SUMMARY TANK EXCAVATION REPORT
CHEVRON SERVICE STATION NO. 9-6991
2920 CASTRO VALLEY BOULEVARD
CASTRO VALLEY, CALIFORNIA

DECEMBER 1990

GROUNDWATER TECHNOLOGY, INC.
CONCORD, CALIFORNIA

GROUNDWATER TECHNOLOGY, INC.

4080-D Pike Lane, Concord, CA 94520
(415) 671-2387

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DECEMBER 1990

Prepared for

Ms. Nancy Vukelich
Chevron U.S.A. Inc.
2410 Camino Ramon
Bishop Ranch #6
San Ramon, CA 94583

Prepared by:

GROUNDWATER TECHNOLOGY, INC.
4080 Pike Lane, Suite D
Concord, CA 94566

Fred Hayden
Project Geologist

Joseph R. Ramage
Project Manager

Allen B. Storm
Registered Geologist
No. 4394

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CHEVRON SERVICE STATION NO. 9-6991
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INTRODUCTION

Groundwater Technology, Inc. is pleased to present this Summary Tank Excavation Report to Chevron U.S.A. Inc. (Chevron) for facility No. 9-6991 located at 2920 Castro Valley Road in Castro Valley, California. This work was performed under Chevron release number 414-6671, provided by Ms. Cynthia Wong. The tank excavation sampling was performed in accordance with guidelines of the Alameda County Health Services Department (ACHSD).

BACKGROUND

Chevron Service Station No. 9-6991 is located on the northeast corner of the intersection of Castro Valley Boulevard and Anita Road, on the southwest portion of a small shopping mall (Figure 1). There are parking lots adjacent to the site to the north and east. There are commercial buildings across Castro Valley Boulevard to the south. Across Anita Road, on the north- west corner of the intersection of Anita Road and Castro Valley Boulevard, is a former service station site. The structures at that site, including the pump-island foundations, are still in place, and the site is currently the location of a business which performs work on automobile interiors. On September 21, 1990, a Groundwater Technology geologist observed a soil-boring operation being conducted at that site by an unknown consulting firm. No other information is available concerning the site at this time.

