BLYMYER
ENGINEERS, INC.

October 24, 1995
BEI Job No. 88288

Mr. Dale Klettke
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502-6577

Subject: **Third Quarter 1995 Groundwater Monitoring**
G.I. Trucking Facility
1750 Adams Avenue
San Leandro, California
STID 1373

Dear Mr. Klettke:

This letter documents the groundwater monitoring activities performed during Third Quarter 1995 at the subject site (Figure 1).

Groundwater samples were collected from two of the five existing groundwater monitoring wells at the site, MW-2 and MW-3 (Figure 2), on August 16, 1995. Monitoring well MW-1 is typically not sampled because it contains an EZY® passive skimmer to recover any free-phase petroleum product in the monitoring well. Collection of groundwater samples from monitoring wells MW-4 and MW-5 was no longer required by the Alameda County Health Care Services Agency (ACHCSA) as stated in its August 5, 1994, letter.

The ACHCSA responded to the recommendations and request for regulatory case closure included in the *First Quarter 1995 Groundwater Monitoring Report* in its letter dated, July 27, 1995. The ACHCSA stated that groundwater monitoring must continue at the site and closure was not approved. However, a reduced monitoring frequency from quarterly to semi-annually for the first and third quarters of the year, was approved, and groundwater samples collected from monitoring wells MW-2 and MW-3 are to analyzed for Total Petroleum Hydrocarbons (TPH) as diesel and for benzene, toluene, ethylbenzene, and total xylenes (BTEX) only. Discontinuation of analysis of groundwater samples for halogenated volatile organic compounds (VOCs), semi-VOCs, and metals was also approved. Blymyer Engineers inquired whether the TPH as gasoline analysis was to be continued, as the status was not discussed in the ACHCSA letter. The ACHCSA stated it would consider the need for the analysis, but had not yet responded to the inquiry before the finalization of this letter report.

Three well casing volumes of water were removed from each of the two wells prior to sampling. A representative groundwater sample was collected from each well using a disposable polyethylene bailer and placed in appropriate containers. The groundwater samples were placed in a cooler with crushed ice and delivered via courier to Sequoia Analytical, a California-certified

1829 CLEMENT AVENUE ALAMEDA, CA 94501•1395 PHONE 510•521•3773 FAX 510•865•2594
3475 LENOX ROAD N.E. SUITE 400 ATLANTA, GA 30326 PHONE 404•238•0550 FAX 404•238•0553

laboratory. Proper chain-of-custody procedures were observed. All purge water was stored on-site in Department of Transportation-approved, 55-gallon drums for future disposal. The Well Purging and Sampling Data sheets for monitoring wells MW-2 and MW-3 are included as Attachment A.

The groundwater samples were analyzed on a standard 10-day turnaround time for TPH as diesel by modified EPA Method 8015 and for BTEX by EPA Method 8020. Prior to this quarter, groundwater samples were analyzed by National Environmental Testing, Inc. (NET). This quarter, the laboratory was changed to Sequoia Analytical as a quality control/quality assurance measure. NET quantifies concentrations for the TPH as diesel analysis in milligrams per liter (mg/L), unlike Sequoia Analytical, which uses micrograms per liter. In order to maintain consistency, the analytical results for TPH as diesel have been converted to mg/L. Tables I, 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 presented as Attachment B.

Discussion of Groundwater Analytical Results

This quarter, 0.063 mg/L of TPH as diesel was detected in the groundwater sample collected from monitoring well MW-2 (Table I). This is the third consecutive sampling event in which TPH as diesel has been detected in the groundwater sample collected from monitoring well MW-2. As in the last two sampling events, the TPH as diesel concentration was only slightly above the method detection limit.

