RW-1; however, a sheen was not observed in either recovery well. Based on the data it was concluded that limited residual free product may be leaching from the sidewalls of the southern extension of the UST basin, in the vicinity of the former waste oil UST. This is an area that was not removed during the UST overexcavation due to a potential structural threat to the maintenance building. It was additionally concluded that free product recovery operations appeared to have essentially reduced the thickness of free product to isolated globules or a sheen in the southern portion of the former UST complex. Due to the modest increase in the concentration of TPH as diesel in groundwater in wells MW-3 and MW-5, it was suggested that a one time semi-annual groundwater sampling event occur in an attempt to determine the trend of the concentration of TPH as diesel in that well. The ACHCSA was in general agreement with the concept (email dated October 3, 2002), but suggested the alternative that the annual monitoring event move forward in time to March 2003. The latter approach was adopted.

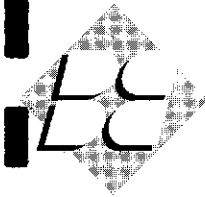
## 2.0 Data Collection

### 2.1 Water Sample Collection

Groundwater samples were collected from monitoring wells MW-2, MW-3, and MW-5 on March 17, 2004. The groundwater samples were collected by Blaine Tech Services (Blaine) in general accordance with the Blaine *Standard Operating Procedures* (Appendix A) for groundwater gauging and sampling. Depth to groundwater, temperature, pH, conductivity, and turbidity were measured initially and after the removal of each of three well casing volumes. The groundwater depth measurements and details of the monitoring well purging and sampling are presented on the *Well Monitoring Data Sheets* and *Well Gauging Data Sheets* generated by Blaine and included as Appendix B. Depth-to-groundwater measurements are presented in Table I. Historic measurements of groundwater depth are also presented in Table I. All purge and decontamination water was stored in Department of Transportation-approved, 55-gallon drums for future disposal.

### 2.2 Water Sample Analytical Methods

The groundwater samples from were submitted to Sequoia Analytical, Inc., a California-certified laboratory, on a standard 10-day turnaround time. The samples were analyzed for TPH as diesel by modified EPA Method 8015; and BTEX and MTBE by EPA Method 8021B. Tables II and III summarize the current and all previous analytical results for groundwater samples collected from the monitoring wells. The laboratory analytical report for the current sampling event is included as Appendix C.



### 2.3 Free Product Recovery

Measurable free product was not present in recovery well RW-2; however, approximately 200 milliliters was recovered from the passive skimmer installed in well RW-1. Sheen was not observed in either well. The Soak-eze<sup>®</sup> socks located in well RW-2 were not changed during the monitoring event due to the lack of measurable hydrocarbons. Table I presents historic and current groundwater and product depth measurements. Table IV contains a summary of the free product volume recovered during this and past events, and the approximate cumulative volume of free product removed to date.

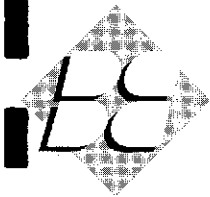
## 3.0 Discussion of Data

### 3.1 Groundwater Sample Analytical Results

A concentration of TPH as diesel was detected only in the groundwater sample from well MW-3 during the present sampling event. This concentration has decreased since the previous event. TPH as diesel remained nondetectable at good limits of detection in wells MW-2 and MW-5. The concentration of BTEX remained nondetectable in wells MW-2, MW-3, and MW-5. Groundwater from the recovery wells was not collected for analysis. BTEX have not been detected in the groundwater samples collected from wells MW-2 and MW-3 since discovery of the July 1996 release, or in wells MW-5 and RW-2 when submitted for analysis. MTBE was not detected in any of the groundwater samples from wells MW-2, MW-3, and MW-5. During the previous sampling event, MTBE was present at a concentration of 2.9  $\mu\text{g/L}$  only in well MW-3, a decrease from the prior sampling event in June 2002. In the June 2002 sampling event, MTBE was confirmed to be present, and other fuel oxygenates were nondetectable, using analysis by EPA Method 8260B (Table III).

### 3.2 Recovered Free Product Data

Historically, the existing EZY<sup>®</sup> passive skimmer, installed in recovery well RW-1, was on a monthly operation and maintenance schedule, overseen by on-site personnel, until August 1994. Thereafter, until July 1996, the passive skimmer had been maintained quarterly by Blymyer Engineers, either concurrent with groundwater monitoring in the first and third quarters of the year or independent of groundwater monitoring in the second and fourth quarters of the year. The groundwater depth, the thickness of any pooled product, and the volume of recovered product were measured on each site visit. In November 1995, approximately 0.25 gallons of free product were recovered from the skimmer, and in February 1996, there was no measurable free product to be recovered. After the discovery of fresh product in the UST basin in July 1996, Blymyer Engineers used a second passive skimmer, a FAP pump, and Soak-eze<sup>®</sup> absorbent socks in varying combinations to recover free product in wells RW-1 and RW-2. An increasing volume of product was removed beginning in June



1996 (Table IV). Until the 1996 release, the cumulative volume of free product removed since recovery began had only amounted to approximately 1.18 gallons. To date approximately 180 gallons of free product have been recovered at the site. This compares reasonably well to the inventory loss of approximately 165 gallons reported by site personnel.

During the March 2004 sampling event, sheen was not present in either recovery well; however, approximately 200 ml of free product was recovered from the passive skimmer in recovery well RW-1. No sign of free product was observed on the Soak-eze<sup>®</sup> absorbent sock installed in well RW-2. Previously limited residual free product was encountered and it was reasoned that the free product might be leaching from the sidewalls of the southern extension of the UST basin, in the vicinity of the former waste oil UST. This is an area that was not removed during the UST overexcavation due to a potential structural threat to the maintenance building.

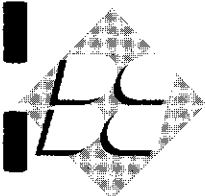
### 3.3 Groundwater Flow Direction and Gradient

The groundwater elevations measured in wells MW-2, MW-3, MW-5, RW-1, and RW-2 in March 2004 were from 0.01 to 0.55 feet higher than in the previous monitoring event in March 2003. The depths ranged from 5.37 to 6.63 feet below the tops of the well casings. The groundwater elevation data, based on surveyed top-of-casing elevations and depths to water, are presented in Table I. Figure 2 indicates that groundwater flows to the southeast at a gradient of approximately 0.113 feet/foot. In general, the gradient at the site has historically been flat; however, this rather steep gradient was produced principally by the relatively unchanged groundwater elevation recorded in well MW-2. Historically, a higher localized water level has consistently been present in the immediate vicinity of the UST basin. This has created an outward radial flow centered on the former UST complex. This groundwater mounding in the former UST basin indicates the difficulty in the flow of water, and thus hydrocarbons, out of the UST basin.

## 4.0 Conclusions

The following conclusions can be made from the available data:

- A concentration of TPH as diesel was present only in well MW-3, and represents a decreased concentration from the previous sampling event. TPH as diesel remained nondetectable, at good limits of detection, in wells MW-2 and MW-5.
- The concentration of BTEX remained nondetectable in wells MW-2, MW-3, and MW-5. BTEX have not been detected in the groundwater samples collected from wells MW-2, MW-3, MW-5, and RW-2 (when groundwater from wells MW-5 and RW-2 have been submitted for analysis) since discovery of the July 1996 release.



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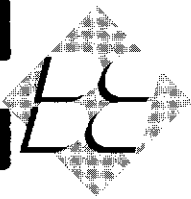
- MTBE returned to nondetectable concentrations in well MW-3. It remained nondetectable in wells MW-2 and MW-5. MTBE has previously been confirmed to be present by GC/MS laboratory techniques (EPA Method 8260B). Other fuel oxygenates were previously not present above standard limits of detection.
- During the June 2002 sampling event, no detectable SVOC compounds, including the carcinogenic "benzo(a)-" PNA compounds, were present in the groundwater sample from well RW-2. It should be noted that the limit of detection limit was elevated due to the presence of non-target compounds. It is of interest to note that BTEX and PNAs have consistently been nondetectable in water within the UST basin, and these compounds have not been detected in well MW-2 located approximately 2 feet downgradient from the edge of the UST basin. It appears that BTEX and PNAs are not migrating beyond the former UST basin.
- During the May 2001, June 2002, March 2003, and March 2004 sampling events limited measurable quantities (50 ml, 100 ml, 50 ml, and 200 ml, respectively) of free product were present in recovery well RW-1. No sign of free product was observed on the Soak-eze® absorbent sock installed in well RW-2 during these sampling events. This suggests that limited residual free product (heavy-end scum) may be leaching from the sidewalls of the southern extension of the UST basin, in the vicinity of the former waste oil UST. This is an area that was not removed during the UST overexcavation due to a potential structural threat to the maintenance building.
- Free product recovery operations have essentially reduced the thickness of free product to isolated heavy-end scum in the southern portion of the former UST complex.

### 5.0 Recommendations

- Continue annual groundwater monitoring on the revised schedule. The next groundwater monitoring event should be scheduled for March 2005.
- A copy of this report should be forwarded to the following agencies for review:

Alameda County Health Care Services Agency  
Department of Environmental Health  
1131 Harbor Bay Parkway, 2nd Floor  
Alameda, CA 94502-6577  
Attention: Ms. Eva Chu





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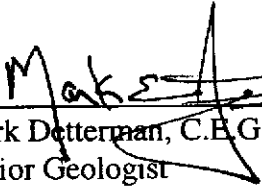
Alameda County Fire Department  
835 East 14th Street  
San Leandro, CA 94577  
Attention: Mr. Mike Bakaldin

## 6.0 Limitations

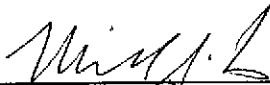
Services performed by Blymyer Engineers have been provided in accordance with generally accepted professional practices for the nature and conditions of the work completed in the same or similar localities, at the time the work was performed. The scope of work for the project was conducted within the limitations prescribed by the client, Arkansas Best Corporation. This report is not meant to represent a legal opinion. No other warranty, expressed or implied, is made. This report was prepared for the sole use of the client.