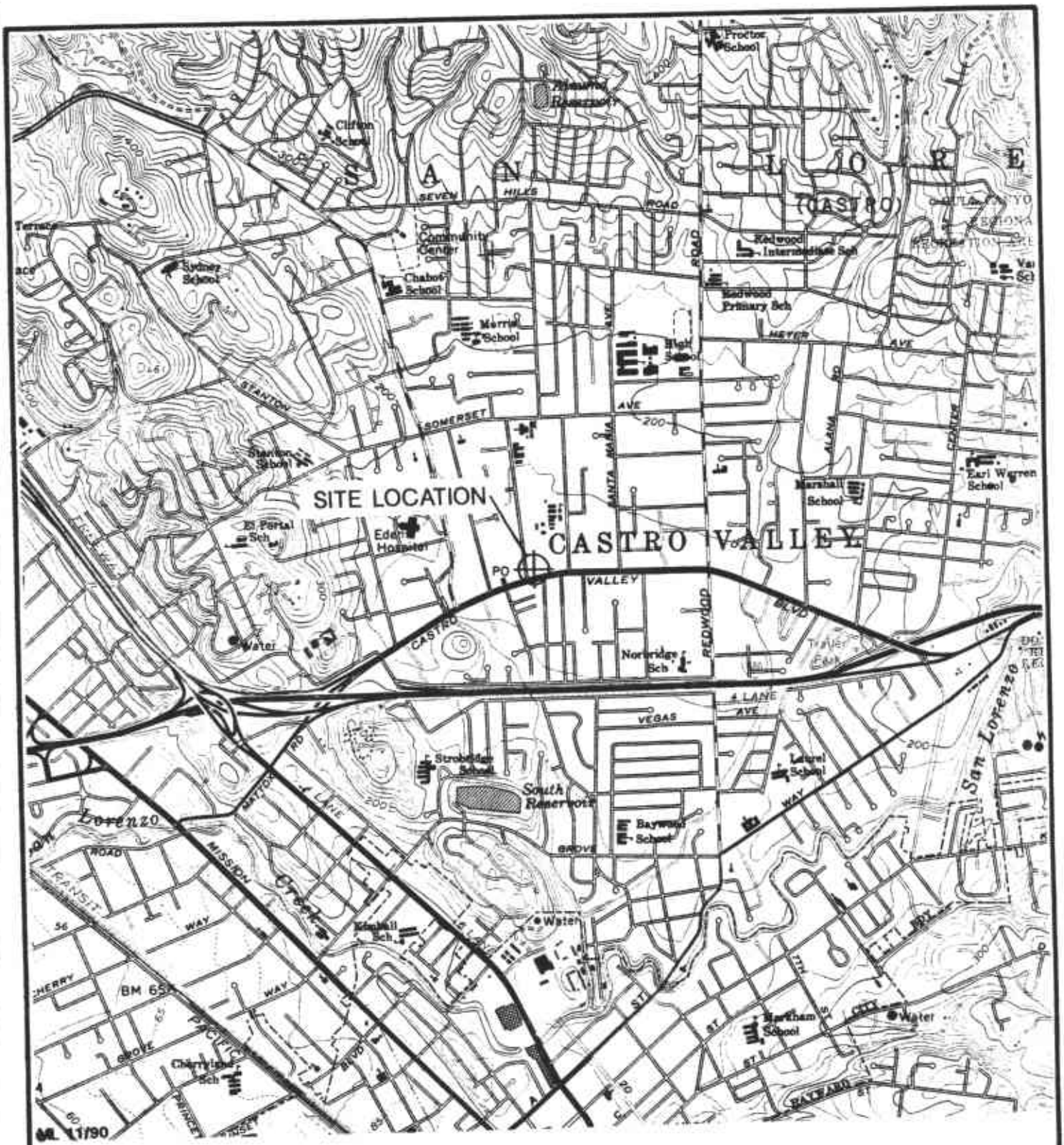

FIGURE 1
SITE LOCATION MAP

CHEVRON USA
CASTRO VALLEY, CALIFORNIA

In September 1990, Groundwater Technology was retained by Chevron to perform soil sampling operations in association with the removal of two underground-storage tanks, a waste-oil tank and an unleaded-fuel (product) tank. Capacity of the two tanks were 1,000 gallons and 6,000 gallons, respectively. The Site Plan (Figure 2) depicts the location of the excavations for the storage tanks and product lines that were removed. Three remaining underground-storage tanks were left in place, and new lines were installed, in preparation for the completion of a service station/mini-market.

SCOPE OF WORK

The following is a summary of work steps performed by Groundwater Technology in connection with the tank excavations:

- Collection of soil and water samples, as needed, from the underground-storage tank excavation pits and product-line trenches. Collection of soil samples, as needed, from the soil piles generated by the excavations, in preparation for off-site disposal at an appropriate landfill.

- Soil and water samples were submitted to GTEL analytical laboratories for laboratory analyses for the presence of total petroleum hydrocarbons (TPH)-as-gasoline, TPH-as-diesel, purgeable hydrocarbons, total lead, soluble lead (the CAM Wet test), and CAM metals, as needed.