During the last sampling event, it was concluded that heavier hydrocarbons that were detected in the groundwater sample collected from monitoring well MW-2 were likely attributable to the presence of weathered diesel. This was concluded because no concentrations of both TPH as motor oil and Total Recoverable Petroleum Hydrocarbons (TRPH) were detected during the same sampling event (Table III). This quarter, the laboratory indicated that an unidentified hydrocarbon was present between the carbon range of C9 to C24. A laboratory representative stated that the detected hydrocarbon was a heavier hydrocarbon than the diesel standard, but that the pattern did not match the laboratory motor oil standard. Based on the analytical results from the last sampling event, it is likely that this detection of the unidentified hydrocarbon is also due to the presence of weathered diesel.

None of the other analytes were detected in the groundwater sample collected from monitoring well MW-2, in contrast to the last sampling event, during which a low concentration of toluene was detected (Table II).

The groundwater sample collected from monitoring well MW-3 contained 1.1 mg/L of TPH as diesel this sampling event, which is less than the concentration detected in First Quarter 1995 (Table I). In the last three sampling events, the laboratory indicated that the positive result detected was due to a heavier hydrocarbon than diesel. Similarly to groundwater collected from monitoring well MW-2, it was concluded during the last sampling event that the heavier hydrocarbon detected was likely weathered diesel. This conclusion was based on the non-detectable concentrations reported for both the TPH as motor oil and TRPH analyses at that time (Table III). This quarter, the laboratory indicated that an unidentified hydrocarbon was detected between the carbon range of C9 to C24. A laboratory representative stated that the hydrocarbon was heavier than the diesel standard, but that the pattern did not match the laboratory motor oil standard. Based on the results of the last sampling event, it is likely that the unidentified hydrocarbon detected is due to the presence of weathered diesel.

TPH as diesel was first detected in a groundwater sample collected from monitoring well MW-3 in February 1990. Since February 1990, except for the December 1990 and December 1992 sampling events, low concentrations of TPH as diesel have been detected in all groundwater samples from this monitoring well (Table I). The concentrations have ranged from 0.19 to 1.7 mg/L. The general trend, evident from the data (Tables I and V), is that the TPH as diesel concentrations in groundwater from monitoring well MW-3, increase with rises in groundwater elevation, which occur during the first months of the year.

None of the other analytes were detected in the groundwater sample collected from monitoring well MW-3 (Table II). This is the third consecutive sampling event that concentrations of BTEX have not been detected in the groundwater sample collected from monitoring well MW-3.

TPH as diesel has never been detected in any groundwater samples from monitoring wells MW-4 and MW-5 since the initial sampling event in November 1988. BTEX has also never been detected in groundwater samples from monitoring wells MW-4 and MW-5 since analytical testing for these compounds began in August 1993. Based on this data, groundwater sample analysis for these compounds ended after the November 1994 sampling event in accordance with the ACHCSA letter, dated August 5, 1994.

Monitoring well MW-1 has contained a thin free-phase petroleum product layer or a product sheen on groundwater since quarterly monitoring began in November 1988. An EZY® passive skimmer was installed in the monitoring well on October 27, 1993. The skimmer was on a monthly operation and maintenance schedule, overseen by on-site personnel, until August 1994. Since then, the skimmer has been maintained quarterly by Blymyer Engineers, either in concurrence with groundwater monitoring in the first and third quarters of the year or independently of groundwater monitoring in the second and fourth quarters of the year. In

May 1995, less than 0.025 gallons of free product was recovered from the skimmer in monitoring well MW-1, and in August 1995, there was no measurable free product to be recovered.

Table IV contains a summary of the amount of free product recovered and the approximate cumulative volume of free product removed to date, which has only amounted to approximately 0.925 gallons in over one and one-half year's time.

Based on the depth to groundwater measurements this quarter, the groundwater flow direction in the vicinity of the underground storage tank basin was toward the southeast with a gradient of approximately 0.013 feet per foot. This flow direction and gradient is correlative with the historical flow direction, which has ranged between south and southeast. Historic and recent measurements of depth to groundwater are presented in Table V.

The next groundwater monitoring event is scheduled for February 1996. Please call Deborah Underwood at (510) 521-3773 with any questions or comments.

Sincerely,

Blymyer Engineers, Inc.