Please call Mark Detterman at (510) 521-3773 with any questions or comments.

Sincerely,  
Blymyer Engineers, Inc.

By:   
Mark Detterman, C.E.G. 1788  
Senior Geologist



And:   
Michael S. Lewis  
Vice President, Technical Services

### Enclosures:

- |             |   |
|-------------|---|
| Table I:    | Summary of Groundwater Elevation Measurements   |
| Table II:   | Summary of Groundwater Sample Hydrocarbon Analytical Results  |
| Table III:  | Summary of Miscellaneous Groundwater Sample Analytical Results  |
| Table IV:   | Free Product Recovery Measurements, Recovery Wells RW-1 and RW-2  |
| Figure 1:   | Site Location Map   |
| Figure 2:   | Site Plan and Groundwater Elevation Contours, March 17, 2004  |
| Appendix A: | <i>Standard Operating Procedures</i> , Blaine Tech Services, Inc.   |
| Appendix B: | <i>Wellhead Inspection Checklist, Well Gauging Data, and Well Monitoring Data Sheets</i> , Blaine Tech Services, Inc., March 17, 2004 |
| Appendix C: | Laboratory Analytical Reports, Sequoia Analytical, Inc., dated April 1, 2004  |

**Table I, Summary of Groundwater Elevation Measurements  
BEI Job No. 88288.1, G.I. Trucking Facility,  
1750 Adams Avenue, San Leandro, California**

Date Measured	RW-1* TOC Elevation 100.00 <sup>a</sup>		MW-2 TOC Elevation 100.24 <sup>a</sup>		MW-3 TOC Elevation 100.22 <sup>a</sup> TOC Elevation 100.18 <sup>b</sup>		MW-4 TOC Elevation 99.48 <sup>a</sup> TOC Elevation 99.46 <sup>a,d</sup>		MW-5 TOC Elevation 99.60 <sup>a</sup>		RW-2 Not Surveyed	
	Depth to Water/Free Product	Water Surface Elevation	Depth to Water	Water Surface Elevation	Depth to Water	Water Surface Elevation	Depth to Water	Water Surface Elevation	Depth to Water	Water Surface Elevation	Depth to Water/Free Product	Water Surface Elevation
November 15, 1988	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	N/A	N/A
February 16, 1989	6.03/5.83	N/A	6.13	94.11	6.00	94.22	5.92	93.56	5.42	94.18	N/A	N/A
May 19, 1989	6.31/6.11	N/A	6.24	94.00	6.20	94.02	5.25	94.23	5.53	94.07	N/A	N/A
August 22, 1989	6.72/6.54	N/A	6.68	93.56	6.60	93.62	6.76	92.72	5.94	93.66	N/A	N/A
November 21, 1989	6.51	93.49	6.64	93.60	6.55	93.67	5.72	93.76	5.91	93.69	N/A	N/A
February 23, 1990	5.74	94.26	6.04	94.20	5.83	94.39	4.92	94.56	5.69	93.91	N/A	N/A
May 23, 1990	6.34/6.19	N/A	6.40	93.84	6.38	93.84	5.39	94.09	5.92	93.68	N/A	N/A
August 27, 1990	6.27	93.73	6.70	93.54	6.67	93.55	5.66	93.82	6.17	93.43	N/A	N/A
December 3, 1990	6.49	93.51	6.83	93.41	6.75	93.47	5.95	93.53	6.05	93.55	N/A	N/A
March 13, 1991	4.94	95.06	5.64	94.60	5.42	94.80	4.39	95.09	5.01	94.59	N/A	N/A
May 29, 1991	9.46	90.54	6.31	93.93	6.28	93.94	5.27	94.21	5.57	94.03	N/A	N/A
August 28, 1991	6.31/6.22	N/A	6.68	93.56	6.62	93.60	5.70	93.78	5.90	93.7	N/A	N/A
December 9, 1991	6.49/6.29	N/A	6.69	93.55	6.65	93.57	5.78	93.78	5.99	93.61	N/A	N/A
February 18, 1992	4.19/4.09	N/A	4.96	95.28	4.73	95.49	3.60	95.88	4.45	95.15	N/A	N/A
May 15, 1992	5.72/5.55	N/A	6.07	94.17	5.99	94.23	5.03	94.45	5.33	94.27	N/A	N/A
August 13, 1992	6.12/5.93	N/A	6.42	93.82	6.32	93.90	5.40	94.08	5.62	93.98	N/A	N/A
December 3, 1992	5.65/5.55	N/A	6.25	93.99	6.23	93.99	5.14	94.34	5.58	94.02	N/A	N/A
March 25, 1993	4.60	95.40	5.40	94.84	5.27	94.95	4.14	95.34	4.34	95.26	N/A	N/A
May 21, 1993	5.56/5.47	N/A	6.04	94.20	5.97	94.25	4.95	94.53	5.28	94.32	N/A	N/A
August 17, 1993	6.07/5.94	N/A	6.42	93.82	6.59	93.63	5.40	94.08	5.61	93.99	N/A	N/A
December 13, 1993	NM <sup>e</sup>	NM <sup>e</sup>	6.09	94.15	6.33	93.89	5.08	94.40	5.38	94.22	N/A	N/A

**Table I, Summary of Groundwater Elevation Measurements  
BEI Job No. 88288.1, G.I. Trucking Facility,  
1750 Adams Avenue, San Leandro, California**

Date Measured	RW-1* TOC Elevation 100.00 <sup>a</sup>		MW-2 TOC Elevation 100.24 <sup>a</sup>		MW-3 TOC Elevation 100.22 <sup>a</sup> TOC Elevation 100.18 <sup>b</sup>		MW-4 TOC Elevation 99.48 <sup>a</sup> TOC Elevation 99.46 <sup>a,d</sup>		MW-5 TOC Elevation 99.60 <sup>a</sup>		RW-2 Not Surveyed	
	Depth to Water/Free Product	Water Surface Elevation	Depth to Water	Water Surface Elevation	Depth to Water	Water Surface Elevation	Depth to Water	Water Surface Elevation	Depth to Water	Water Surface Elevation	Depth to Water/Free Product	Water Surface Elevation
February 24, 1994	4.97	95.63	5.57	94.67	5.76	94.46	4.38	95.10	4.90	94.70	N/A	N/A
May 11, 1994	5.20	94.80	5.94	94.30	5.84	94.34	4.85	94.63	5.23	94.37	N/A	N/A
August 23, 1994	6.06/5.98	N/A	6.44	93.80	6.38	93.80	5.47	94.01	5.70	93.90	N/A	N/A
November 29, 1994	5.98	94.02	5.82	94.42	5.76	94.42	4.76	94.72	5.12	94.48	N/A	N/A
February 15, 1995	4.93	95.07	5.68	95.56	5.60	95.58	NM	NM	NM	NM	N/A	N/A
May 18, 1995	4.99	95.01	NM	NM	NM	NM	NM	NM	NM	NM	N/A	N/A
August 16, 1995	6.46	93.54	6.19	94.05	6.11	94.07	5.16	94.32	5.47	94.13	N/A	N/A
November 16, 1995	5.21	94.79	NM	NM	NM	NM	NM	NM	NM	NM	N/A	N/A
February 15, 1996	4.68	95.32	5.62	94.62	5.48	94.70	4.40	95.08	4.90	94.70	N/A	N/A
August 5, 1996	6.05/5.70	N/A	6.22	94.02	6.16	94.02	5.27	94.19	5.50	94.10	6.02/5.71	N/A
February 6, 1997	4.40	95.60	5.5	94.74	5.36	94.82	4.26	95.2	4.80	94.80	4.41	N/A
August 22, 1997	4.90	95.1	6.57	93.67	5.85	94.33	5.09	94.37	6.37	93.23	4.88	N/A
February 12, 1998	3.18	96.82	4.88	95.36	4.81	95.41	3.58	95.88	4.32	95.28	3.21	N/A
August 27, 1998	5.95	94.05	6.42	93.82	6.25	93.93	5.43	94.03	5.77	93.83	5.92	N/A
March 4 & 11, 1999	4.98	95.02	6.39	93.85	6.14	94.04	5.34	94.12	5.88	93.72	4.95	N/A
June 18, 2002	6.28	93.72	7.14	93.10	7.07	93.11	NM	NM	5.97	93.63	6.30	N/A
March 13, 2003	6.15	93.85	6.64	93.60	6.45	93.73	NM	NM	5.77	93.83	6.11	N/A
March 17, 2004	5.60	94.40	6.63	93.61	5.98	94.20	NM	NM	5.37	94.23	5.58	N/A

Notes: TOC = Top of casing  
b = Resurveyed elevation, May 11, 1994  
d = TOC mark lost; Resurveyed elevation, August 16, 1996  
NM = Not measured

a = Based on an arbitrary datum  
c = Not measured due to equipment malfunction  
N/A = Not applicable  
\* = Formerly designated as well MW-1

**Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results  
BEI Job No. 88288.1, G.I. Trucking Facility,  
1750 Adams Avenue, San Leandro, California**