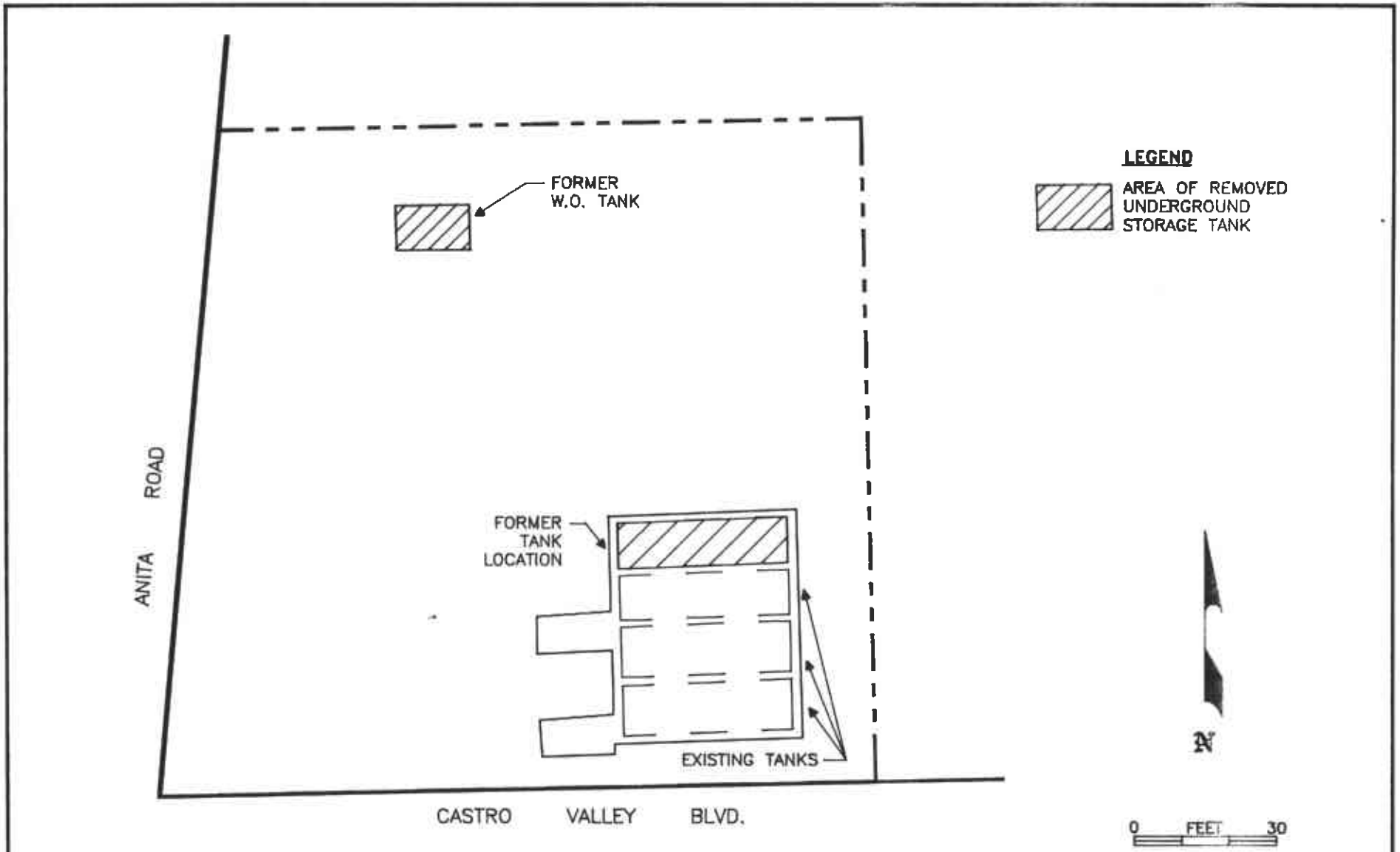

FIGURE 2
SITE PLAN

CHEVRON, USA
CASTRO VALLEY, CALIFORNIA

- Supervision of additional excavation of the waste-oil pit and the southern product-line trench, as well as the collection of additional soil and water samples. A mobile lab was present on site during part of this phase of work.

- Field screening, on-site soil stockpiling, soil sampling and coordination of the transport and disposal of the excavated soil.

- Preparation of this summary report.

TANK REMOVAL PROCEDURES

On September 11, 1990, Golden West Builders excavated and removed the two underground-storage tanks referred to above. Mr. Scott Seery of the ACHSD was on site to inspect the tank removal process. A representative of the Castro Valley Fire Department approved the product tank as suitable for removal. No tank leaks were reported during the inspection process. The two tanks were removed from the site by Erickson Company. See Appendix A for copies of the tank manifests.

TANK AND SOIL CONDITIONS

At the time of the site visit on September 11, 1990, the excavations for the waste-oil tank and the product tank had been completed and the waste-oil tank removed from the site. The product tank was visually inspected upon removal for perforations, signs of structural failure, and corrosive degradation. No signs of leaks were observed in the product tank.

The material surrounding the two underground storage tanks consisted primarily of silty and clayey pea gravel for the product tank and silty medium sand for the waste-oil tank. The base of the pits appeared to be a dark greenish-gray claystone of low permeability. The claystone appeared fractured and slickensided. Neither the soils from the product-tank excavation nor the soils from the waste-oil excavation had an appearance of obvious discoloration.

Groundwater was encountered in the product-tank excavation at 11-feet below grade. No water was encountered in the waste-oil tank excavation at 11-feet below grade, but vertical partings in the native soil (degraded bedrock) were moist.

Two trenches for the product lines were excavated to 3-feet-below grade before sampling (Figure 2). The final dimensions of the product-tank excavation were approximately 40-feet long by 15-feet wide by 13-feet deep. The final dimensions for the waste-oil tank excavation (following overexcavation) were approximately 40-feet long by 16-feet wide by 15-feet deep in the center. The final dimensions for the southwest product-line trench were 10-feet long by 4-feet wide by 7-feet deep.

SOIL AND WATER SAMPLE COLLECTION AND ANALYSES

This section describes the excavation and soil pile sampling locations, methods and laboratory analytical results for the sampling operations conducted by Groundwater Technology from September 11, 1990 to September 21, 1990.

EXCAVATION SAMPLING

Excavation sampling occurred in two phases: initial excavation of product and waste-oil tank pits and product-line trenches; and over excavation of the waste-oil tank pit and the southern product-line trench.