By:_____
Deborah Underwood
Geologist

And:_____
Mark Detterman, C.E.G. 1788
Senior Geologist

Enclosures:

Table I:	Summary of Groundwater Sample Analytical Results; TPH as Diesel
Table II:	Summary of Groundwater Sample Analytical Results; Benzene, Toluene, Ethylbenzene, and Total Xylenes
Table III:	Summary of Groundwater Sample Analytical Results; TPH as Gasoline, TPH as Motor Oil, TRPH, HVOCs, SVOCs, and Metals
Table IV:	Free Product Recovery Measurements, Monitoring Well MW-1
Table V:	Groundwater Elevation Measurements
Figure 1:	Site Location Map
Figure 2:	Site Plan and Groundwater Elevation Contours, August 16, 1995
Attachment A:	Well Purging and Sampling Data Sheets, dated August 16, 1995
Attachment B:	Laboratory Analytical Report, Sequoia Analytical, dated August 31, 1995

cc: Mr. Eddy So, San Francisco Bay Regional Water Quality Control Board
Mr. Mike Bakaldin, San Leandro Fire Department
Mr. Wade Stroupe, Jr., WorldWay Corporation
Mr. Bob Hogencamp, G.I. Trucking Company
Mr. Tom McGuire, G.I. Trucking Company

H:\DHU\88288\88288QM3.95

Table 1, Summary of Groundwater Sample Analytical Results
TPH as Diesel, Modified EPA Method 8015 (mg/L)
BEI Job No. 88288, G.I. Trucking Facility, 1750 Adams Avenue, San Leandro, California

Date Sampled	MW-1	MW-2	MW-3	MW-4	MW-5
November 15, 1988	0.22 feet free product	<0.20	<0.20	<0.20	<0.20
February 16, 1989	0.20 feet free product	<0.09	<0.09	<0.09	<0.09
May 19, 1989	0.20 feet free product	<0.08	<0.08	<0.08	<0.08
August 22, 1989	0.18 feet free product	<0.03	<0.03	<0.03	<0.03
November 21, 1989	product sheen	<0.03	<0.03	<0.03	<0.03
February 23, 1990	product sheen	<0.05	0.34	<0.05	<0.05
May 23, 1990	0.15 feet free product	<0.05	0.64	<0.05	<0.05
August 27, 1990	product sheen	<0.05	0.41	<0.05	<0.05
December 3, 1990	product sheen	<0.05	<0.05	<0.05	<0.05
March 13, 1991	product sheen	<0.05	1.3	<0.05	<0.05
May 29, 1991	product sheen	<0.05	0.54	<0.05	<0.05
August 28, 1991	0.09 feet free product	<0.05	0.24	<0.05	<0.05
December 9, 1991	0.20 feet free product	<0.05	0.20	<0.05	<0.05
February 18, 1992	0.09 feet free product	<0.05	0.89	<0.05	<0.05
May 15, 1992	0.17 feet free product	<0.05	0.38	<0.05	<0.05
August 13, 1992	0.19 feet free product	<0.05	0.20	<0.05	<0.05
December 3, 1992	0.10 feet free product	<0.05	<0.05	<0.05	<0.05
March 25, 1993	product sheen	<0.05	1.6	<0.05	<0.05
May 21, 1993	0.09 feet free product	<0.05	0.72	<0.05	<0.05
August 17, 1993	0.13 feet free product	<0.05	0.48	<0.05	<0.05
December 13, 1993	heavy product sheen	<0.05	0.19	<0.05	<0.05
February 24, 1994	heavy product sheen	<0.05	0.38	<0.05	<0.05
May 11, 1994	heavy product sheen	<0.05	0.58	<0.05	<0.05
August 23, 1994	0.08 feet free product	<0.05	0.45[a]	<0.05	<0.05
November 29, 1994	heavy product sheen	0.09	0.96[a]	NA	NA
February 15, 1995	heavy product sheen	0.1[a]	1.7[a]	NA	NA
August 16, 1995[b]	heavy product sheen	0.063[c]	1.1[c]	NA	NA

TPH = Total Petroleum Hydrocarbons.
mg/L = Milligrams 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 µg/L.
c = Laboratory reports that an unidentified hydrocarbon, heavier than the diesel standard, was present between the carbon range of C9 to C24.

