GROUNDWATER TECHNOLOGY ®

Groundwater Technology, Inc.
15010 W. 106th Street, Lenexa, KS 66215 USA
Tel: (913) 599-0262 Fax: (913) 599-1043

February 2, 1996

Mr. G. Keith West
General Motors Corporation
Argonaut "A" - 1004H
485 W. Milwaukee Avenue
Detroit, Michigan 48202

Subject: Report of Sampling and Analysis Activities of June 26, 1995
for Work Plan Addendum #1
GMC TRUCK CENTER
8099 South Coliseum Way
Oakland, California

Dear Mr. West:

The following is a brief letter report presenting the findings of the field work conducted on June 26, 1995 at the above referenced facility. The purpose of the work completed during this phase was to collect data to assist in determining the horizontal and vertical impact of fugitive hydrocarbons at the site. The scope of work was performed in accordance with the *Work Plan for Further Site Assessment, GMC Truck Center, 8099 Coliseum Way, Oakland, California* dated January 26, 1995 and the Work Plan Addendum 1 dated February 2, 1996.

The areas investigated included the areas around the underground storage tanks (USTs) formerly located on the south side of the main building, the oil/water separator located on the northeast side of the main building, and the garbage collection area at the far northwest corner of the property. The field work included the advancement of ten corings and the collection of soil and groundwater samples from those corings. The original work plan called for the advancement of nine corings. The tenth coring was advanced near the north boundary of the site when free phase petroleum product was observed in the coring advanced to the north of the oil/water separator. The soil corings installed on June 26, 1995 include SB-18 through SB-27. The locations of these soil corings are shown on the attached coring location map. The soil coring locations were selected in areas believed to have been impacted by petrloeum hydrocarbons based upon previous assessment data.

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Coring and Sampling Methods

Ten (10) soil cores were installed using a Geoprobe subsurface sampling system equipped with 2-inch outer diameter dual rod probes. Prior to coring each hole, all tools were steam cleaned to avoid cross contamination. The coring was supervised by a Groundwater Technology staff geologist who logged each coring in accordance with the Unified Soil Classification System.

Soil samples were collected with a 7/8-inch diameter inner rod with acetate liner. The samples were collected at approximately 5-foot and 10-foot depths. Each soil sample was field screened for hydrocarbon vapors using a photoionization detector (PID). After field screening, select soil samples were immediately transferred to clean brass liners, sealed with aluminum foil, capped with plastic end caps, secured with tape, labeled, logged on the chain of custody form, and placed on ice in preparation of shipment to a California certified laboratory for analysis.

Groundwater samples were collected from each coring through the temporary installation of slotted PVC well screen. A clean stainless steel bailer was used to retrieve the groundwater samples. The groundwater samples were placed in new clean sample containers, labeled, logged on the chain of custody form, and placed on ice in preparation of shipment to a California certified laboratory for analysis. Following the completion of the soil and groundwater sampling, the core holes were backfilled with neat cement and finished with asphalt or concrete to the existing grade.

Soil and Groundwater Sample Analysis

Selected soil samples and one groundwater sample from each coring were submitted for laboratory analysis of TPH as gasoline according to EPA Method 5030/8015; BTEX according to EPA Method 8020; and hydrocarbon screening for compounds ranging from diesel fuel through motor oil using a gas chromatograph (GC) and a flame ionization detector (FID). The GC/FID method samples were prepared using EPA Method 3550 and were analyzed according to protocols commonly referred to as modified EPA Method 8015.

Soil Sample Results

The soil samples collected from corings SB-18 and SB-19 drilled near the garbage collection area and the soil corings SB-24 through SB-26 drilled near the former USTs were not submitted for laboratory analysis. These samples were not analyzed because the extent of hydrocarbons in soil in these areas had been previously defined from data collected during the March 1995 field work and were considered to be beyond the defined limits of TPH in soil. These corings were installed to obtain groundwater quality data.

The soil sample collected from a depth of 10-feet below grade from the coring identified as SB-20, north of the oil/water separator, contained TPH as mineral spirits at a concentration of 1,400 milligrams per kilogram (mg/kg), ethylbenzene at a concentration of 1.6 mg/kg, and total xylenes at a concentration of 17 mg/kg. The soil sample collected from a depth of 10-feet below grade from the coring identified as SB-23, southeast of the oil/water separator, contained TPH as gasoline at a concentration of 28 mg/kg, toluene at a concentration of 0.042 mg/kg, ethylbenzene at a concentration of 0.061 mg/kg, and total xylenes at a concentration of 0.32 mg/kg. The remaining three corings (SB-21, SB-22, and SB-27) did not contain any constituents above the method detection limits.