Initial Excavation Sampling (9/11/90). A total of twenty soil and two water samples were collected at the time of the initial site visit (September 11, 1990). Ten soil samples were collected from soil piles (described in a later section) and ten soil samples were collected from the two pit excavations and the two trench excavations. See Figure 3 for sample locations. Soil samples were collected at both ends of the underground product and waste-oil storage tanks at 11-feet (soil-water interface) and 8-feet below grade, respectively. Additionally, a third sample was collected at approximately 9-feet below grade from the center of the product-tank excavation. The waste-oil pit was deepened from 8-feet to 11-feet below grade and a third sample was collected from the center of the pit. Tables 1, 2 and 3 summarize laboratory analyses results for TPH-as-gasoline for soil samples from the pit and trench excavations, and the excavation pit water samples, respectively. These three tables also summarize laboratory analyses results for benzene, toluene, ethylbenzene and total xylenes (BTEX). Table 1 also summarizes total oil-and-grease (TOG) for the soil sample from the waste-oil pit. See Appendix B for the laboratory analytical reports and Chain-of-Custody Manifest.

To acquire the soil samples, a backhoe bucket was used to excavate the sample and bring it to the surface. Approximately 6-inches of soil were removed and a 6-inch-long by 2-inch-

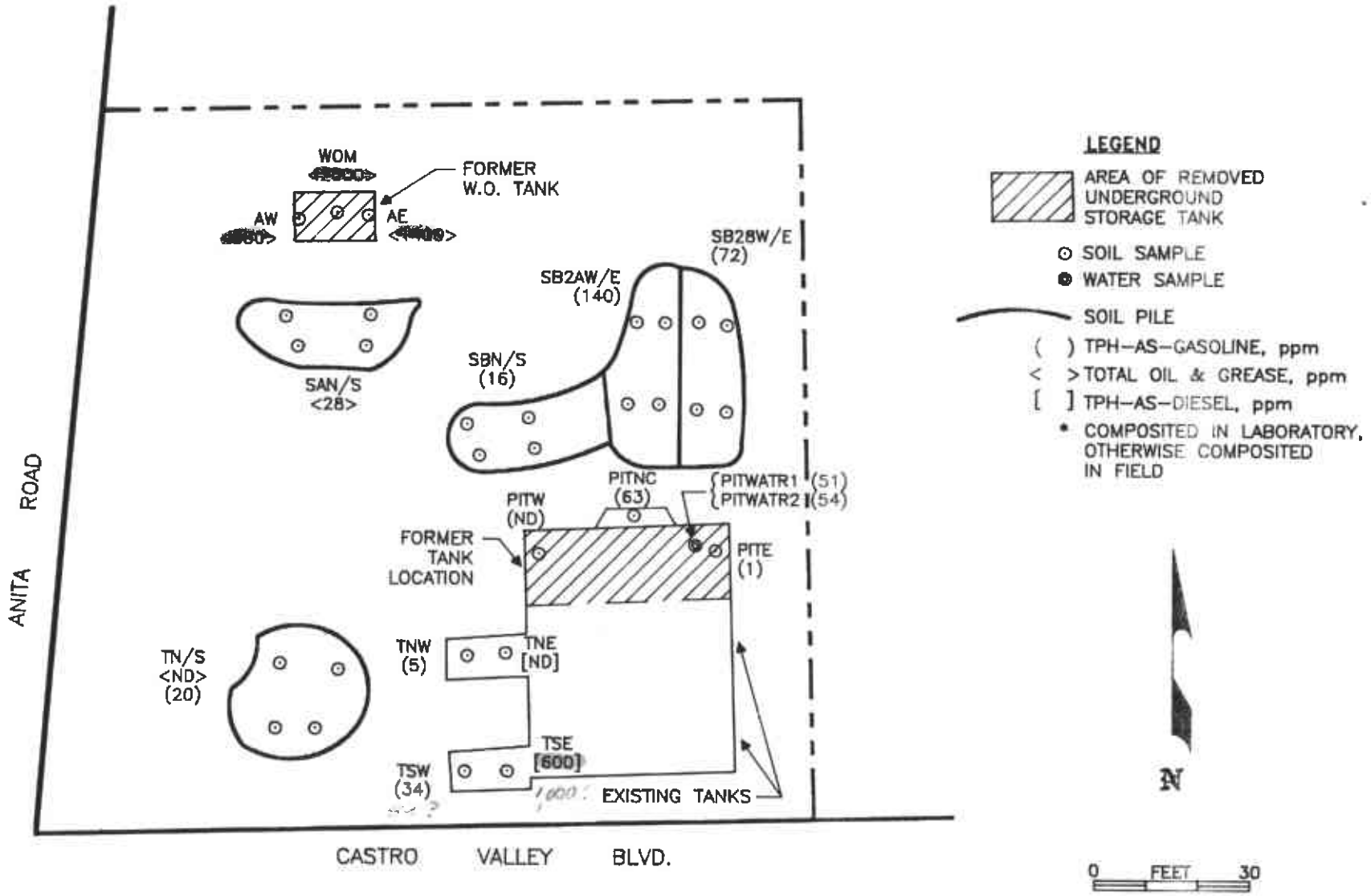

FIGURE 3
INITIAL SAMPLE LOCATIONS FOR
TANK EXCAVATIONS AND SOIL PILES
(9/11/90)