Table II. Summary of Groundwater Sample Analytical Results
Benzene, Toluene, Ethylbenzene, and Total Xylenes, Modified EPA Method 8020 (µg/L)
BEI Job No. 88288, G.I. Trucking Facility, 1750 Adams Avenue, San Leandro, California

Date Sampled	MW-1	MW-2	MW-3	MW-4	MW-5
November 15, 1988 to May 21, 1993	Not Analyzed				
August 17, 1993	0.13 feet free product	<0.5	<0.5	<0.5	<0.5
December 13, 1993	heavy product sheen	<0.5	<0.5	<0.5	<0.5
February 24, 1994	heavy product sheen	<0.5	<0.5	<0.5	<0.5
May 11, 1994	heavy product sheen	<0.5	<0.5	<0.5	<0.5
August 23, 1994	0.08 feet free product	<0.5	0.6[a]	<0.5	<0.5
November 29, 1994	heavy product sheen	<0.5	<0.5	NA	NA
February 15, 1995	heavy product sheen	1.2[a]	ND	NA	NA
August 16, 1995	heavy product sheen	<0.5	<0.5	NA	NA

µg/L = Micrograms per liter.
<x = Detected concentration less than respective detection limit of x.
a = Detected concentration of toluene.
NA = Not analyzed.
ND = None of analytes detected above the detection limit; see individual laboratory report for respective detection limits.

Table III, Summary of Groundwater Sample Analytical Results*
TPH as Gasoline, TPH as Motor Oil, TRPH, HVOCs, SVOCs, and Metals
BEI Job No. 88288, G.I. Trucking Facility, 1750 Adams Avenue, San Leandro, California

Sample I.D.	Date Sampled	Modified EPA Method 8015 TPH as gasoline (mg/L)	Modified EPA Method 8015 TPH as motor oil[a] (mg/L)	EPA Method 418.1 TRPH (mg/L)	EPA Method 601 HVOCs (µg/L)	EPA Method 8270 SVOCs (µg/L)	EPA Methods 6010 and 7421 Metals[b] (mg/L)
MW-1	January 15, 1988 to August 23, 1994	NA	NA	NA	NA	NA	NA
	November 29, 1994[c]	NA	NA	NA	NA	NA	NA
	February 15, 1995[c]	NA	NA	NA	NA	NA	NA
	August 16, 1995[c]	NA	NA	NA	NA	NA	NA
MW-2	January 15, 1988 to August 23, 1994	NA	NA	NA	NA	NA	NA
	November 29, 1994	<0.05	NA	NA	ND	ND	ND[d]
	February 15, 1995	<0.05	<0.5	<5.0	ND	ND	0.002 Pb[e]
	August 16, 1995[f]	NA	NA	NA	NA	NA	NA
MW-3	January 15, 1988 to August 23, 1994	NA	NA	NA	NA	NA	NA
	November 29, 1994	<0.05	NA	NA	ND	ND	ND[d]
	February 15, 1995	<0.05	<0.5	<5.0	ND	ND	0.004 Pb[e] 0.16 Zn[e]
	August 16, 1995[f]	NA	NA	NA	NA	NA	NA

* = Groundwater samples from monitoring wells MW-4 and MW-5 were not collected for analysis in accordance with the ACHCSA letter dated August 5, 1994.
TPH = Total Petroleum Hydrocarbons.
HVOCs = Halogenated Volatile Organic Compounds.
SVOCs = Semi-volatile Organic Compounds.
mg/L = Milligrams per liter.
µg/L = Micrograms per liter.
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 TRPH, HVOCs, SVOCs, and metals was discontinued beginning this monitoring event in accordance with the ACHCSA letter, dated July 27, 1995.
NA = Not analyzed.
ND = None of analytes detected above the detection limit; see individual laboratory report for respective detection limits.