Groundwater Sample Results

Groundwater samples collected from SB-21 and SB-22, to the west and east of the oil/water separator, did not contain concentrations of TPH above the method detection limits. The sample from SB-21 contained toluene at a concentration of 0.5 micrograms per liter (ug/L) and ethylbenzene at a concentration of 0.7 ug/L. The groundwater sample collected from SB-22 contained toluene at a concentration of 0.6 ug/l. The groundwater sample collected from SB-20, to the north of the oil/water separator, contained free phase hydrocarbons and was characterized by the laboratory as containing 520,000 ug/L TPH as mineral spirits and 170,000 ug/L TPH as motor oil, 60 ug/L ethylbenzene, and 150 ug/L total xylenes. The groundwater samples collected from SB-23, to the south of the oil/water separator, contained 150 ug/L TPH as gasoline and 23,000 ug/L TPH as motor oil, 3,900 ug/L TPH as kerosene, 1.0 ug/L ethylbenzene, and 2.8 ug/L total xylenes. The groundwater sample collected from SB-27, about 150-feet north of the oil/water separator, contained 16,000 ug/L TPH as motor oil.

The groundwater sample collected from SB-18, located near the garbage collection area and SB-26, located on the CALTRANS property to the west of the gasoline and diesel USTs did not contain concentrations of TPH above the method detection limits. SB-18 did contain 8.1 ug/L toluene. The groundwater sample collected from SB-19, near the northwest corner of the building, contained TPH as motor oil at a concentration of 44,000 ug/L and toluene at a concentration of 0.3 ug/L. The groundwater samples collected from SB-24 and SB-25, on the CALTRANS property to the west of the building, contained TPH as motor oil at concentrations of 13,000 ug/L and 17,000 ug/L, respectively. In addition, SB-24 contained 0.4 ug/L toluene.

Findings

Based on the results of the previous and current investigations, petroleum hydrocarbons are present in the groundwater and soil at the site. The recently completed field work suggests that primarily dissolved concentrations of motor oil, combined with mineral spirits and kerosene, are present in groundwater in the area of the oil/water separator. In addition, dissolved concentrations of motor oil in groundwater appears to have migrated off-site in a southwest direction.

Based on this data, Groundwater Technology recommends that ten groundwater monitoring wells be installed on and around the site. These wells should be located in areas of the site in which the greatest impact to the subsurface has already been defined and in areas up- and down-gradient of these areas to monitor groundwater quality and potential migration of hydrocarbons on-site and off-site. The details of the proposed monitoring well installation work are provided in the Proposed

Work Plan Addendum 2 for Further Site Assessment Sampling Activities, dated February 2, 1996.

If you have any questions regarding the information contained in this report, please feel free to contact me at or (216) 349-0004.

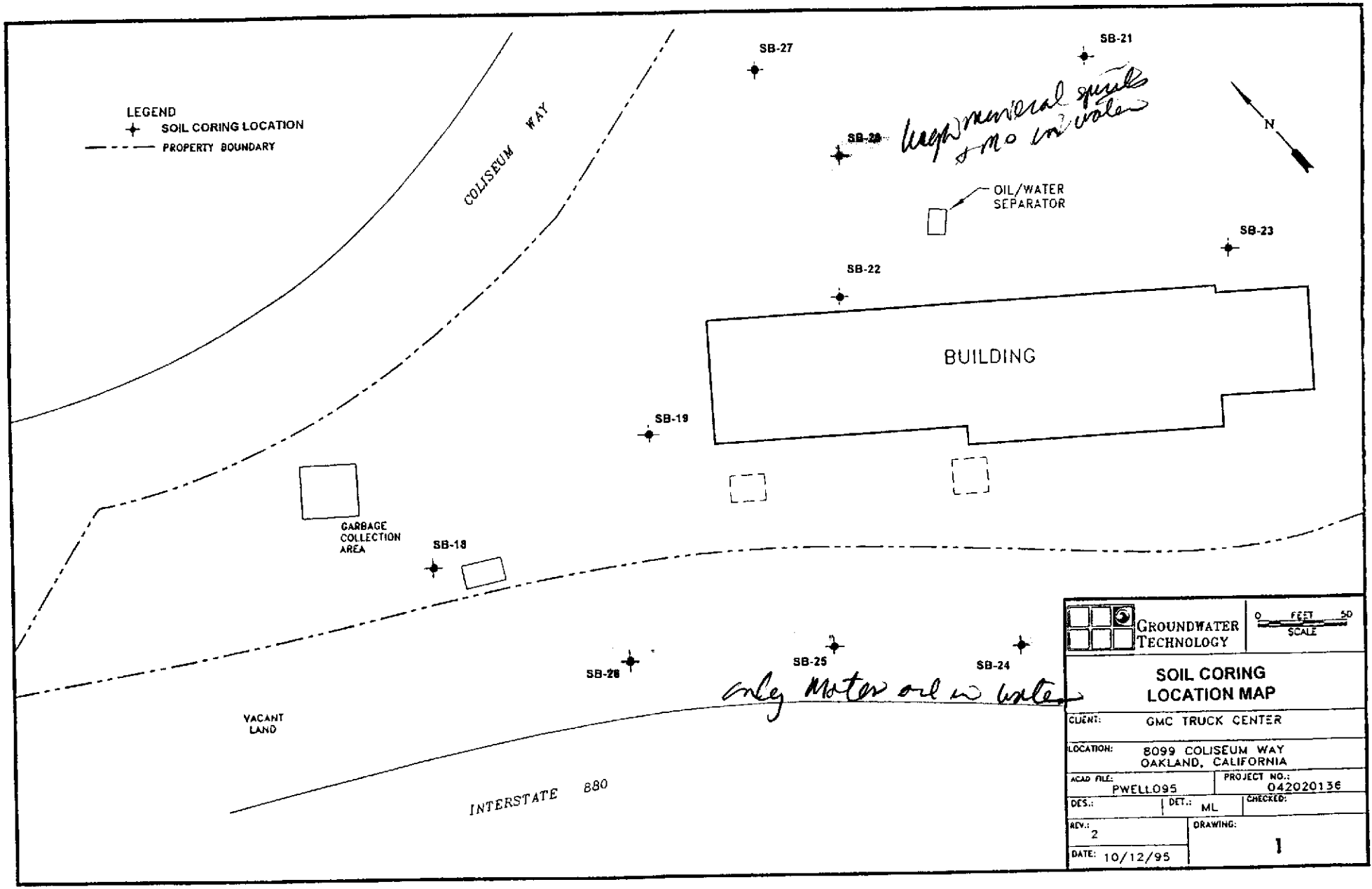
Sincerely,
Groundwater Technology, Inc.