CHEVRON, USA
CASTRO VALLEY, CALIFORNIA

TABLE 1
EXCAVATION ANALYTICAL RESULTS
(Concentrations in parts per million [ppm])

SAMPLE NUMBER	DEPTH (FT)	DATE	8015/8020 GAS	8015/8020 DIESEL	B	T	E	X	TOG	TPH
PITW	11	9/11/90	ND	NS	ND	ND	ND	ND	NS	NS
PITNC	9	"	63	NS	.05	.01	.52	2	NS	NS
PITE	11	"	1	NS	ND	ND	ND	ND	NS	NS
AW	8	"	NS	NS	NS	NS	NS	NS	830	NS
AE	8	"	NS	NS	NS	NS	NS	NS	1,400	NS
WOM	11	"	15	NS	26	7.5	6.4	22	2,000	NS
WOW15	15	9/18/90	26	ND	ND	ND	ND	ND	780	NS
WOE15	15	"	ND	ND	ND	ND	ND	ND	160	NS
WOM15	15	"	13	ND	ND	ND	ND	ND	480	NS
A-1	12	9/20/90	NS	NS	NS	NS	NS	NS	710	NS
2A	12	"	NS	NS	NS	NS	NS	NS	1,500	NS
3A	12	"	NS	NS	NS	NS	NS	NS	510	NS
6A	12	"	NS	NS	NS	NS	NS	NS	3,200	NS
4A	12	"	NS	NS	NS	NS	NS	NS	39	NS
5A	12	"	NS	NS	NS	NS	NS	NS	68	NS
PH1-6	6	"	NS	NS	NS	NS	NS	NS	42	NS
PH1-10	10	"	NS	NS	NS	NS	NS	NS	480	NS
PH2-6	6	"	NS	NS	NS	NS	NS	NS	58	NS
PH2-10	10	"	NS	NS	NS	NS	NS	NS	38	NS
PH3-6	6	"	NS	NS	NS	NS	NS	NS	22	NS
PH3-10	10	"	NS	NS	NS	NS	NS	NS	35	NS
E-1-10	10	9/21/90	NS	ND	ND	ND	ND	ND	11	NS
E-2-10	10	"	NS	ND	ND	ND	ND	ND	19	NS
E-3-1-10	10	"	NS	ND	ND	ND	ND	ND	14	NS
E-3-2-10	10	"	NS	ND	ND	ND	ND	ND	12	NS
E-4-10	10	"	NS	ND	ND	ND	ND	ND	14	NS
E-5-10	10	"	NS	ND	ND	ND	ND	ND	6	NS
E-6-10	10	"	NS	ND	ND	ND	ND	ND	19	NS

ND = not detected at the minimum detection limit (MDL)
NS = Not sampled
TPH = Total petroleum hydrocarbons 10 ppm
TOG = Total oil-and-grease
Benzene MDL = .005 ppm; Toluene DL = .005 ppm
Ethylbenzene MDL = .005 ppm; Xylenes MDL = .015 ppm

TABLE 2

[redacted] ANALYTICAL RESULTS

SAMPLE NUMBER	DEPTH	DATE	8015/8020 GAS	8015/8020 DIESEL	B	T	E	X
TNW	3	9/11/90	5	NS	.24	ND	.09	.24
TSW	3	"	52	NS	.16	ND	.57	.53
TNE	3	"	NS	ND	NS	NS	NS	NS
TSE	3	"	NS	1,000	NS	NS	NS	NS
TE	5	9/18/90	NS	150	.01	.01	.01	.02
TW	5		21	NS	.1	.01	.02	.1
PT-N7	7	9/21/90	ND	140	ND	ND	ND	ND
PT-S7	7	"	ND	58	ND	ND	ND	ND
PTS-1-7	7	"	ND	ND	ND	ND	ND	ND
PTS-2-7	7	"	ND	ND	ND	ND	ND	ND

ND = not detected at the Method Detection Limit (MDL)
Benzene MDL = .005 ppm; Toluene MDL = .005 ppm
Ethylbenzene MDL = .005 ppm; Xylenes MDL = .015 ppm
NS = Not Sampled

TABLE 3

EXCAVATION [redacted] ANALYTICAL RESULTS

SAMPLE NUMBER	DATE	8015/8020 GAS	8015/8020 DIESEL	B	T	E	X
PITWTR1	9/11/90	51,000	NS	5,800	9,600	960	13,000
PITWTR2	"	54,000	NS	6,200	10,000	1,100	14,000
WOWAT1	9/18/90	1,400	NS	NS	NS	NS	NS
WOWAT2	"	510	NS	NS	NS	NS	NS