Sample ID	Date	Modified EPA Method 8015 (mg/L)	EPA Method 8020 or 8021B ( $\mu\text{g/L}$ )				
			TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes
RW-1*	November 15, 1988	0.22 ft. FP	NA	NA	NA	NA	NA
	February 16, 1989	0.20 ft. FP	NA	NA	NA	NA	NA
	May 19, 1989	0.20 ft. FP	NA	NA	NA	NA	NA
	August 22, 1989	0.18 ft. FP	NA	NA	NA	NA	NA
	November 21, 1989	product sheen	NA	NA	NA	NA	NA
	February 23, 1990	product sheen	NA	NA	NA	NA	NA
	May 23, 1990	0.15 ft. FP	NA	NA	NA	NA	NA
	August 27, 1990	product sheen	NA	NA	NA	NA	NA
	December 3, 1990	product sheen	NA	NA	NA	NA	NA
	March 13, 1991	product sheen	NA	NA	NA	NA	NA
	May 29, 1991	product sheen	NA	NA	NA	NA	NA
	August 28, 1991	0.09 ft. FP	NA	NA	NA	NA	NA
	December 9, 1991	0.20 ft. FP	NA	NA	NA	NA	NA
	February 18, 1992	0.09 ft. FP	NA	NA	NA	NA	NA
	May 15, 1992	0.17 ft. FP	NA	NA	NA	NA	NA
	August 13, 1992	0.19 ft. FP	NA	NA	NA	NA	NA
	December 3, 1992	0.10 ft. FP	NA	NA	NA	NA	NA
	March 25, 1993	product sheen	NA	NA	NA	NA	NA
	May 21, 1993	0.09 ft. FP	NA	NA	NA	NA	NA
	August 17, 1993	0.13 ft. FP	NA	NA	NA	NA	NA
December 13, 1993	heavy product sheen	NA	NA	NA	NA	NA	

**Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results  
BEI Job No. 88288.1, G.I. Trucking Facility,  
1750 Adams Avenue, San Leandro, California**

Sample ID	Date	Modified EPA Method 8015 (mg/L)	EPA Method 8020 or 8021B ( $\mu\text{g/L}$ )				
		TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
RW-1* (cont.)	February 24, 1994	heavy product sheen	NA	NA	NA	NA	NA
	May 11, 1994	heavy product sheen	NA	NA	NA	NA	NA
	August 23, 1994	0.08 ft FP	NA	NA	NA	NA	NA
	November 29, 1994	heavy product sheen	NA	NA	NA	NA	NA
	February 15, 1995	heavy product sheen	NA	NA	NA	NA	NA
	August 16, 1995	heavy product sheen	NA	NA	NA	NA	NA
	February 15, 1996	heavy product sheen	NA	NA	NA	NA	NA
	August 5, 1996	0.35 ft FP	NA	NA	NA	NA	NA
	February 6, 1997	light sheen	NA	NA	NA	NA	NA
	August 22, 1997	light sheen	NA	NA	NA	NA	NA
	February 12, 1998	89	NA	NA	NA	NA	NA
	August 27, 1998	heavy product sheen	NA	NA	NA	NA	NA
	March 4 & 11, 1999	sheen	NA	NA	NA	NA	NA
	May 30, 2001	sheen	NA	NA	NA	NA	NA
	June 18, 2002	no sheen	NA	NA	NA	NA	NA
	March 13, 2003	no sheen	NA	NA	NA	NA	NA
March 17, 2004	no sheen	NA	NA	NA	NA	NA	

**Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results  
BEI Job No. 88288.1, G.I. Trucking Facility,  
1750 Adams Avenue, San Leandro, California**

Sample ID	Date	Modified EPA Method 8015 (mg/L)	EPA Method 8020 or 8021B ( $\mu\text{g/L}$ )				
		TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
MW-2	November 15, 1988	<0.20	NA	NA	NA	NA	NA
	February 16, 1989	<0.09	NA	NA	NA	NA	NA
	May 19, 1989	<0.08	NA	NA	NA	NA	NA
	August 22, 1989	<0.03	NA	NA	NA	NA	NA
	November 21, 1989	<0.03	NA	NA	NA	NA	NA
	February 23, 1990	<0.05	NA	NA	NA	NA	NA
	May 23, 1990	<0.05	NA	NA	NA	NA	NA
	August 27, 1990	<0.05	NA	NA	NA	NA	NA
	December 3, 1990	<0.05	NA	NA	NA	NA	NA
	March 13, 1991	<0.05	NA	NA	NA	NA	NA
	May 29, 1991	<0.05	NA	NA	NA	NA	NA
	August 28, 1991	<0.05	NA	NA	NA	NA	NA
	December 9, 1991	<0.05	NA	NA	NA	NA	NA
	February 18, 1992	<0.05	NA	NA	NA	NA	NA
	May 15, 1992	<0.05	NA	NA	NA	NA	NA
	August 13, 1992	<0.05	NA	NA	NA	NA	NA
	December 3, 1992	<0.05	NA	NA	NA	NA	NA
	March 25, 1993	<0.05	NA	NA	NA	NA	NA
May 21, 1993	<0.05	NA	NA	NA	NA	NA	
August 17, 1993	<0.05	<0.5	<0.5	<0.5	<0.5	<0.5	

**Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results  
BEI Job No. 88288.1, G.I. Trucking Facility,  
1750 Adams Avenue, San Leandro, California**

Sample ID	Date	Modified EPA Method 8015 (mg/L)	EPA Method 8020 or 8021B ( $\mu\text{g/L}$ )				
		TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
MW-2 (cont.)	December 13, 1993	<0.05	<0.5	<0.5	<0.5	<0.5	NA
	February 24, 1994	<0.05	<0.5	<0.5	<0.5	<0.5	NA
	May 11, 1994	<0.05	<0.5	<0.5	<0.5	<0.5	NA
	August 23, 1994	<0.05	<0.5	<0.5	<0.5	<0.5	NA
	November 29, 1994	<b>0.09</b>	<0.5	<0.5	<0.5	<0.5	NA
	February 15, 1995	<b>0.1<sup>a</sup></b>	<0.5	<b>1.2</b>	<0.5	<0.5	NA
	August 16, 1995	<b>0.063<sup>c</sup></b>	<0.5	<0.5	<0.5	<0.5	NA
	February 15, 1996	<b>0.079</b>	<0.5	<0.5	<0.5	<0.5	NA
	August 5, 1996	<b>0.10<sup>d</sup></b>	<0.5	<0.5	<0.5	<0.5	NA
	February 6, 1997	<b>0.14<sup>a</sup></b>	<0.5	<0.5	<0.5	<0.5	NA
	August 22, 1997	<0.10	<0.5	<0.5	<0.5	<0.5	NA
	February 12, 1998	<0.10	<0.5	<0.5	<0.5	<0.5	NA
	August 27, 1998	<b>0.093</b>	<0.5	<0.5	<0.5	<0.5	NA
	March 4 & 11, 1999	<0.050	<0.5	<0.5	<0.5	<0.5	<5
	May 30, 2001	NA	NA	NA	NA	NA	NA
	June 18, 2002	<0.050	<0.5	<0.5	<0.5	<0.5	<2.5
March 13, 2003	<0.048	<0.5	<0.5	<0.5	<0.5	<2.0	
March 17, 2004	<0.50	<0.5	<0.5	<0.5	<0.5	<2.5	

**Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results  
BEI Job No. 88288.1, G.I. Trucking Facility,  
1750 Adams Avenue, San Leandro, California**

Sample ID	Date	Modified EPA Method 8015 (mg/L)	EPA Method 8020 or 8021B ( $\mu\text{g/L}$ )				
		TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
MW-3	November 15, 1988	<0.20	NA	NA	NA	NA	NA
	February 16, 1989	<0.09	NA	NA	NA	NA	NA
	May 19, 1989	<0.08	NA	NA	NA	NA	NA
	August 22, 1989	<0.03	NA	NA	NA	NA	NA
	November 21, 1989	<0.03	NA	NA	NA	NA	NA
	February 23, 1990	<b>0.34</b>	NA	NA	NA	NA	NA
	May 23, 1990	<b>0.64</b>	NA	NA	NA	NA	NA
	August 27, 1990	<b>0.41</b>	NA	NA	NA	NA	NA
	December 3, 1990	<0.05	NA	NA	NA	NA	NA
	March 13, 1991	<b>1.3</b>	NA	NA	NA	NA	NA
	May 29, 1991	<b>0.54</b>	NA	NA	NA	NA	NA
	August 28, 1991	<b>0.24</b>	NA	NA	NA	NA	NA
	December 9, 1991	<b>0.20</b>	NA	NA	NA	NA	NA
	February 18, 1992	<b>0.89</b>	NA	NA	NA	NA	NA
	May 15, 1992	<b>0.38</b>	NA	NA	NA	NA	NA
	August 13, 1992	<b>0.20</b>	NA	NA	NA	NA	NA
	December 3, 1992	<0.05	NA	NA	NA	NA	NA
	March 25, 1993	<b>1.6</b>	NA	NA	NA	NA	NA
May 21, 1993	<b>0.72</b>	NA	NA	NA	NA	NA	
August 17, 1993	<b>0.48</b>	<0.5	<0.5	<0.5	<0.5	NA	



**Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results**  
**BEI Job No. 88288.1, G.J. Trucking Facility,**  
**1750 Adams Avenue, San Leandro, California**

Sample ID	Date	Modified EPA Method 8015 (mg/L)	EPA Method 8020 or 8021B ( $\mu\text{g/L}$ )				
		TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
MW-3 (cont.)	December 13, 1993	0.19	<0.5	<0.5	<0.5	<0.5	NA
	February 24, 1994	0.38	<0.5	<0.5	<0.5	<0.5	NA
	May 11, 1994	0.58	<0.5	<0.5	<0.5	<0.5	NA
	August 23, 1994	0.45 <sup>a</sup>	<0.5	0.6	<0.5	<0.5	NA
	November 29, 1994	0.96 <sup>a</sup>	<0.5	<0.5	<0.5	<0.5	NA
	February 15, 1995	1.7 <sup>a</sup>	<0.5	<0.5	<0.5	<0.5	NA
	August 16, 1995	1.1 <sup>c</sup>	<0.5	<0.5	<0.5	<0.5	NA
	February 15, 1996	1.3	<0.5	<0.5	<0.5	<0.5	NA
	August 5, 1996	1.0 <sup>d</sup>	<0.5	<0.5	<0.5	<0.5	NA
	February 6, 1997	2.4 <sup>a</sup>	<0.5	<0.5	<0.5	<0.5	NA
	August 22, 1997	2.0 <sup>a</sup>	<0.5	<0.5	<0.5	<0.5	NA
	February 12, 1998	1.5 <sup>e</sup>	<0.5	<0.5	<0.5	<0.5	NA
	August 27, 1998	0.410	<0.5	<0.5	<0.5	<0.5	NA
	March 4 & 11, 1999	0.330	<0.5	<0.5	<0.5	<0.5	17
	May 30, 2001	NA	NA	NA	NA	NA	NA
	June 18, 2002	1.1 <sup>e</sup>	<0.5	<0.5	<0.5	<0.5	3.6 <sup>f</sup>
March 13, 2003	0.680	<0.5	<0.5	<0.5	<0.5	2.9	
March 17, 2004	0.450	<0.5	<0.5	<0.5	<0.5	<2.5	

**Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results  
BEI Job No. 88288.1, G.I. Trucking Facility,  
1750 Adams Avenue, San Leandro, California**

Sample ID	Date	Modified EPA Method 8015 (mg/L)	EPA Method 8020 or 8021B ( $\mu\text{g/L}$ )				
			TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes
MW-4	November 15, 1988	<0.20	NA	NA	NA	NA	NA
	February 16, 1989	<0.09	NA	NA	NA	NA	NA
	May 19, 1989	<0.08	NA	NA	NA	NA	NA
	August 22, 1989	<0.03	NA	NA	NA	NA	NA
	November 21, 1989	<0.03	NA	NA	NA	NA	NA
	February 23, 1990	<0.05	NA	NA	NA	NA	NA
	May 23, 1990	<0.05	NA	NA	NA	NA	NA
	August 27, 1990	<0.05	NA	NA	NA	NA	NA
	December 3, 1990	<0.05	NA	NA	NA	NA	NA
	March 13, 1991	<0.05	NA	NA	NA	NA	NA
	May 29, 1991	<0.05	NA	NA	NA	NA	NA
	August 28, 1991	<0.05	NA	NA	NA	NA	NA
	December 9, 1991	<0.05	NA	NA	NA	NA	NA
	February 18, 1992	<0.05	NA	NA	NA	NA	NA
	May 15, 1992	<0.05	NA	NA	NA	NA	NA
	August 13, 1992	<0.05	NA	NA	NA	NA	NA
	December 3, 1992	<0.05	NA	NA	NA	NA	NA
	March 25, 1993	<0.05	NA	NA	NA	NA	NA
May 21, 1993	<0.05	NA	NA	NA	NA	NA	
August 17, 1993	<0.05	<0.5	<0.5	<0.5	<0.5	NA	

**Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results  
BEI Job No. 88288.1, G.I. Trucking Facility,  
1750 Adams Avenue, San Leandro, California**

Sample ID	Date	Modified EPA Method 8015 (mg/L)	EPA Method 8020 or 8021B ( $\mu\text{g/L}$ )				
		TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
MW-4 (cont.)	December 13, 1993	<0.05	<0.5	<0.5	<0.5	<0.5	NA
	February 24, 1994	<0.05	<0.5	<0.5	<0.5	<0.5	NA
	May 11, 1994	<0.05	<0.5	<0.5	<0.5	<0.5	NA
	August 23, 1994	<0.05	<0.5	<0.5	<0.5	<0.5	NA
	November 29, 1994	NA	NA	NA	NA	NA	NA
	February 15, 1995	NA	NA	NA	NA	NA	NA
	August 16, 1995	NA	NA	NA	NA	NA	NA
	February 15, 1996	NA	NA	NA	NA	NA	NA
	August 5, 1996	NA	NA	NA	NA	NA	NA
	February 6, 1997	NA	NA	NA	NA	NA	NA
	August 22, 1997	NA	NA	NA	NA	NA	NA
	February 12, 1998	NA	NA	NA	NA	NA	NA
	August 27, 1998	NA	NA	NA	NA	NA	NA
	March 4 & 11, 1999	NA	NA	NA	NA	NA	NA
June 1999	Destroyed						

**Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results**  
**BEI Job No. 88288.1, G.I. Trucking Facility,**  
**1750 Adams Avenue, San Leandro, California**

Sample ID	Date	Modified EPA Method 8015 (mg/L)	EPA Method 8020 or 8021B ( $\mu\text{g/L}$ )				
		TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
MW-5	November 15, 1988	<0.20	NA	NA	NA	NA	NA
	February 16, 1989	<0.09	NA	NA	NA	NA	NA
	May 19, 1989	<0.08	NA	NA	NA	NA	NA
	August 22, 1989	<0.03	NA	NA	NA	NA	NA
	November 21, 1989	<0.03	NA	NA	NA	NA	NA
	February 23, 1990	<0.05	NA	NA	NA	NA	NA
	May 23, 1990	<0.05	NA	NA	NA	NA	NA
	August 27, 1990	<0.05	NA	NA	NA	NA	NA
	December 3, 1990	<0.05	NA	NA	NA	NA	NA
	March 13, 1991	<0.05	NA	NA	NA	NA	NA
	May 29, 1991	<0.05	NA	NA	NA	NA	NA
	August 28, 1991	<0.05	NA	NA	NA	NA	NA
	December 9, 1991	<0.05	NA	NA	NA	NA	NA
	February 18, 1992	<0.05	NA	NA	NA	NA	NA
	May 15, 1992	<0.05	NA	NA	NA	NA	NA
	August 13, 1992	<0.05	NA	NA	NA	NA	NA
	December 3, 1992	<0.05	NA	NA	NA	NA	NA
	March 25, 1993	<0.05	NA	NA	NA	NA	NA
	May 21, 1993	<0.05	NA	NA	NA	NA	NA
August 17, 1993	<0.05	<0.05	<0.05	<0.5	<0.5	<0.5	<0.5

**Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results  
BEI Job No. 88288.1, G.I. Trucking Facility,  
1750 Adams Avenue, San Leandro, California**

Sample ID	Date	Modified EPA Method 8015 (mg/L)	EPA Method 8020 or 8021B (µg/L)				
		TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
MW-5 (cont.)	December 13, 1993	<0.05	<0.05	<0.5	<0.5	<0.5	<0.5
	February 24, 1994	<0.05	<0.05	<0.5	<0.5	<0.5	<0.5
	May 11, 1994	<0.05	<0.05	<0.5	<0.5	<0.5	<0.5
	August 23, 1994	<0.05	<0.05	<0.5	<0.5	<0.5	<0.5
	November 29, 1994	NA	NA	NA	NA	NA	NA
	February 15, 1995	NA	NA	NA	NA	NA	NA
	August 16, 1995	NA	NA	NA	NA	NA	NA
	February 15, 1996	NA	NA	NA	NA	NA	NA
	August 5, 1996	NA	NA	NA	NA	NA	NA
	February 6, 1997	NA	NA	NA	NA	NA	NA
	August 22, 1997	NA	NA	NA	NA	NA	NA
	February 12, 1998	NA	NA	NA	NA	NA	NA
	August 27, 1998	NA	NA	NA	NA	NA	NA
	March 4 & 11, 1999	NA	NA	NA	NA	NA	NA
	May 30, 2001	NA	NA	NA	NA	NA	NA
	June 18, 2002	<b>0.061</b>	<0.5	<0.5	<0.5	<0.5	<2.5
March 13, 2003	<0.047	<0.5	<0.5	<0.5	<0.5	<2.0	
March 17, 2004	<0.50	<0.5	<0.5	<0.5	<0.5	<2.5	

**Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results  
BEI Job No. 88288.1, G.I. Trucking Facility,  
1750 Adams Avenue, San Leandro, California**

Sample ID	Date	Modified EPA Method 8015 (mg/L)	EPA Method 8020 or 8021B ( $\mu\text{g/L}$ )				
		TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
RW-2 **	August 5, 1996	NA	NA	NA	NA	NA	NA
	February 6, 1997	NA	NA	NA	NA	NA	NA
	August 22, 1997	NA	NA	NA	NA	NA	NA
	February 12, 1998	<b>100</b>	<0.5	<0.5	<0.5	<0.5	NA
	August 27, 1998	NA	NA	NA	NA	NA	NA
	March 4 & 11, 1999	<b>74</b>	<1.0	<1.0	<1.0	<1.0	<10
	May 30, 2001	<b>9.0</b>	<0.5	<0.5	<0.5	<0.5	NA
	June 18, 2002	<b>280</b>	<10	<10	<10	<10	<50
	March 13, 2003	no sheen	NA	NA	NA	NA	NA
	March 17, 2004	no sheen	NA	NA	NA	NA	NA

- Notes:
- TPH = Total Petroleum Hydrocarbons
  - MTBE = Methyl *tert*-butyl ether
  - mg/L = Milligrams per liter
  - $\mu\text{g/L}$  = Micrograms per liter
  - <x = Detected concentration less than respective detection limit of x.
  - NA = Not analyzed
  - a = Laboratory reports that positive result appears to be due to the presence of a heavier hydrocarbon than diesel.
  - b = Beginning this sampling event results are converted to mg/L, originally reported in  $\mu\text{g/L}$ .
  - c = Laboratory reports that an unidentified hydrocarbon, heavier than the diesel standard, was present between the carbon range of C9 to C24.
  - d = Laboratory reports a hydrocarbon heavier than the diesel standard was present, and that the method blank contained 0.05 mg/L TPH as diesel.
  - e = Laboratory reports that the pattern is atypical for diesel analysis (June 2002 result was weathered diesel per personal communication September 16, 2002).
  - f = Confirmed by EPA Method 8260B at a concentration of 3.1  $\mu\text{g/L}$ ; see Table III
  - \* = Formerly designated as well MW-1
  - \*\* = Installed July 1996

Bold results indicate detectable analyte concentrations.