Michael R. Sieczkowski, CHMM
Project Manager

Kenneth P. Johnson, R.G. for
Project Hydrogeologist

Attachments: Coring Location Map

c: B. Ferguson
C. Covert


LEGEND
SOIL CORING LOCATION
PROPERTY BOUNDARY
COLISEUM WAY
SB-27
SB-21
SB-20
heavy mineral spirits
no water
N
OIL/WATER
SEPARATOR
SB-23
SB-22
BUILDING
SB-19
GARBAGE
COLLECTION
AREA
SB-18
SB-26
SB-25
SB-24
only Motor oil in water
VACANT
LAND
INTERSTATE 880
GROUNDWATER
TECHNOLOGY
0 FEET 50
SCALE
SOIL CORING
LOCATION MAP
CLIENT: GMC TRUCK CENTER
LOCATION: 8099 COLISEUM WAY
OAKLAND, CALIFORNIA
ACAD FILE: PWELL095
PROJECT NO.: 042020136
DES.:
DET.: ML
CHECKED:
REV.: 2
DRAWING: 1
DATE: 10/12/95

GROUNDWATER TECHNOLOGY, INC.

TABLE 2
ADDENDUM 1 SOIL AND GROUNDWATER SAMPLING
GROUNDWATER SAMPLE ANALYTICAL RESULTS
GENERAL MOTORS CORPORATION WHITE TRUCK CENTER
OAKLAND, CALIFORNIA

Sample I.D.	Date	Benzene Collected ug/L	Toluene ug/L	Ethyl-benzene ug/L	Total Xylenes ug/L	TPH as gasoline ug/L	TPH as diesel ug/L	TPH as mineral spirits ug/L	TPH as kerosene ug/L	TPH as motor oil ug/L
SB-18	06/26/95	<0.3	**8.1**	<0.3	<0.5	<50	<1,000	<1,000	<1,000	<5,000
SB-19	06/26/95	<0.3	**0.3**	<0.3	<0.5	<50	<2,500	<2,500	<2,500	**44,000**
SB-20	06/26/95	<0.3	<0.3	**60**	**150**	<500	<2,500	**520,000**	<2,500	**170,000**
SB-21	06/26/95	<0.3	**0.5**	**0.7**	<0.5	<50	<1,000	<1,000	<1,000	<5,000
SB-22	06/26/95	<0.3	**0.6**	<0.3	<0.5	<50	<1,000	<1,000	<1,000	<5,000
SB-23	06/26/95	0.5	<0.3	**1.0**	**2.8**	**150**	<2,500	<2,500	**3,900**	**23,000**
SB-24	06/26/95	<0.3	**0.4**	<0.3	<0.5	<50	<1,000	<1,000	<1,000	**13,000**
SB-25	06/26/95	<0.3	<0.3	<0.3	<0.5	<50	<1,000	<1,000	<1,000	**17,000**
SB-26	06/26/95	<0.6	<0.6	<0.6	<1.0	<100	<1,000	<1,000	<1,000	<5,000
SB-27	06/26/95	<0.3	<0.3	<0.3	<0.5	<50	<1,000	<1,000	<1,000	**16,000**

GROUNDWATER TECHNOLOGY, INC.