ND = not detected at the Method detection Limit (MDL)
Benzene MDL = .005 ppb Toluene MDL = .005 ppb
Ethylbenzene MDL = .005 ppb Xylenes MDL = .015 ppb
NS = Not Sampled

diameter brass tube was immediately driven into the soil using a rubber mallet washed in distilled water containing tri-sodium phosphate (TSP). The brass tube was then sealed, capped, labeled, placed on ice in an insulated cooler, and transported under Chain-of-Custody Manifest to GTEL Environmental Laboratories, Inc. (GTEL), a State of California-certified laboratory in Concord, California for laboratory analyses. Standard Operating Procedures (SOPs) for the sampling procedures are presented in Appendix C.

Two soil samples were taken from each of the two product-line trenches adjacent to former pump islands. The product lines on site extended from the west side of the underground storage tanks, approximately 10 feet in a westerly direction. Because the pump islands contained diesel and unleaded pumps at the east and west ends of the pump islands, respectively, soil samples from these areas were analyzed for both diesel and gasoline. Samples were collected in the same manner as that described for the pit excavations above.

Water samples were collected with disposable polyethylene bailers raised slowly from the pit in order to minimize agitation of the sample water. The sample was placed in two 40-milliliter glass vials, acidified to a pH below 2, and the vials sealed without headspace bubbles, using Teflon^{R} septa caps. Each vial was labeled and placed on ice in an insulated cooler for transportation to the GTEL facility in Concord, California for laboratory analyses. Proper Chain-of-Custody Manifest documentation was maintained. See Appendix B for a copy of the laboratory analyses and Chain-of-Custody Manifest. See Table 3 for a summary of the laboratory analyses.

Laboratory analytical results for soil samples collected from the product-tank excavation ranged from non detectable (ND) at Method Detection Limits to 63 parts per million (ppm) for TPH-as-gasoline.

The laboratory results for the total oil-and-grease (TOG) analyses of soils from the waste-oil pit reported concentrations ranging from 830 ppm at 8-feet below grade to 2,000 ppm at 11-feet below grade.

The results of the laboratory analyses of soil samples from the product tank and waste-oil tank excavations using Environmental Protection Agency (EPA) Methods 8240 and 8010 were all below detection levels, except for sample WOM which was found to contain 1,2-Dichlorobenzene at 7.8 ppm, and benzene, toluene, ethylbenzene and xylenes at 26 ppm, 7.5 ppm, 6.4 ppm and 22 ppm, respectively.

The water samples showed concentrations of TPH-as-gasoline ranging from 510 parts per billion (ppb) to 54,000 ppb. See Figure 3 for the locations of the water samples collected.

Overexcavation of the Waste-Oil Pit and Product-Line Trench (9/17-21/90). Based on the analytical results of the September 11, 1990, soil sampling round, the waste-oil excavation pit was overexcavated to 15 feet, on September 18, 1990. This was approximately 4-feet below the water level that later developed in the pit. Additionally, the south product-line trench was deepened to 7 feet. Soil samples were collected from both waste-oil pit and product-line trenches. See Figures 4 and 5 for soil and water sample locations. On September 18, 1990, following the deepening of the waste-oil pit, two samples were