Table III, Summary of Miscellaneous Groundwater Sample Analytical Results (continued)

Notes: *	=	Groundwater samples from monitoring wells MW-4 and MW-5 were not collected for these analyses.
**	=	Formerly designated as well MW-1
TPH	=	Total Petroleum Hydrocarbons
HVOCs	=	Halogenated Volatile Organic Compounds
SVOCs	=	Semi-volatile Organic Compounds
PNAs	=	Poly-nuclear Aromatic Compounds
MTBE	=	Methyl tert-butyl ether
mg/L	=	Milligrams per liter
$\mu\text{g/L}$	=	Micrograms per liter
NA	=	Not analyzed
ND	=	None of analytes detected above the detection limit; see individual laboratory report for respective detection limits.
a	=	TPH as motor oil analysis performed First Quarter 1995 only to provide additional groundwater chemistry data.
b	=	Metals analytical test includes: cadmium (Cd), chromium (Cr), lead (Pb), nickel (Ni), zinc (Zn).
c	=	Not analyzed due to presence of free product or product sheen in monitoring well.
d	=	Groundwater sample filtered and preserved before submittal to laboratory.
e	=	Detected analyte(s) and concentration(s) listed; see individual laboratory report for respective detection limit(s).
f	=	Analysis of groundwater samples for TPH as gasoline, TRPH, HVOCs, SVOCs, and metals was discontinued beginning this monitoring event.
g	=	MTBE confirmed at a concentration of 3.1 $\mu\text{g/L}$ by EPA Method 8260B. All other fuel oxygenates were nondetectable at variable limits of detection. Please see laboratory report for details.

**Table IV, Free Product Recovery Measurements, Recovery Wells RW-1 and RW-2\*\***  
**BEI Job No. 88288.001, G.I. Trucking Facility,**  
**1750 Adams Avenue, San Leandro, California**

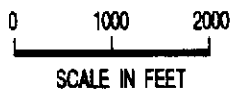
Date Recovered	Volume Recovered (gallons)
November 1988 to October 1993	No recovery performed
November 1993	0.125
December 1993	0.25
January 1994	0.05
February 1994	<0.05
March 1994	<0.05
April 1994	<0.05
May 1994	<0.05
June 1994	<0.025
July 1994	<0.025
August 1994 <sup>a</sup>	0.1
November 1994	0.1
February 1995	<0.025
May 1995	<0.025
August 1995	No measurable product to recover
November 1995	0.25
February 1996	No measurable product to recover
June 1996	1.1
July 1996 <sup>b</sup>	3.75
August 1996	121
September 1996	30
October 1996	23
November 1996	Soak-eze <sup>®</sup> installed/trace in passive skimmer
December 1996	Soak-eze <sup>®</sup> installed/trace in passive skimmer
January 1997	Soak-eze <sup>®</sup> installed/0.1 gallon in passive skimmer
February 1 to 6, 1997	Soak-eze <sup>®</sup> installed/trace in passive skimmer
February 7 to August 22, 1997	Soak-eze <sup>®</sup> installed/100 ml in passive skimmer
August 22, 1997 to February 12, 1998	Soak-eze <sup>®</sup> installed/0 ml in passive skimmer
February 13, 1998 to August 27, 1998	Soak-eze <sup>®</sup> replaced/20 ml in passive skimmer
August 28, 1998 to March 4, 1999	No measurable product to recover
May 30, 2001	50 ml in passive skimmer (RW-2), light sheen on water
June 18, 2002	100 ml in passive skimmer (RW-2), no sheen reported
March 13, 2003	50 ml in passive skimmer (RW-1), no sheen reported (RW-1 and RW-2)
March 17, 2004	200 ml in passive skimmer (RW-1), no sheen reported (RW-1 and RW-2)
Cumulative Volume Recovered (approximate)	180



UNITED STATES GEOLOGICAL SURVEY 7.5' QUAD. "SAN LEANDRO, CA", ED. 1959, PHOTOREVISED 1980.



**BLMYER**  
ENGINEERS, INC.



**SITE LOCATION MAP**

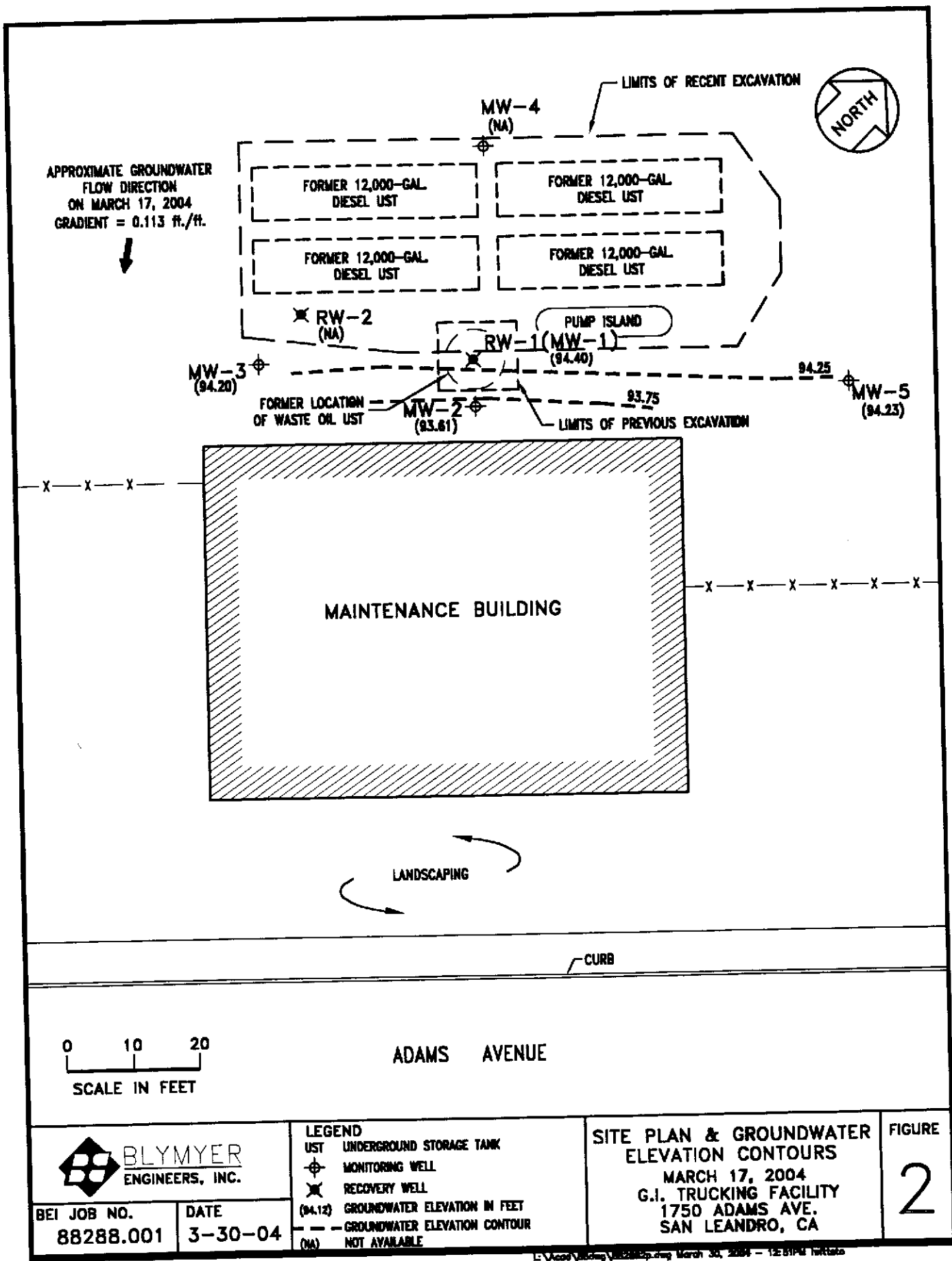
G.I. TRUCKING FACILITY  
1750 ADAMS AVE.  
SAN LEANDRO, CA

FIGURE

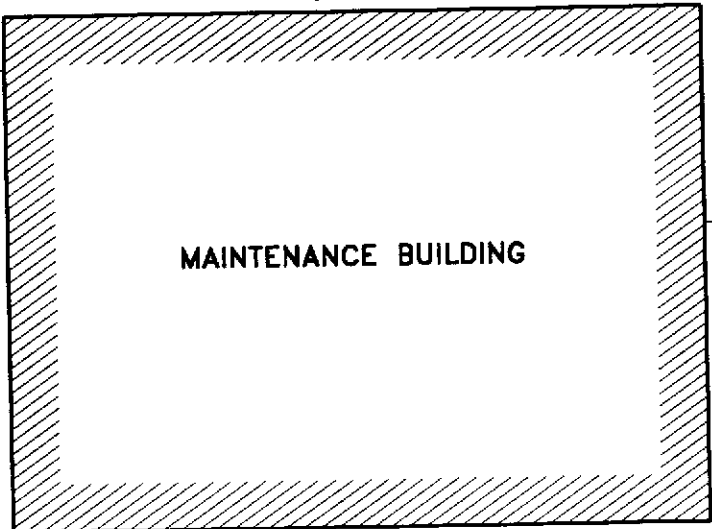
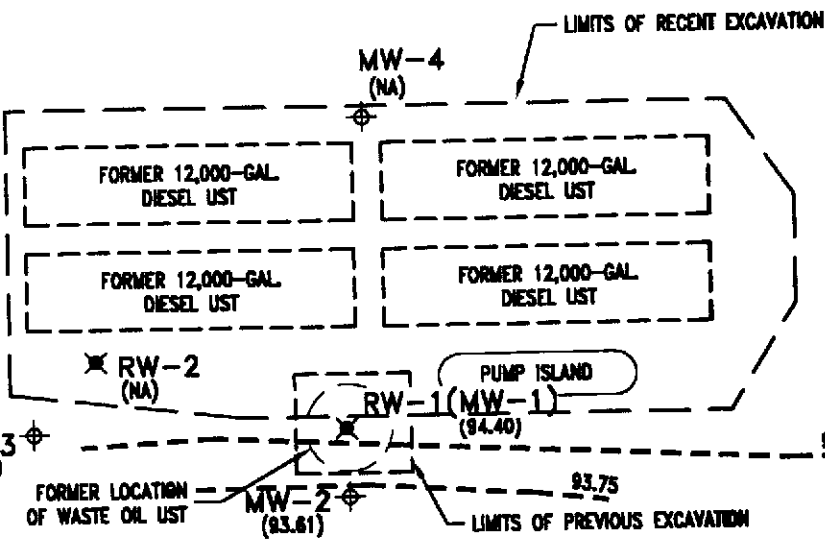
1

BEI JOB NO. 88288

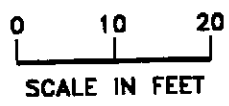
DATE 9/19/95



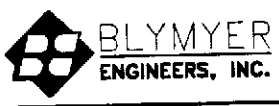
APPROXIMATE GROUNDWATER  
FLOW DIRECTION  
ON MARCH 17, 2004  
GRADIENT = 0.113 ft./ft.