H:\DH\JN\88288\88288QMR.TB3

Table IV. Free Product Recovery Measurements, Monitoring Well MW-1 BEI Job No. 88288, 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[a]	0.1
November 1994	0.1
February 1995	<0.025
May 1995	<0.025
August 1995	No measurable product to recover
Cumulative Volume Recovered (approximate)	0.925

a = Frequency of recovery activities decreased from monthly to quarterly after this recovery event.

Table V, Groundwater Elevation Measurements
BEI Job No. 88288, G.I. Trucking Facility, 1750 Adams Avenue, San Leandro, California

Date Measured	MW-1 TOC Elevation 100.00[a]		MW-2 TOC Elevation 100.24[a]		MW-3 TOC Elevation 100.22[a] TOC Elevation 100.18[b]		MW-4 TOC Elevation 99.48[a]		MW-5 TOC Elevation 99.60[a]	
	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
November 15, 1988	No Measurements Recorded									
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
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
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
November 21, 1989	6.51	93.49	6.64	93.60	6.55	93.67	5.72	93.76	5.91	93.69
February 23, 1990	5.74	94.26	6.04	94.20	5.83	94.39	4.92	94.56	5.69	93.91
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
August 27, 1990	6.27	93.73	6.70	93.54	6.67	93.55	5.66	93.82	6.17	93.43
December 3, 1990	6.49	93.51	6.83	93.41	6.75	93.47	5.95	93.53	6.05	93.55
March 13, 1991	4.94	95.06	5.64	94.60	5.42	94.80	4.39	95.09	5.01	94.59
May 29, 1991	9.46	90.54	6.31	93.93	6.28	93.94	5.27	94.21	5.57	94.03
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
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
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
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
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
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
March 25, 1993	4.60	95.40	5.40	94.84	5.27	94.95	4.14	95.34	4.34	95.26
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
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
December 13, 1993	NM[c]	NM[c]	6.09	94.15	6.33	93.89	5.08	94.40	5.38	94.22
February 24, 1994	4.97	95.63	5.57	94.67	5.76	94.46	4.38	95.10	4.90	94.70
May 11, 1994	5.20	94.80	5.94	94.30	5.84	94.34	4.85	94.63	5.23	94.37
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
November 29, 1994	5.98	94.02	5.82	94.42	5.76	94.42	4.76	94.72	5.12	94.48
February 15, 1995	4.93	95.07	5.68	95.56	5.60	95.58	NM	NM	NM	NM
May 18, 1995	4.99	95.01	NM	NM	NM	NM	NM	NM	NM	NM
August 16, 1995	6.46	93.54	6.19	94.05	6.11	94.07	5.16	94.32	5.47	94.13

TOC = Top of Casing; a = Based on an Arbitrary Datum; b = Resurveyed elevation, May 11, 1994; c = Not measured due to equipment malfunction; N/A = Not Applicable; NM = Not measured

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

BLYMYER ENGINEERS, INC.