TABLE 1
ADDENDUM 1 SOIL AND GROUNDWATER SAMPLING
SOIL SAMPLE ANALYTICAL RESULTS
GENERAL MOTORS CORPORATION WHITE TRUCK CENTER
OAKLAND, CALIFORNIA

Sample I.D.	Date	Benzene Collected mg/kg	Toluene mg/kg	Ethyl-benzene mg/kg	Total Xylenes mg/kg	TPH as gasoline mg/kg	TPH as diesel mg/kg	TPH as mineral spirits mg/kg	TPH as kerosene mg/kg	TPH as motor oil mg/kg
SB-20 *	06/26/95	<0.10	<0.10	**1.6**	**17**	<20	<200	**1400**	<200	<2000
SB-21	06/26/95	<0.005	<0.005	<0.005	<0.015	<1.0	<10	<10	<10	<100
SB-22	06/26/95	<0.005	<0.005	<0.005	<0.015	<1.0	<10	<10	<10	<100
SB-23 **	06/26/95	<0.025	**0.042**	**0.061**	**0.32**	**28**	<10000	<1000	<1000	<10000
SB-27	06/26/95	<0.005	<0.005	<0.005	<0.015	<1.0	<200	<200	<200	<2000

* Indicates that the detection limit was raised due to high concentration of target analyte.
** Indicates that the detection limit was raised due to matrix interference.

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

4080 Pike Lane
Concord, CA 94520
(510) 685-7852
(800) 544-3422 Inside CA
(800) 423-7143 Outside CA
(510) 825-0720 FAX

July 17, 1995

Chris Desocio
Groundwater Technology, Inc.
4057 Port Chicago Hwy.
Concord, CA 94520

RE: GTEL Client ID:	042020136
Login Number:	C5060290
Project ID (number):	042020136.2010
Project ID (name):	GMC Trucking/8099 S. Coliseum Way, Oakland, CA

Dear Chris Desocio:

Enclosed please find the analytical results for the samples received by GTEL Environmental Laboratories, Inc. on 06/27/95 under Chain-of-Custody Number(s) 34059, 34060.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes.

GTEL is certified by the Department of Health Service under Certification Number E1075.

If you have any questions regarding this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

William Sarlode (signature)
for
Rashmi Shah
Laboratory Director

GTEL Client ID: 042020136
Login Number: C5060290
Project ID (number): 042020136.2010
Project ID (name): GMC Trucking/8099 S. Coliseum Way, Oakland, CA

ANALYTICAL RESULTS

Volatile Organics
Method: EPA8020/15
Matrix: Aqueous

GTEL Sample Number	C5060290-01	C5060290-02	C5060290-03	C5060290-04
Client ID	SB-18	SB-19	SB-20	SB-21
Date Sampled	06/26/95	06/26/95	06/26/95	06/26/95
Date Analyzed	07/07/95	07/03/95	07/03/95	07/07/95
Dilution Factor	1.00	1.00	10.0	1.00

Analyte	Reporting Limit	Units	Concentration:			
Benzene	0.3	ug/L	< 0.3	< 0.3	< 3.0	< 0.3
Toluene	0.3	ug/L	8.1	0.3	< 3.0	0.5
Ethylbenzene	0.3	ug/L	< 0.3	< 0.3	60.	0.7
Xylenes (total)	0.5	ug/L	< 0.5	< 0.5	150	< 0.5
TPH as GAS	50.	ug/L	< 50.	< 50.	< 500	< 50.
BFB (Surrogate)	--	%	80.2	83.2	132.	94.8

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA8020/15:

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update I. Gasoline Range Hydrocarbons (TPH) quantitated by GC/FID with purge and trap. Acceptability limits for recovery in the Bromofluorobenzene (BFB) surrogate is 62-129%.

C5060290-03:

Detection limit raised due to high levels of hydrocarbons. Hydrocarbon pattern not charateric of gasoline.

GTEL ENVIRONMENTAL LABORATORIES, INC.

GTEL Client ID: 042020136
Login Number: C5060290
Project ID (number): 042020136.2010
Project ID (name): GMC Trucking/8099 S. Coliseum Way, Oakland, CA

ANALYTICAL RESULTS

Volatile Organics
Method: EPA8020/15
Matrix: Aqueous

GTEL Sample Number	C5060290-05	C5060290-06	C5060290-07	C5060290-08
Client ID	SB-22	SB-23	SB-24	SB-25
Date Sampled	06/26/95	06/26/95	06/26/95	06/26/95
Date Analyzed	07/07/95	07/06/95	07/07/95	07/06/95
Dilution Factor	1.00	1.00	1.00	1.00

Analyte	Reporting Limit	Units	Concentration:			
Benzene	0.3	ug/L	< 0.3	0.5	< 0.3	< 0.3
Toluene	0.3	ug/L	0.6	< 0.3	0.4	< 0.3
Ethylbenzene	0.3	ug/L	< 0.3	1.0	< 0.3	< 0.3
Xylenes (total)	0.5	ug/L	< 0.5	2.8	< 0.5	< 0.5
TPH as GAS	50.	ug/L	< 50.	150	< 50.	< 50.
BFB (Surrogate)	--	%	79.7	109.	120.	109.

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA8020/15:

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update 1. Gasoline Range Hydrocarbons (TPH) quantitated by GC/FID with purge and trap. Acceptability limits for recovery in the Bromofluorobenzene (BFB) surrogate is 62-129%.

C5060290-08:

Uncategorized compound is not included in gasoline concentration.

GTEL ENVIRONMENTAL LABORATORIES, INC.