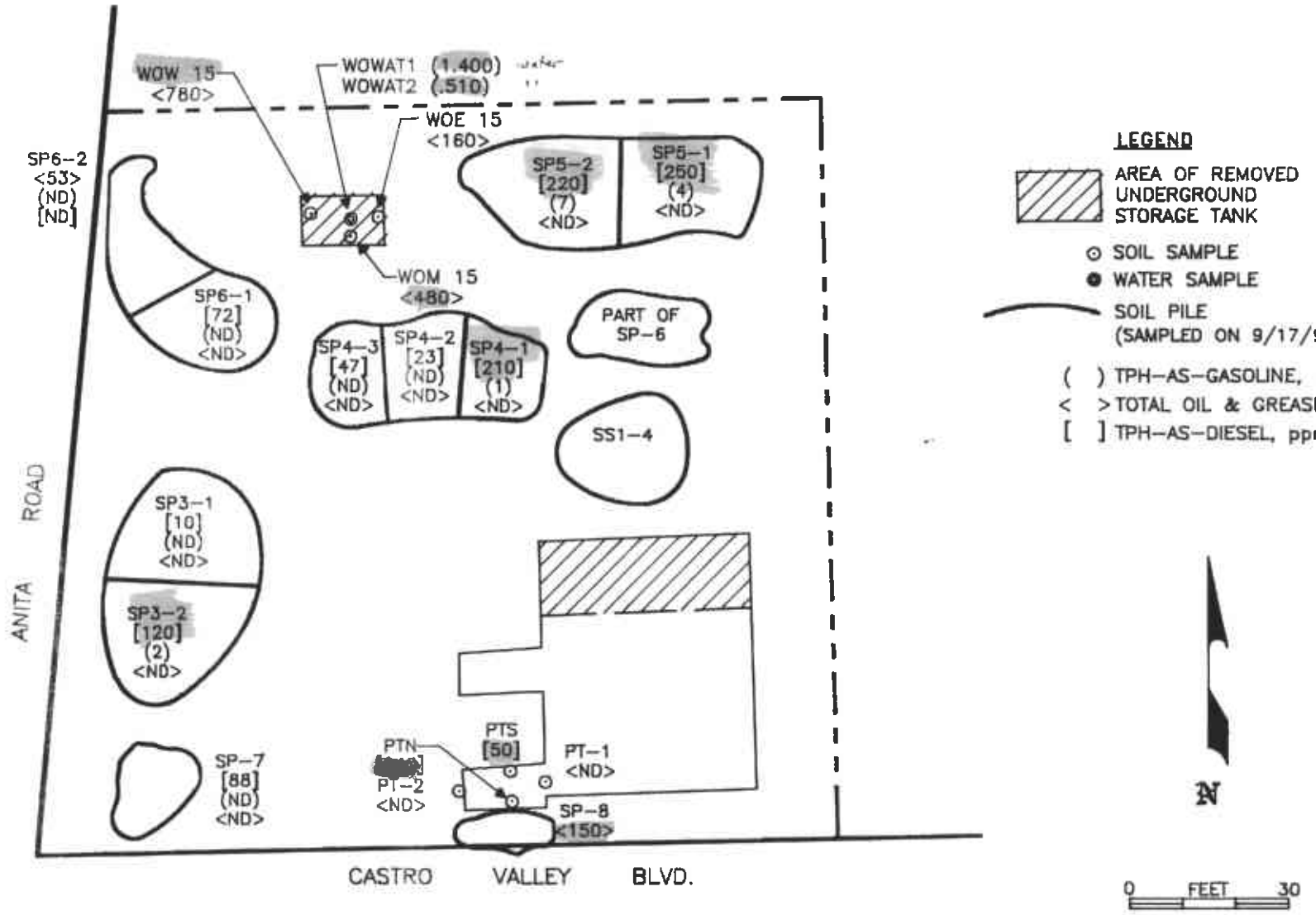

FIGURE 4
EXCAVATION AND SOIL PILE
SAMPLE LOCATIONS
(9/17-22/90)