0 1000 2000

SCALE IN FEET

N

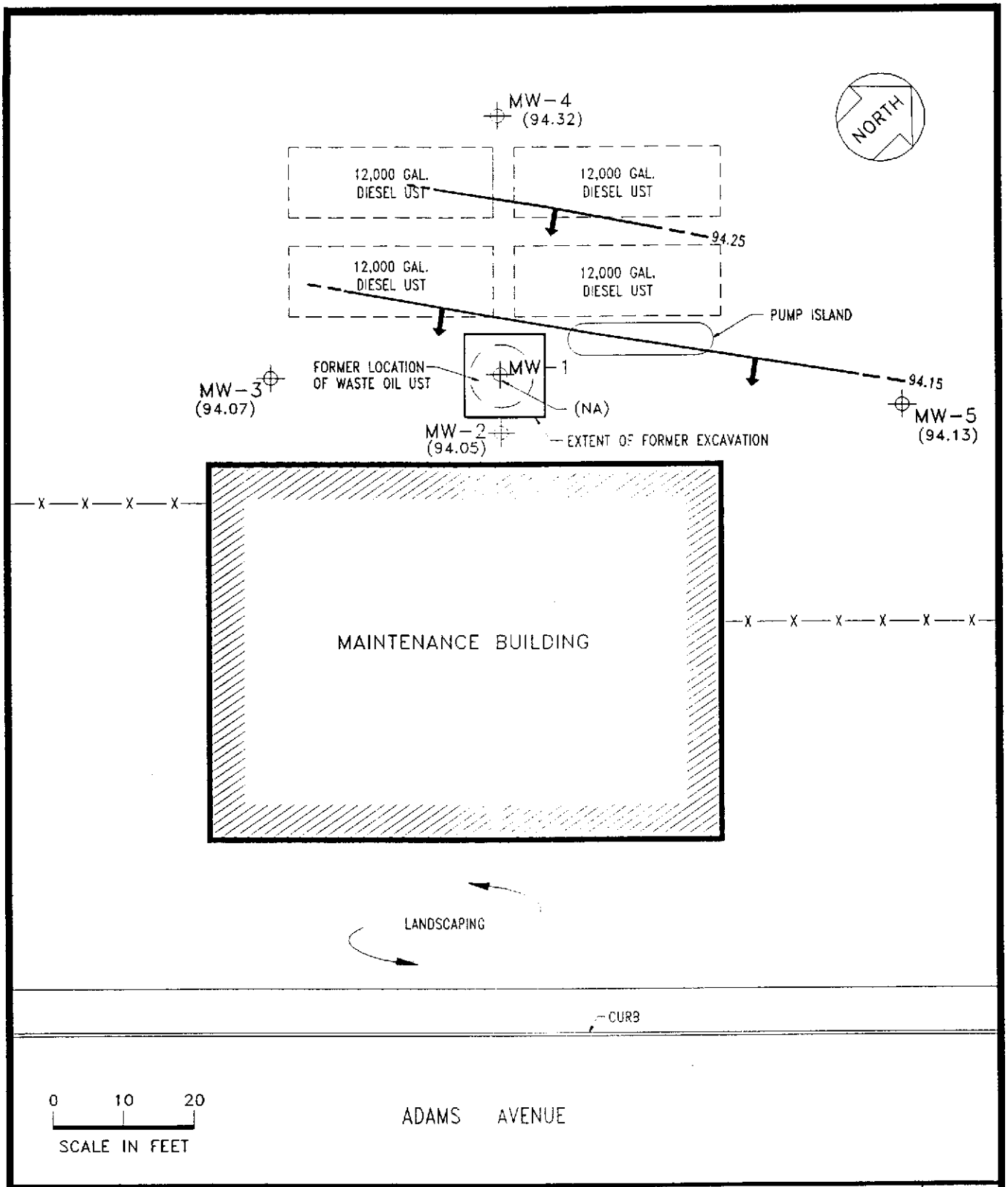
SITE LOCATION MAP

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

FIGURE 1

BEI JOB NO. 88288

DATE 9/19/95



BLYMYER ENGINEERS, INC.

BEI JOB NO.	DATE
88288	9/19/95

LEGEND

- UST — UNDERGROUND STORAGE TANK
- ⊕ — GROUNDWATER MONITORING WELL
- (94.13) — GROUNDWATER ELEVATION (FT.) (ARBITRARY DATUM)
- (NA) — NOT APPLICABLE
- ---- — GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- ➡ — GROUNDWATER FLOW DIRECTION (APPROX.)

SITE PLAN AND
GROUNDWATER ELEVATION
CONTOURS
AUGUST 16, 1995
G.I. TRUCKING FACILITY
1750 ADAMS AVE.
SAN LEANDRO, CA

FIGURE
2

REVISED 9/20/95 H:\PUBLIC\ACADLW\882882E

Attachment A

Well Purging and Sampling Data Sheets, dated August 16, 1995

Well Purging and Sampling Data

Date	8/16/95	Project Number	88288	Project Name	G.I. Trucking
Well Number	MW-2	Boring Diameter	N/A	Casing Diameter	2"

Column of Liquid in Well		Volume to be Removed	
Depth to product	N/A	Gallons per foot of casing	= 0.17 gal/ft.
Depth to water	6.19 ft.	Column of water	x 17.06 ft.
Total depth of well	23.25 ft.	Volume of casing	= 2.90 gal.
Column of water	17.06 ft.	No. of volumes to remove	x 3
		Total volume to remove	= 8.70 gal.