GTEL Client ID: 042020136
Login Number: C5060290
Project ID (number): 042020136.2010
Project ID (name): GMC Trucking/8099 S. Coliseum Way, Oakland, CA

ANALYTICAL RESULTS

Volatile Organics
Method: EPA8020/15
Matrix: Aqueous

GTEL Sample Number	C5060290-09	C5060290-15	C5060290-16	--	
Client ID	SB-26	SB-27	TRIP BLANK	--	
Date Sampled	06/26/95	06/26/95	06/26/95	--	
Date Analyzed	07/03/95	07/07/95	07/03/95	--	
Dilution Factor	2.00	1.00	1.00	--	

Analyte	Reporting Limit	Units	Concentration:			
Benzene	0.3	ug/L	< 0.6	< 0.3	< 0.3	--
Toluene	0.3	ug/L	< 0.6	< 0.3	< 0.3	--
Ethylbenzene	0.3	ug/L	< 0.6	< 0.3	< 0.3	--
Xylenes (total)	0.5	ug/L	< 1.0	< 0.5	< 0.5	--
TPH as GAS	50.	ug/L	< 100	< 50.	< 50.	--
BFB (Surrogate)	--	%	90.1	84.2	85.0	--

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA8020/15:

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update 1. Gasoline Range Hydrocarbons (TPH) quantitated by GC/FID with purge and trap. Acceptability limits for recovery in the Bromofluorobenzene (BFB) surrogate is 62-129%.

C5060290-09:

Detection limit raised due to low sample volume.

GTEL ENVIRONMENTAL LABORATORIES, INC.

GTEL Client ID: 042020136
Login Number: C5060290
Project ID (number): 042020136.2010
Project ID (name): GMC Trucking/8099 S. Coliseum Way, Oakland, CA

ANALYTICAL RESULTS

Volatile Organics
Method: EPA8020/15
Matrix: Solids

GTEL Sample Number	C5060290-10	C5060290-11	C5060290-12	C5060290-13
Client ID	SB-20 (SOIL)	SB-21 (SOIL)	SB-22 (SOIL)	SB-23 (SOIL)
Date Sampled	06/26/95	06/26/95	06/26/95	06/26/95
Date Analyzed	07/08/95	07/04/95	07/04/95	07/06/95
Dilution Factor	20.0	1.00	1.00	5.00

Analyte	Reporting Limit	Units	Concentration:Wet Weight			
Benzene	0.005	mg/kg	< 0.10	< 0.005	< 0.005	< 0.025
Toluene	0.005	mg/kg	< 0.10	< 0.005	< 0.005	0.042
Ethylbenzene	0.005	mg/kg	1.6	< 0.005	< 0.005	0.061
Xylenes (total)	0.015	mg/kg	17.	< 0.015	< 0.015	0.32
TPH as GAS	1.0	mg/kg	< 20.	< 1.0	< 1.0	28.
BFB (Surrogate)	--	%	120.	77.3	102.	102.

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA8020/15:

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update 1. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual protocols, May 1988 revision. Acceptability limits for recovery in the Bromofluorobenzene (BFB) surrogate is 60-119%.

GTEL ENVIRONMENTAL LABORATORIES, INC.

GTEL Client ID: 042020136
Login Number: C5060290
Project ID (number): 042020136.2010
Project ID (name): GMC Trucking/8099 S. Coliseum Way, Oakland, CA

ANALYTICAL RESULTS

Volatile Organics
Method: EPA8020/15
Matrix: Solids

GTEL Sample Number	C5060290-14	--	--	--	
Client ID	SB-27 (SOIL)	--	--	--	
Date Sampled	06/26/95	--	--	--	
Date Analyzed	07/04/95	--	--	--	
Dilution Factor	1.00	--	--	--	

Analyte	Reporting Limit	Units	Concentration:Wet Weight			
Benzene	0.005	mg/kg	< 0.005	--	--	--
Toluene	0.005	mg/kg	< 0.005	--	--	--
Ethylbenzene	0.005	mg/kg	< 0.005	--	--	--
Xylenes (total)	0.015	mg/kg	< 0.015	--	--	--
TPH as GAS	1.0	mg/kg	< 1.0	--	--	--
BFB (Surrogate)	--	%	97.9	--	--	--

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA8020/15:

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update 1. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual protocols, May 1988 revision. Acceptability limits for recovery in the Bromofluorobenzene (BFB) surrogate is 60-119%.

GTEL ENVIRONMENTAL LABORATORIES, INC.

GTEL Client ID: 042020136 QUALITY CONTROL RESULTS
Login Number: C5060290 Volatile Organics
Project ID (number): 042020136.2010 Method: EPA8020/15
Project ID (name): GMC Trucking/8099 S. Coliseum Way, Oakland, CA Matrix: Aqueous

Method Blank Results

QC Batch No: M070395-1
Date Analyzed: 03-JUL-95

Analyte	Method: EPA8020/15 Concentration: ug/L
Benzene	< 0.30
Toluene	< 0.30
Ethylbenzene	< 0.30
Xylenes (Total)	< 0.50
TPH as Gasoline	< 50.0

Notes:

GTEL ENVIRONMENTAL LABORATORIES, INC.