CURB



ADAMS AVENUE



- LEGEND**
- UST UNDERGROUND STORAGE TANK
  - ⊕ MONITORING WELL
  - ✕ RECOVERY WELL
  - (94.12) GROUNDWATER ELEVATION IN FEET
  - - - GROUNDWATER ELEVATION CONTOUR
  - (NA) NOT AVAILABLE

**SITE PLAN & GROUNDWATER  
ELEVATION CONTOURS**  
MARCH 17, 2004  
G.I. TRUCKING FACILITY  
1750 ADAMS AVE.  
SAN LEANDRO, CA

FIGURE  
**2**

BEI JOB NO. 88288.001  
DATE 3-30-04

*Appendix A*

---

*Standard Operating Procedures*

*Blaine Tech Services, Inc.*

Blaine Tech Services, Inc.  
Standard Operating Procedure

## WATER LEVEL AND TOTAL WELL DEPTH MEASUREMENTS (GAUGING)

### Routine Water Level Measurements

1. Establish that water or debris will not enter the well box upon removal of the cover.
2. Remove the cover using the appropriate tools.
3. Inspect the wellhead (see Wellhead Inspections).
4. Establish that water or debris will not enter the well upon removal of the well cap.
5. Unlock and remove the well cap lock (if applicable). If lock is not functional out it off.
6. Loosen and remove the well cap. CAUTION: DO NOT PLACE YOUR FACE OR HEAD DIRECTLY OVER WELLHEAD WHEN REMOVING THE WELL CAP. WELL CAP MAY BE UNDER PRESSURE AND/OR MAY RELEASE ACCUMULATED AND POTENTIALLY HARMFUL VAPORS.
7. Verify and identify survey point as written on S.O.W.
  - TOC: If survey point is listed as Top of Casing (TOC), look for the exact survey point in the form of a notch or mark on the top of the casing. If no mark is present, use the north side of the casing as the measuring point.
  - TOB: If survey point is listed as Top of Box (TOB), the measuring point will be established manually. Place the inverted wellbox lid halfway across the wellbox opening and directly over the casing. The lower edge of the inverted cover directly over the casing will be the measuring point.
8. Put new Latex or Nitrile gloves on your hands.
9. Slowly lower the Water Level Meter probe into the well until it signals contact with water with a tone and/or flashing a light.
10. Gently raise the probe tip slightly above the water and hold it there. Wait momentarily to see if the meter emits a tone, signaling rising water in the casing. Gently lower the probe tip slightly below the water. Wait momentarily to see if the meter stops emitting a tone, signaling dropping water in the casing. Continue process until water level stabilizes indicating that the well has equilibrated.
11. While holding the probe at first contact with water and the tape against the measuring point, note depth. Repeat twice to verify accuracy. Write down measurement on Well Gauging Sheet under Depth to Water column.
12. Recover probe, replace and tighten well cap, replace lock (if applicable), replace well box cover and tighten hardware (if applicable)

### Routine Total Well Depth Measurements

1. Lower the Water Level Meter probe into the well until it lightens in your hands, indicating that the probe is resting at the bottom of well.
2. Gently raise the tape until the weight of the probe increases, indicating that the probe has lifted off the well bottom.

Gauging SOP

Page 2 of 2

3. While holding the probe at first contact with the well bottom and the tape against the well measuring point, note depth. Repeat twice to verify accuracy. Write down measurement on Well Gauging Sheet under Total Well Depth column.
4. Recover probe, replace and tighten well cap, replace lock (if applicable), replace well box cover and tighten hardware (if applicable).

**Blaine Tech Services, Inc.  
Standard Operating Procedure**

**WELL WATER EVACUATION (PURGING) WITH  
BTS 1.75" BLADDERLESS STAINLESS STEEL  
POSITIVE DISPLACEMENT PUMP**

The BTS 1.75" Bladderless Stainless Steel Positive Displacement Purge Pump is modeled after the EPA approved USGS/Middleburg Positive Displacement Sampling Pump. It is suitable for purging wells with diameters greater than 2" at depths up to several hundred feet.

The pump is actuated with compressed air from an electric, oil-less air compressor mounted on the Sampling Vehicle. The air travels to the pump via a single hose. Water is pushed out of the pump and up a second hose to the surface. The rate of water removal is relatively slow and loss of volatiles is almost non-existent. There is only positive pressure on the water being purged. There is no impeller cavitation or suction acting on the water. The pump can be placed at any location in the well and can draw water from the very bottom of the well. The pump is virtually immune to the erosive effects of silt or lack of water that can destroy other types of pumps.

**Purging with the BTS 1.75" Stainless Steel Positive Displacement Pump**

1. Position pump hose reel over the top of the well.
2. Start the air compressor so that it can build pressure.
3. Connect the influent air hose and effluent water hose of the reel to the pump.
4. Gently unreel and lower the pump into the well to the desired depth, typically several feet off the well bottom. Use caution when contacting the well bottom.
5. Secure the hose reel.
6. Connect the effluent water line extension to the hose reel. Attach the extension to a graduated 5-gallon bucket or other receptacle.
7. Connect the control box air-line to the hose reel.
8. Turn the switch on the control box to the "on" position to commence purging.
9. Adjust water recharge duration and air pulse duration for maximum efficiency. Expect not more than 1.0 GPM when pumping from 0 - 100 feet below grade and not more than 0.5 GPM when pumping from depths greater than 100 feet below grade.
10. Upon removal of first casing volume, fill clean parameter cup with water.
11. Use the water in the cup to collect and record the required parameter measurements.
12. Continue purging until second casing volume is removed.
13. Collect parameter measurements.
14. Continue purging until third casing volume is removed.



## Purging - 1.75" Middleburg Pump SOP

Page 2 of 2

15. Collect parameter measurements. If parameters are stable, stop purging. If parameters remain unstable, continue purging until stabilization occurs or the fifth casing volume is removed.
16. Upon completion of purging, disconnect the control box air-line and effluent water line extension from the hose reel, gently recover the pump and secure the reel. Sample the well as required.

Blaine Tech Services, Inc.  
Standard Operating Procedure

**SAMPLE COLLECTION  
FROM GROUNDWATER WELLS USING BAILERS**

**Sampling with a Bailer (Stainless Steel, Teflon or Disposable)**

1. Put new Latex or Nitrile gloves on your hands.
2. Determine required bottle set.
3. Fill out sample labels completely and attach to bottles.
4. Arrange bottles in filling order and loosen caps (see Determine Collection Order below).
5. Attach bailer cord or string to bailer. Leave other end attached to spool.
6. Gently lower empty bailer into well until water is reached.
7. As bailer fills, cut cord from spool and tie end of cord to hand.
8. Gently raise full bailer out of well and clear of well head. Do not let the bailer or cord touch the ground. If a set of parameter measurements is required, go to step 9. If no additional measurements are required, go to step 11.
9. Fill a clean parameter cup, empty the remainder contained in the bailer into the sink, lower the bailer back into the well and secure the cord on the Sampling Vehicle. Use the water in the cup to collect and record parameter measurements.
10. Fill bailer again and carefully remove it from the well.
11. Slowly fill and cap sample bottles. Fill and cap volatile compounds first, then semi-volatile, then inorganic. Return to the well as needed for additional sample material.

Fill 40-milliliter vials for volatile compounds as follows: Slowly pour water down the inside on the vial. Carefully pour the last drops creating a convex or positive meniscus on the surface. Gently screw the cap on eliminating any air space in the vial. Turn the vial over, tap several times and check for trapped bubbles. If bubbles are present, repeat process.

Fill 1 liter amber bottles for semi-volatile compounds as follows: Slowly pour water into the bottle. Leave approximately 1 inch of headspace in the bottle. Cap bottle.

Field filtering of inorganic samples using a stainless steel bailer is performed as follows: Attach filter connector to top of full stainless steel bailer. Attach 0.45 micron filter to connector. Flip bailer over and let water gravity feed through the filter and into the sample bottle. If high turbidity level of water clogs filter, repeat process with new filter until bottle is filled. Leave headspace in the bottle. Cap bottle.

Field filtering of inorganic samples using a disposable bailer is performed as follows: Attach 0.45 micron filter to connector plug. Attach connector plug to bottom of full disposable bailer. Water will gravity feed through the filter and into the sample bottle. If high turbidity level of water clogs filter, repeat process with new filter until bottle is filled. Leave headspace in the bottle. Cap bottle.