Method of measuring liquid	Oil/water interface probe
Method of purging well	Disposable polyethylene bailer
Method of decontamination	Liqui-nox and distilled water

Physical appearance of water (clarity, color, particulates, odor)	
Initial	Clear, no odor
During	Slightly silty, tan color, no odor
Final	Slightly silty, tan color, no odor

Field Analysis	Initial	During		Final
Time	10:14	10:21	10:29	10:36
Temperature (F)	68.9	66.4	66.3	66.3
Conductivity (us/cm)	732	715	716	713
pH	7.50	7.55	7.66	7.70
Method of measurement	Hydac meter			
Total volume purged	9.0 gal.			
Comments	Sampled with disposable polyethylene bailer			

Sample Number	Amount of Sample
MW-2	3-40ml VOAs w/ HCl
	2-1L amber bottles

Signed/Sampler	Stephen W Moe	Date	8/16/95
Signed/Reviewer	[illegible]	Date	8/17/95

Well Purging and Sampling Data

Date	8/16/95	Project Number	88288	Project Name	G.I. Trucking
Well Number	MW-3	Boring Diameter	N/A	Casing Diameter	2"

Column of Liquid in Well		Volume to be Removed	
Depth to product	N/A	Gallons per foot of casing	= 0.17 gal/ft.
Depth to water	6.11 ft.	Column of water	x 16.64 ft.
Total depth of well	22.75 ft.	Volume of casing	= 2.83 gal.
Column of water	16.64 ft.	No. of volumes to remove	x 3
		Total volume to remove	= 8.49 gal.

Method of measuring liquid	Oil/water interface probe
Method of purging well	Disposable polyethylene bailer
Method of decontamination	Liqui-nox and distilled water

Physical appearance of water (clarity, color, particulates, odor)	
Initial	Clear, no odor
During	Slightly silty, tan color, no odor
Final	Silty, tan color, no odor

Field Analysis	Initial	During		Final
Time	11:19	11:26	11:35	11:42
Temperature (F)	71.5	67.8	68.6	68.2
Conductivity (us/cm)	735	704	789	818
pH	7.30	7.39	7.27	7.24
Method of measurement	Hydac meter			
Total volume purged	9.0 gal.			
Comments	Sampled with disposable polyethylene bailer			

Sample Number	Amount of Sample
MW-3	3-40ml VOAs w/ HCl
	2-1L amber bottles

Signed/Sampler	Stephen M Lowe	Date	8/16/95
Signed/Reviewer	[illegible]	Date	8/17/95

Attachment B

Laboratory Analytical Report, Sequoia Analytical, dated August 31, 1995

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blymyer Engineers	Client Proj. ID: 88288/GI Trucking/San Leandro	Sampled: 08/16/95
1829 Clement Street	Sample Descript: MW-2	Received: 08/17/95
Alameda, CA 94501-1396	Matrix: LIQUID	Extracted: 08/25/95
	Analysis Method: EPA 8015 Mod	Analyzed: 08/28/95
Attention: Debra Underwood	Lab Number: 9508F04-01	Reported: 08/31/95

QC Batch Number: GC0825950HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	63
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	104

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Noelle Northey
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blymyer Engineers	Client Proj. ID: 88288/GI Trucking/San Leandro	Sampled: 08/16/95
1829 Clement Street	Sample Descript: MW-2	Received: 08/17/95
Alameda, CA 94501-1396	Matrix: LIQUID	
	Analysis Method: EPA 8020	Analyzed: 08/23/95
Attention: Debra Underwood	Lab Number: 9508F04-01	Reported: 08/31/95