GTEL Client ID: 042020136 QUALITY CONTROL RESULTS
Login Number: C5060290 Volatile Organics
Project ID (number): 042020136.2010 Method: EPA8020/15
Project ID (name): GMC Trucking/8099 S. Coliseum Way, Oakland, CA Matrix: Solids

Method Blank Results

QC Batch No: F070495-1
Date Analyzed: 04-JUL-95

Analyte	Method:EPA8020/15 Concentration: mg/kg
Benzene	< 0.0050
Toluene	< 0.0050
Ethylbenzene	< 0.0050
Xylenes (Total)	< 0.015
TPH as Gasoline	< 1.0

Notes:

GTEL ENVIRONMENTAL LABORATORIES, INC.

Client Number: 042020136
Project ID: GMC Trucking
8099 S. Coliseum Way
Oakland, CA
Work Order Number: C5-06-0290

ANALYTICAL RESULTS

Hydrocarbons in Water

Method: GC-FID[a]

GTEL Sample Number		01[f]	02[g]	03[g]	04[f]
Client Identification		SB-18	SB-19	SB-20	SB-21
Date Sampled		06/26/95	06/26/95	06/26/95	06/26/95
Date Extracted		06/28/95	06/28/95	06/28/95	06/28/95
Date Analyzed		07/10/95	07/18/95	07/18/95	07/15/95
Analyte	Detection Limit, ug/L	Concentration, ug/L			
TPH as gasoline[b]	50	<1000	<2500	<2500	<1000
TPH as mineral spirits	50	<1000	<2500	520000	<1000
TPH as kerosene	50	<1000	<2500	<2500	<1000
TPH as diesel fuel	50	<1000	<2500	<2500	<1000
TPH as motor oil	250	<5000	44000	170000	<5000
Detection Limit Multiplier		20	50	50	20
O-Terphenyl surrogate, % recovery		72.1	101	142	152

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, USEPA, November, 1986. O-Terphenyl surrogate acceptability limits are 50-150%.

b. Quantitation uncertain due to analyte losses during extraction and chromatographic interference by the solvent peak.

c. Results taken from multiple dilutions.

f. Detection limit raised due to matrix interference.

g. Detection limit raised due to high concentration of target analytes.

Client Number: 042020136
Project ID: GMC Trucking
8099 S. Coliseum Way
Oakland, CA
Work Order Number: C5-06-0290

ANALYTICAL RESULTS

Hydrocarbons in Water

Method: GC-FID[a]

GTEL Sample Number		05[f]	06g	07g	08g
Client Identification		SB-22	SB-23	SB-24	SB-25
Date Sampled		06/26/95	06/26/95	06/26/95	06/26/95
Date Extracted		06/28/95	06/28/95	06/28/95	06/28/95
Date Analyzed		07/18/95	07/15/95	07/18/95	07/18/95
Analyte	Detection Limit, ug/L	Concentration, ug/L			
TPH as gasoline[b]	50	<1000	<2500	<1000	<1000
TPH as mineral spirits	50	<1000	<2500	<1000	<1000
TPH as kerosene	50	<1000	3900	<1000	<1000
TPH as diesel fuel	50	<1000	<2500	<1000	<1000
TPH as motor oil	250	<5000	23000	13000	17000
Detection Limit Multiplier		20	50	20	20
O-Terphenyl surrogate, % recovery		103	109	50.5	54.3

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, USEPA, November, 1986. O-Terphenyl surrogate acceptability limits are 50-150%.

b. Quantitation uncertain due to analyte losses during extraction and chromatographic interference by the solvent peak.

f. Detection limit raised due to matrix interference.

g. Detection limit raised due to high concentration of target analytes.

Client Number: 042020136
Project ID: GMC Trucking
8099 S. Coliseum Way
Oakland, CA
Work Order Number: C5-06-0290

ANALYTICAL RESULTS

Hydrocarbons in Water

Method: GC-FID[a]

GTEL Sample Number		09[d,f]	159	GCK 070895	
Client Identification		SB-26	SB-27	METHOD BLANK	
Date Sampled		06/26/95	06/26/95	--	
Date Extracted		06/28/95	06/28/95	06/28/95	
Date Analyzed		07/18/95	07/18/95	07/08/95	
Analyte	Detection Limit, ug/L	Concentration, ug/L			
TPH as gasoline[b]	50	<1000	<1000	<50	
TPH as mineral spirits	50	<1000	<1000	<50	
TPH as kerosene	50	<1000	<1000	<50	
TPH as diesel fuel	50	<1000	<1000	<50	
TPH as motor oil	250	<5000	16000	<250	
Detection Limit Multiplier		20	20	1	
O-Terphenyl surrogate, % recovery		14.0	180[e]	124	

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, USEPA, November, 1986. O-Terphenyl surrogate acceptability limits are 50-150%.

b. Quantitation uncertain due to analyte losses during extraction and chromatographic interference by the solvent peak.

d. Estimated concentration due to low surrogate recovery; insufficient sample available for re-extraction.

e. Surrogate recovery is less than upper control limit due to target compound interference.

f. Detection limit raised due to matrix interference.

g. Detection limit raised due to high concentration of target analytes.