12. Bag samples and place in ice chest.
13. Note sample collection details on well data sheet and Chain of Custody.

*Appendix B*

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*Wellhead Inspection Checklist, Well Gauging Data  
and Well Monitoring Data Sheets  
Blaine Tech Services, Inc.  
dated March 17, 2004*



# WELL GAUGING DATA

Project # 040317-ACL Date 3/17/04 Client Blymyer

Site 1750 Adams Ave San Leandro

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC
MW-2	2					6.63	23.02	TOC
MW-3	2					5.98	20.65	↓
MW-5	2					5.37	21.65	
RW-1	12		—		⊗	5.60	—	
RW-2	4		—		⊗	5.58	—	

# WELL MONITORING DATA SHEET

Project #: 040317-ACL	Client: Blymyer
Sampler: AC	Date: 3/17/04
Well I.D.: RW-1	Well Diameter: 2 3 4 6 8 <u>12</u>
Total Well Depth (TD): —	Depth to Water (DTW): 5.60
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Recovery Method: Bailer      Waterra      Sampling Method: Bailer  
                          Disposable Bailer      Peristaltic      Disposable Bailer  
                          Positive Air Displacement      Extraction Pump      Extraction Port  
                          Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

_____ (Gals.) X _____ = _____ Gals. 1 Case Volume      Specified Volumes      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or μS)	Turbidity (NTUs)	Gals. Removed	Observations
						NO SPH Detected

Did well dewater?    Yes    No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: 3/17/04    Sampling Time: \_\_\_\_\_    Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_    Laboratory: Kiff    CalScience    Other: SPL

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other: \_\_\_\_\_

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time    Duplicate I.D. (if applicable): \_\_\_\_\_

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other: \_\_\_\_\_

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

# WELL MONITORING DATA SHEET

Project #: <b>040317-ACL</b>	Client: <b>Blymyer</b>
Sampler: <b>Ac</b>	Date: <b>3/17/04</b>
Well I.D.: <b>RW-2</b>	Well Diameter: 2 3 <b>(4)</b> 6 8
Total Well Depth (TD): <b>✓</b>	Depth to Water (DTW): <b>5.58</b>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <b>(PVC)</b> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Large Method: Bailer      Waterra      Sampling Method: Bailer  
                  Disposable Bailer      Peristaltic      **(Disposable Bailer)**  
                  Positive Air Displacement      Extraction Pump      Extraction Port  
                  Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

Other: \_\_\_\_\_

_____ (Gals.) X _____ = _____ Gals. 1 Case Volume      Specified Volumes      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
	<b>NO</b>	<b>SPH</b>	<b>Detected</b>			

Did well dewater?    Yes    No      Gallons actually evacuated: \_\_\_\_\_

Sampling Date: **3/17/04**    Sampling Time: \_\_\_\_\_    Depth to Water: \_\_\_\_\_

Sample I.D.: \_\_\_\_\_    Laboratory: Kiff    CalScience    Other: **(STL)**

Analyzed for: TPH-G    **(BTEX)**    **(MTBE)**    **(TPH-D)**    Oxygenates (5)    Other: \_\_\_\_\_

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time    Duplicate I.D. (if applicable): \_\_\_\_\_

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other: \_\_\_\_\_

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:		mg/L
------------------	------------	------	-------------	--	------

O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:		mV
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# WELL MONITORING DATA SHEET

Project #: <b>040317-Act</b>	Client: <b>Blymyer</b>
Sampler: <b>Ac</b>	Date: <b>3/17/04</b>
Well I.D.: <b>MW-2</b>	Well Diameter: <b>(2)</b> 3 4 6 8
Total Well Depth (TD): <b>23.02</b>	Depth to Water (DTW): <b>6.63</b>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <b>(PVC)</b> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <b>9.90</b>	

Sample Method: **Bailer**      Waterra      Sampling Method: **Bailer**  
                   **(Disposable Bailer)**      Peristaltic      **(Disposable Bailer)**  
                   Positive Air Displacement      Extraction Pump      Extraction Port  
                   Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

<b>3</b> (Gals.) X <b>3</b> = <b>9</b> Gals. 1 Case Volume      Specified Volumes      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (F or °C)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
0905	71.7	7.1	797	175	3	cloudy
0908	69.4	7.4	768	136	6	"
0912	68.0	7.3	771	111	9	"

Did well dewater?    Yes    **No**      Gallons actually evacuated: **9**

Sampling Date: **3/17/04**    Sampling Time: **0915**    Depth to Water: **8.07**

Sample I.D.: **MW-2**      Laboratory: Kiff    CalScience    Other: **(STL) Sequoia**

Analyzed for: TPH-G    **(BTEX)**    **(MTBE)**    **(TPH-D)**    Oxygenates (5)    Other:

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time      Duplicate I.D. (if applicable): \_\_\_\_\_

Analyzed for: TPH-G    BTEX    MTBE    TPH-D    Oxygenates (5)    Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
------------------	------------	------	-------------	------

O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV
--------------------	------------	----	-------------	----



**WELL MONITORING DATA SHEET**

Project #: 0A0317-AC1 Client: Blymyer  
 Sampler: Ac Date: 3/17/04  
 Well I.D.: MW-3 Well Diameter: (2) 3 4 6 8 \_\_\_\_\_  
 Total Well Depth (TD): 20.65 Depth to Water (DTW): 5.98  
 Depth to Free Product: \_\_\_\_\_ Thickness of Free Product (feet): \_\_\_\_\_  
 Referenced to: PVC Grade \_\_\_\_\_ D.O. Meter (if req'd): YSI HACH  
 DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 8.91

Recovery Method: Bailer Disposable Bailer Positive Air Displacement Electric Submersible  
 Waterra Peristaltic Extraction Pump Other \_\_\_\_\_  
 Sampling Method: Bailer Disposable Bailer Extraction Port Dedicated Tubing  
 Other: \_\_\_\_\_

2.5 (Gals.) X 3 = 7.5 Gals.  
 1 Case Volume Specified Volumes Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
<u>0930</u>	<u>68.1</u>	<u>7.1</u>	<u>841</u>	<u>273</u>	<u>2.5</u>	<u>Cloudy</u>
<u>0933</u>	<u>67.9</u>	<u>7.1</u>	<u>872</u>	<u>168</u>	<u>5</u>	<u>"</u>
<u>0936</u>	<u>67.5</u>	<u>7.1</u>	<u>914</u>	<u>139</u>	<u>7.5</u>	<u>"</u>

Did well dewater? Yes No Gallons actually evacuated: 7.5  
 Sampling Date: 3/17/04 Sampling Time: 0940 Depth to Water: 7.42

Sample I.D.: MW-3 Laboratory: Kiff CalScience Other STL Sequoia

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: \_\_\_\_\_

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: \_\_\_\_\_

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

# WELL MONITORING DATA SHEET

Project #: <u>0A0317 - Ac1</u>	Client: <u>Blymyer</u>
Sampler: <u>Ac</u>	Date: <u>3/17/04</u>
Well I.D.: <u>MW-5</u>	Well Diameter: <u>(2)</u> 3 4 6 8
Total Well Depth (TD): <u>21.65</u>	Depth to Water (DTW): <u>5.37</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>8.62</u>	

Purge Method: Bailer      Waterra      Sampling Method: Bailer  
Disposable Bailer      Peristaltic      Disposable Bailer  
 Positive Air Displacement      Extraction Pump      Extraction Port  
 Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

Other: \_\_\_\_\_

3 (Gals.) X 3 = 9 Gals.  
 Case Volume      Specified Volumes      Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F or °C)	pH	Cond. (mS or <u>µS</u> )	Turbidity (NTUs)	Gals. Removed	Observations
<u>0847</u>	<u>67.5</u>	<u>6.4</u>	<u>831</u>	<u>51</u>	<u>3</u>	<u>clear</u>
<u>0850</u>	<u>67.5</u>	<u>6.8</u>	<u>841</u>	<u>59</u>	<u>6</u>	<u>"</u>
<u>0853</u>	<u>68.8</u>	<u>6.9</u>	<u>848</u>	<u>62</u>	<u>9</u>	<u>"</u>

Did well dewater? Yes  No  Gallons actually evacuated: 9

Sampling Date: 3/17/04 Sampling Time: 0900 Depth to Water: 6.87

Sample I.D.: MW-5 Laboratory: Kiff CalScience Other STC Sequoia

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

EB I.D. (if applicable): \_\_\_\_\_ @ \_\_\_\_\_ Time Duplicate I.D. (if applicable): \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

# WELL MONITORING DATA SHEET

Project #: <b>040322-SS2</b>	Client: <b>STE BLYVEL EMB.</b>	RECEIVED MAR 29 2004
Sampler: <b>SOOCH</b>	Date: <b>3/22/04</b>	
Well I.D.: <b>RW-1</b>	Well Diameter: 2 3 4 6 8 <b>(12)</b>	
Total Well Depth (TD): _____	Depth to Water (DTW): _____	
Depth to Free Product: _____	Thickness of Free Product (feet): _____	
Referenced to: PVC Grade	D.O. Meter (if req'd):	YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:		

Purge Method:	Bailer Disposable Bailer Positive Air Displacement Electric Submersible Other _____	Water Peristaltic Extraction Pump Other _____
	Sampling Method:	Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____

<b>EMPTY SKINNER</b> (Gals.) X _____ = _____ Gals. 1 Case Volume      Specified Volumes      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F or °C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
						<b>EMPTY SKINNER APPROX. 200 ml SH FROM SKINNER.</b>

Did well dewater? Yes No	Gallons actually evacuated: _____
Sampling Date: _____	Sampling Time: _____
Sample I.D.: _____	Depth to Water: _____
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____	Laboratory: Kiff CalScience Other: _____
EB I.D. (if applicable): _____ @ _____ Time	Duplicate I.D. (if applicable): _____
Analyzed for: TPH-G BTEX MTBE TPH-D Oxygenates (5) Other: _____	
D.O. (if req'd): Pre-purge: _____ mg/L	Post-purge: _____ mg/L
O.R.P. (if req'd): Pre-purge: _____ mV	Post-purge: _____ mV

*Appendix C*

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*Laboratory Analytical Reports  
Sequoia Analytical, Inc., dated April 1, 2004*