QC Batch Number: GC082395BTEX17A
Instrument ID: GCHP17

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	83

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Noelle Northey
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blymyer Engineers	Client Proj. ID: 88288/GI Trucking/San Leandro	Sampled: 08/16/95
1829 Clement Street	Sample Descript: MW-3	Received: 08/17/95
Alameda, CA 94501-1396	Matrix: LIQUID	Extracted: 08/25/95
	Analysis Method: EPA 8015 Mod	Analyzed: 08/28/95
Attention: Debra Underwood	Lab Number: 9508F04-02	Reported: 08/31/95

QC Batch Number: GC0825950HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	**50**	**1100**
Chromatogram Pattern:		
Unidentified HC		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	97

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Noelle Northey
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blymyer Engineers	Client Proj. ID: 88288/GI Trucking/San Leandro	Sampled: 08/16/95
1829 Clement Street	Sample Descript: MW-3	Received: 08/17/95
Alameda, CA 94501-1396	Matrix: LIQUID	
	Analysis Method: EPA 8020	Analyzed: 08/23/95
Attention: Debra Underwood	Lab Number: 9508F04-02	Reported: 08/31/95

QC Batch Number: GC082395BTEX17A
Instrument ID: GCHP17

BTEX Distinction

Analyte	Detection Limit ug/L	Sample Results ug/L
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	75

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Noelle Northey
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Blymyer Engineers
1829 Clement Street
Alameda, CA 94501-1396
Attention: Debra Underwood

Client Project ID: 88288/GI Trucking/San Leandro
Matrix: Liquid
Work Order #: 9508F04 -01- 02
Reported: Aug 31, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC0825950HBPEXA
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3510

Analyst:	N. Herrera
MS/MSD #:	BLK082595
Sample Conc.:	N.D.
Prepared Date:	8/25/95
Analyzed Date:	8/27/95
Instrument I.D.#:	GCHP4B
Conc. Spiked:	1000 µg/L
Result:	770
MS % Recovery:	77
Dup. Result:	840
MSD % Recov.:	84
RPD:	8.7
RPD Limit:	0-50

LCS #:	
Prepared Date:	
Analyzed Date:	
Instrument I.D.#:	
Conc. Spiked:	
LCS Result:	
LCS % Recov.:	

MS/MSD LCS Control Limits	38-122

SEQUOIA ANALYTICAL

Noelle Northey
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

BLYMYER
ENGINEERS, INC.
1829 Clement Avenue
Alameda, CA 94501 (510) 521-3773 FAX (510) 865-2594

9508F04

CHAIN OF CUSTODY RECORD

JOB # 88288

PROJECT NAME/LOCATION: GI Trucking / San Leandro, CA

SAMPLERS (SIGNATURE): Steph W. Moore

TURNAROUND TIME: Standard DAY(S)

REMARKS:

DATE	TIME	COMP	GRAB	SAMPLE NAME/LOCATION	# OF CONTAINERS	TPH AS GASOLINE + BTXE (MOD EPA 8015/8020)	TPH AS DIESEL (MOD EPA 8015)	VOC (EPA 624/8240)	SEMI-VOC (EPA 625/8270)	TRPH (EPA 418.1)	BTXE (EPA 8020/602)					HOLD	REMARKS
8/16/95	1055		X	MW-2	5		X				X						cooler @ 1°C 01
8/16/95	1205		X	MW-3	5		X				X						cooler @ 3°C 02

REQUESTED BY: Debra Underwood

RESULTS AND INVOICE TO: Carolina Freight Carriers c/o Blymyer Engineers, Inc.

RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED BY: (SIGNATURE)
Steph W Moore	8/17/95 1120	Ralph Bariello
RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)
		Tony McMahon

RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED BY: (SIGNATURE)
Ralph Bariello	8/17/95 1:51	
DATE / TIME	REMARKS:	
8/17/95 13:51	(Sequoia)	

WHITE: Accompany Sample YELLOW: BEI, After Lab Signs PINK: Original Sampler