Client Number: 042020136
Project ID: GMC Trucking
8099 S. Coliseum Way
Oakland, CA
Work Order Number: C5-06-0290

ANALYTICAL RESULTS

Hydrocarbons in Soil

Method: GC-FID[a]

GTEL Sample Number		10[g]	11	12	13[f]
Client Identification		SB-20	SB-21	SB-22	SB-23
Date Sampled		06/26/95	06/26/95	06/26/95	06/26/95
Date Extracted		06/28/95	06/28/95	06/28/95	06/28/95
Date Analyzed		07/15/95	07/11/95	07/11/95	07/18/95
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
TPH as gasoline[b]	10	<200	<10	<10	<1000
TPH as mineral spirits	10	1400	<10	<10	<1000
TPH as kerosene	10	<200	<10	<10	<1000
TPH as diesel fuel	10	<200	<10	<10	<1000
TPH as motor oil	100	<2000	<100	<100	<10000
Detection Limit Multiplier		20	1	1	100
O-Terphenyl surrogate, % recovery		119	61.5	78.5	108

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, USEPA, November, 1986. Results reported on a wet weight basis. O-Terphenyl surrogate acceptability limits are 50-150%.

b. Quantitation uncertain due to analyte losses during extraction and chromatographic interference by the solvent peak.

f. Detection limit raised due to matrix interference.

g. Detection limit raised due to high concentration of target analytes.

Client Number: 042020136
Project ID: GMC Trucking
8099 S. Coliseum Way
Oakland, CA
Work Order Number: CS-06-0290

ANALYTICAL RESULTS

Hydrocarbons in Soil

Method: GC-FID[a]

GTEL Sample Number		14[f]	GCJ 062995		
Client Identification		SB-27	METHOD BLANK		
Date Sampled		06/26/95	–		
Date Extracted		06/28/95	06/28/95		
Date Analyzed		07/12/95	06/29/95		
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
TPH as gasoline[b]	10	<200	<10		
TPH as mineral spirits	10	<200	<10		
TPH as kerosene	10	<200	<10		
TPH as diesel fuel	10	<200	<10		
TPH as motor oil	100	<2000	<100		
Detection Limit Multiplier		20	1		
O-Terphenyl surrogate, % recovery		73.9	106		

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, USEPA, November, 1986. Results reported on a wet weight basis. O-Terphenyl surrogate acceptability limits are 50-150%.

b. Quantitation uncertain due to analyte losses during extraction and chromatographic interference by the solvent peak.

f. Detection limit raised due to matrix interference.

GTEL ENVIRONMENTAL LABORATORIES, INC.

4080 PIKE LANE, SUITE C
CONCORD, CA 94520
(510) 685-7852
(800) 423-7143

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

34059

Company Name: Ground Water Tech
Phone #: 510 671 2387
FAX #:
Company Address: 4057 Port Chicago Hwy Concord
Site Location: Oakland
Project Manager: Chris DeSocio
Client Project ID: (#)
(NAME) GMC
I attest that the proper field sampling procedures were used during the collection of these samples.
Sampler Name (Print): Bridget Baxter

ANALYSIS REQUEST | **OTHER**

Field Sample ID	GTEL Lab # (Lab Use only)	# CONTAINERS	Matrix: WATER	SOIL	AIR	SLUDGE	PRODUCT	OTHER	Method Preserved: HCl	HNO_3	H_2SO_4	ICE	UNPRESERVED	OTHER (Specify)	Sampling: DATE	TIME	BTEX 602 ☐ 8020 ☐ with MTBE ☐	BTEX/Gas Hydrocarbons PID/FID ☐ with MTBE ☐	Hydrocarbons GC/FID Gas ☐ Diesel ☐ Screen ☐	Hydrocarbon Profile (SIMDIS) ☐	Oil and Grease 413.1 ☐ 413.2 ☐ SM-503 ☐	TPH/IR 418.1 ☐ SM 503 ☐	EDB by 504 ☐ DBCP by 504 ☐	EPA 503.1 ☐ EPA 502.2 ☐	EPA 601 ☐ EPA 8010 ☐	EPA 602 ☐ EPA 8020 ☐	EPA 608 ☐ 8080 ☐ PCB only ☐	EPA 624/PPL ☐ 8240/TAL ☐ NBS (+15) ☐	EPA 625/PPL ☐ 8270/TAL ☐ NBS (+25) ☐	EPA 610 ☐ 8310 ☐	EP TOX Metals ☐ Pesticides ☐ Herbicides ☐	TCLP Metals ☐ VOA ☐ Semi-VOA ☐ Pest ☐ Herb ☐	EPA Metals - Priority Pollutant ☐ TAL ☐ RCRA ☐	CAM Metals TTLC ☐ STLC ☐	Lead 239.2 ☐ 200.7 ☐ 7420 ☐ 7421 ☐ 6010 ☐	Organic Lead ☐	Corrosivity ☐ Flash Point ☐ Reactivity ☐				
SB-18	01	2	X						X				X		6/26			X	X																					
SB-19	02	3	↓						↓				↓		↓			↓	↓																					
SB-20	03	3	↓						↓				↓		↓			↓	↓																					
SB-21	04	3	↓						↓				↓		↓			↓	↓																					
SB-22	05	3	↓						↓				↓		↓			↓	↓																					
SB-23	06	3	↓						↓				↓		↓			↓	↓																					
SB-24	07	3	↓						↓				↓		↓			↓	↓																					
SB-25	08	3	↓						↓				↓		↓			↓	↓																					
SB-26	09	3	↓						↓				↓		↓			↓	↓																					
SB-20	10	1		X									X		↓			↓	↓																					
SB-21	11	1		X									X		↓			↓	↓																					