**Sequoia  
Analytical**

885 Jarvis Drive  
Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308  
www.sequoiainaba.com

---

1 April, 2004

Mark Detteman  
Blymyer Engineers  
1829 Clement Street  
Alameda, CA 94501

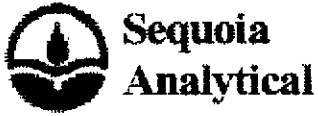
RE: G.I. Trucking, San Leandro  
Work Order: MNC0532

Enclosed are the results of analyses for samples received by the laboratory on 03/18/04 15:55. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

James Hartley  
Dept Manager - Project Manager

CA ELAP Certificate #1210



**Sequoia  
Analytical**

885 Jarvis Drive  
Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308  
www.sequoialabs.com

Blymyer Engineers  
1829 Clement Street  
Alameda CA, 94501

Project: G.I. Trucking, San Leandro  
Project Number: [none]  
Project Manager: Mark Detterman

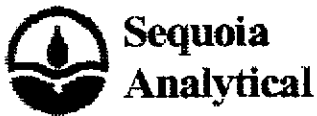
MNC0532  
Reported:  
04/01/04 09:39

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-2	MNC0532-01	Water	03/17/04 09:15	03/18/04 15:55
MW-3	MNC0532-02	Water	03/17/04 09:40	03/18/04 15:55
MW-5	MNC0532-03	Water	03/17/04 09:00	03/18/04 15:55

Sequoia Analytical - Morgan Hill

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.*



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 FAX (408) 782-6308  
 www.sequoialabs.com

Blymyer Engineers  
 1829 Clement Street  
 Alameda CA, 94501

Project: G.I. Trucking, San Leandro  
 Project Number: [none]  
 Project Manager: Mark Detterman

MNC0532  
 Reported:  
 04/01/04 09:39

**Extractable Hydrocarbons by EPA 8015B**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-2 (MNC0532-01) Water</b> Sampled: 03/17/04 09:15 Received: 03/18/04 15:55									
Diesel Range Organics (C10-C28)	ND	50	ug/l	1	4C22015	03/22/04	03/23/04	EPA 8015B-SVOA	
Surrogate: n-Octacosane		84.6 %	34-123		"	"	"	"	
<b>MW-3 (MNC0532-02) Water</b> Sampled: 03/17/04 09:40 Received: 03/18/04 15:55									
Diesel Range Organics (C10-C28)	450	50	ug/l	1	4C22015	03/22/04	03/23/04	EPA 8015B-SVOA	HC-12
Surrogate: n-Octacosane		93.4 %	34-123		"	"	"	"	
<b>MW-5 (MNC0532-03) Water</b> Sampled: 03/17/04 09:00 Received: 03/18/04 15:55									
Diesel Range Organics (C10-C28)	ND	50	ug/l	1	4C22015	03/22/04	03/23/04	EPA 8015B-SVOA	
Surrogate: n-Octacosane		88.2 %	34-123		"	"	"	"	

Sequoia Analytical - Morgan Hill

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Blymyer Engineers  
 1829 Clement Street  
 Alameda CA, 94501

 Project: G.I. Trucking, San Leandro  
 Project Number: [none]  
 Project Manager: Mark Dettnerman

 MNC0532  
 Reported:  
 04/01/04 09:39

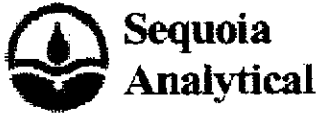
**MTBE and BTEX by EPA 8021B**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-2 (MNC0532-01) Water    Sampled: 03/17/04 09:15    Received: 03/18/04 15:55</b>									
Methyl tert-butyl ether	ND	2.5	ug/l	1	4C24001	03/24/04	03/24/04	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		109 %	55-142		"	"	"	"	
<b>MW-3 (MNC0532-02) Water    Sampled: 03/17/04 09:40    Received: 03/18/04 15:55</b>									
Methyl tert-butyl ether	ND	2.5	ug/l	1	4C24001	03/24/04	03/24/04	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		109 %	55-142		"	"	"	"	
<b>MW-5 (MNC0532-03) Water    Sampled: 03/17/04 09:00    Received: 03/18/04 15:55</b>									
Methyl tert-butyl ether	ND	2.5	ug/l	1	4C24001	03/24/04	03/24/04	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		110 %	55-142		"	"	"	"	

Sequoia Analytical - Morgan Hill

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 www.sequoialabs.com

Blymyer Engineers  
 1829 Clement Street  
 Alameda CA, 94501

Project: G.I. Trucking, San Leandro  
 Project Number: [none]  
 Project Manager: Mark Detterman

MNC0532  
 Reported:  
 04/01/04 09:39

**Extractable Hydrocarbons by EPA 8015B - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 4C22015 - EPA 3510C</b>										
<b>Blank (4C22015-BLK1)</b>										
Prepared: 03/22/04 Analyzed: 03/23/04										
Diesel Range Organics (C10-C28)	ND	50	ug/l							
Surrogate: <i>n-Octacosane</i>	36.5		"	50.0		73.0	34-123			
<b>Laboratory Control Sample (4C22015-BS1)</b>										
Prepared: 03/22/04 Analyzed: 03/23/04										
Diesel Range Organics (C10-C28)	512	50	ug/l	500		102	51-128			
Surrogate: <i>n-Octacosane</i>	39.2		"	50.0		78.4	34-123			
<b>Laboratory Control Sample Dup (4C22015-BSD1)</b>										
Prepared: 03/22/04 Analyzed: 03/23/04										
Diesel Range Organics (C10-C28)	555	50	ug/l	500		111	51-128	8.06	27	
Surrogate: <i>n-Octacosane</i>	37.8		"	50.0		75.6	34-123			

Sequoia Analytical - Morgan Hill

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Blymyer Engineers  
1829 Clement Street  
Alameda CA, 94501

Project: G.I. Trucking, San Leandro  
Project Number: [none]  
Project Manager: Mark Detterman

MNC0532  
Reported:  
04/01/04 09:39

**MTBE and BTEX by EPA 8021B - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 4C24001 - EPA 5030B [P/T]</b>										
<b>Blank (4C24001-BLK1)</b> Prepared & Analyzed: 03/24/04										
Methyl tert-butyl ether	ND	2.5	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Surrogate: <i>a,a,a</i> -Trifluorotoluene	44.0		"	40.0		110	55-142			
<b>Laboratory Control Sample (4C24001-BS1)</b> Prepared & Analyzed: 03/24/04										
Benzene	11.1	0.50	ug/l	10.0		111	68-140			
Toluene	10.8	0.50	"	10.0		108	76-127			
Ethylbenzene	11.2	0.50	"	10.0		112	77-130			
Xylenes (total)	33.1	0.50	"	30.0		110	78-128			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	43.4		"	40.0		108	55-142			
<b>Laboratory Control Sample (4C24001-BS2)</b> Prepared & Analyzed: 03/24/04										
Surrogate: <i>a,a,a</i> -Trifluorotoluene	42.6		ug/l	40.0		106	55-142			
<b>Matrix Spike (4C24001-MS1)</b> Source: MNC0533-08 Prepared & Analyzed: 03/24/04										
Benzene	8.37	0.50	ug/l	8.00	ND	105	68-140			
Toluene	37.6	0.50	"	37.1	0.080	101	76-127			
Ethylbenzene	9.35	0.50	"	8.70	ND	107	77-130			
Xylenes (total)	45.0	0.50	"	42.1	ND	107	78-128			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	42.6		"	40.0		106	55-142			
<b>Matrix Spike Dup (4C24001-MSD1)</b> Source: MNC0533-08 Prepared & Analyzed: 03/24/04										
Benzene	8.67	0.50	ug/l	8.00	ND	108	68-140	3.52	30	
Toluene	38.4	0.50	"	37.1	0.080	103	76-127	2.11	30	
Ethylbenzene	9.43	0.50	"	8.70	ND	108	77-130	0.852	21	
Xylenes (total)	45.8	0.50	"	42.1	ND	109	78-128	1.76	21	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	43.1		"	40.0		108	55-142			

Sequoia Analytical - Morgan Hill

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Blymyer Engineers  
1829 Clement Street  
Alameda CA, 94501

Project: G.I. Trucking, San Leandro  
Project Number: [none]  
Project Manager: Mark Dettnerman

MNC0532  
Reported:  
04/01/04 09:39

#### Notes and Definitions

HC-12 Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

# BLAINE

TECH SERVICES, INC.

1690 ROGERS AVENUE  
SAN JOSE, CALIFORNIA 95112-1108  
FAX (408) 573-7771  
PHONE (408) 573-8585

MNC0532

### CONDUCT ANALYSIS TO DETECT

LAB: Sequoia | DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND

- EPA
- IIA
- OTHER
- RWQCR REGION

### CHAIN OF CUSTODY

BTS # 0A0317-AC1

CLIENT: Blymyer Engineers, Inc.

SITE: G. I. Trucking  
1750 Adams Ave  
San Leandro, CA

C = COMPOSITE ALL CONTAINERS

TPH-D (8015)  
BTEX/MBE (8020)

### SPECIAL INSTRUCTIONS

Invoice and Report to : Blymyer Engineers, Inc.  
Attn: Mark Deltzman

SAMPLE ID.	DATE	TIME	MTRD SOL W-H-O	CONTAINERS TOTAL	C	TPH-D (8015)	BTEX/MBE (8020)					ADDL INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-2	3/17	0915	W	5		X	X								01
MW-3		0940				X	X								02
MW-5		0900				X	X								03

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY	RESULTS NEEDED	NO LATER THAN
	3/17/04	1015	Aaron Costa	As contracted	
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
<i>[Signature]</i>	3/18/04	1500	<i>[Signature]</i>	3/18/04	1500
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
<i>[Signature]</i>	3/18/04	1555	<i>[Signature]</i>	3-18-04	1555
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
TO VIA	DATE SENT	TIME SENT	COOLER #		