TAT
Priority (24 hr) ☐
Expedited (48 hr) ☐
7 Business Days ☐
Other ______
Business Days ☐

Special Handling
GTEL Contact ______
Quote/Contract # ______
Confirmation # ______
P.O. # ______

QA/QC Level
Blue ☐ CLP ☐ Other ☐ ______

SPECIAL DETECTION LIMITS

SPECIAL REPORTING REQUIREMENTS

FAX ☐

REMARKS: Amount of HCL present in VOAs caused effervescence which caused bubbles in bottles.

Lab Use Only Lot #: 6°c
Storage Location: 1 of 2
Work Order #: C5060290

CUSTODY RECORD

Relinquished by	Date	Time	Received by
Relinquished by Sampler: Bridget Baxter	[illegible]	[illegible]	Received by: Geralyn LaBlanc 6:10 PM
Relinquished by:			Received by:
Relinquished by:	6/27/95	10:00	Received by Laboratory: Waybill # [illegible]

GTEL ENVIRONMENTAL LABORATORIES INC

4080 PIKE LANE, SUITE C
CONCORD, CA 94520
(510) 685-7852
(800) 423-7143

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

34060

Company Name: [illegible] GTI
Phone #: 510 671-2387
FAX #:
Company Address: 1405? Port Chicago Hwy Concord
Site Location: Oakland
Project Manager: Chris DeSocio
Client Project ID: (#) (NAME) GMC
I attest that the proper field sampling procedures were used during the collection of these samples.
Sampler Name (Print): Bridget Baxter

Field Sample ID	GTEL Lab # (Lab Use only)	# Containers	Matrix: Water	Soil	Air	Sludge	Product	Other	Method Preserved: HCl	HNO3	H2SO4	Ice	Unpreserved	Other (Specify)	Sampling: Date	Time
SB-22	12	1	X	X									X		6/26	
SB-23	13	1		X									X		↓	
SB-27	14	1		X									X		↓	
SB-27	15	3	X						X				X		↓	
Tripblank	16	2	X													
SB-25?																
SB-24		3														
SB-25																
SB-26		3	↓						↓				↓			
SB-20		1		X												
SB-21		1		X									X		↓	

ANALYSIS REQUEST

Field Sample ID	BTEX 602 / 8020 with MTBE	BTEX/Gas Hydrocarbons PID/FID with MTBE	Hydrocarbons GC/FID Gas / Diesel / Screen	Hydrocarbon Profile (SIMDIS)	Oil and Grease 413.1 / 413.2 / SM-503	TPH/IR 418.1 / SM 503	EDB by 504 / DBCP by 504	EPA 503.1 / EPA 502.2	EPA 601 / EPA 8010	EPA 602 / EPA 8020	EPA 608 / 8080 / PCB only	EPA 624/PPL / 8240/TAL / NBS (+15)	EPA 625/PPL / 8270/TAL / NBS (+25)	EPA 610 / 8310	EP TOX Metals / Pesticides / Herbicides	TCLP Metals / VOA / Semi-VOA / Pest / Herb	EPA Metals - Priority Pollutant / TAL / RCRA	CAM Metals TTLC / STLC	Lead 239.2 / 200.7 / 7420 / 7421 / 6010	Organic Lead	Corrosivity / Flash Point / Reactivity	OTHER			
SB-22		X	X																						
SB-23		X	X																						
SB-27		X	X																						
SB-27		X	X																						
Tripblank		X	X																						

TAT	Special Handling
Priority (24 hr) ☐	GTEL Contact
Expedited (48 hr) ☐	Quote/Contract #
7 Business Days ☐	Confirmation #
Other Business Days ☐	P.O. #

QA/QC Level: Blue ☐ CLP ☐ Other ☐

SPECIAL DETECTION LIMITS

SPECIAL REPORTING REQUIREMENTS

FAX ☐

REMARKS:

Lab Use Only Lot #:
Storage Location: 2 OF 2
Work Order #: C5060290

CUSTODY RECORD

	Date	Time	
Relinquished by Sampler: Bridget Baxter	6/26/95	6:10pm	Received by: Geralyn LeBlanc 6:10 PM
Relinquished by:			Received by:
Relinquished by:	6/27/95	08:00	Received by Laboratory: Waybill # [illegible]