CHEVRON, USA
CASTRO VALLEY, CALIFORNIA

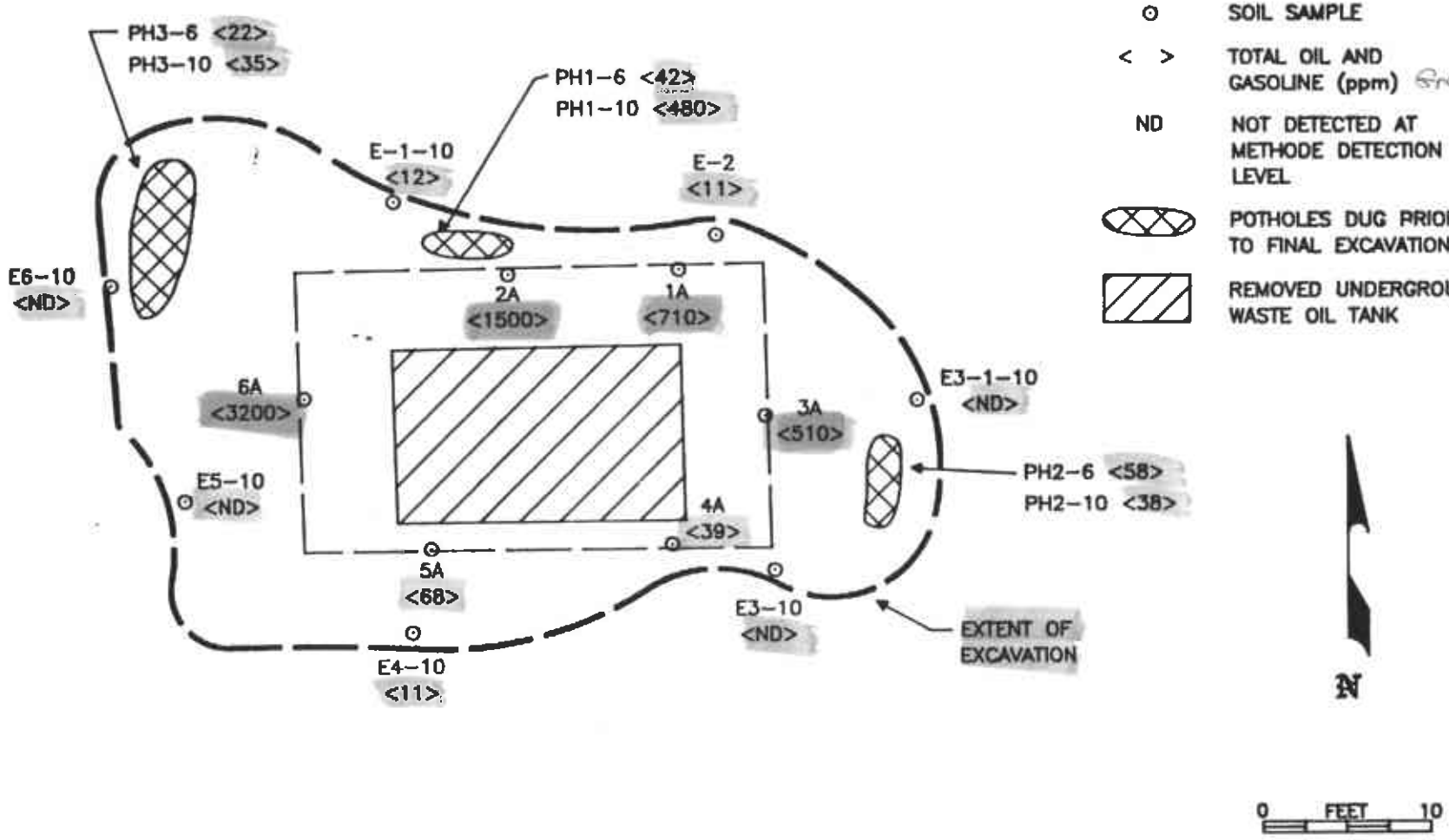

FIGURE 5
WASTE OIL TANK PIT
ADDITIONAL EXCAVATION SOIL SAMPLES
(9/21/90)

CHEVRON, USA
CASTRO VALLEY, CALIFORNIA

collected from standing water in the pit. Soil and water sampling procedures have been described earlier and are presented in Appendix C (Standard Operating Procedures).

During the September 20, 1990 excavations, a GTEL mobile lab with State of California certification was used to analyze samples for TPH. On September 21, 1990, this mobile lab was available at a nearby site to provide laboratory analyses for TPH of samples collected at the Castro Valley Boulevard site. The two excavations were extended until the laboratory analyses results for soil samples collected from the excavations were at, or near, non-detectable levels of TPH.

The laboratory analytical results from the soil and water samples collected during the overexcavation activities are included on Table 1, 2, and 3. Final laboratory analytical results for the waste-oil pit soil samples, following overexcavation, are shown on Figure 5. Analytical results of these soil samples ranged from ND to 12 ppm for Total Oil and Grease (TOG).

The south product-line trench was deepened and further soil samples were collected to be analyzed for the presence of TPH-as-diesel. Analytical results for samples from 7-feet below grade were shown to be at non-detectable levels to the east and west, and at 50 ppm and 140 ppm at the north and south walls. Excavation to the south could not be continued due to the proximity of the sidewalk.

SOIL PILE SAMPLE COLLECTION AND ANALYSES

Due to the small area of the site, the soil piles were moved frequently in accordance with Chevron's directions. The locations of soil samples collected from the soil piles are shown on Figures 3 and 4.

Table 4 summarizes the laboratory analyses results from the samples taken from the soil piles. A total of ten samples were collected on September 11, 1990 for laboratory analyses. These sample locations are shown on Figure 3. Locations of subsequent soil samples are shown on Figure 4.

Two samples (COMP1 and COMP1D), collected from the soils excavated from the trench, were analyzed for Total Petroleum Hydrocarbons, volatile organics and metals (including cadmium, chromium, lead, zinc, mercury and cyanide. The methods for these analyses included EPA Methods 418.1 for Total Petroleum Hydrocarbons, EPA Method 8240 for volatile organics, EPA Method 9010 for cyanide, EPA Method 7471 for mercury, and EPA Method 3050/6010 for all the other analyses.

OFF-SITE REMOVAL OF EXCAVATION SPOILS

To comply with the various landfill requirements, soil samples were analyzed for the presence of TPH-as-gasoline, BTEX, Total oil-and-grease (TOG), total lead, and Title 22 CAM (W.E.T.) lead (total extractable) concentrations. Based on the laboratory results, all stockpiled soil was transported off site to an appropriate landfill. Table 5 summarizes the soil pile analyses for metals.

Where??

TABLE 4

SOIL PILE ANALYTICAL RESULTS

SAMPLE NUMBER	DATE	8015/8020 GAS	8015/8020 DIESEL	B	T	E	X	TOG	Pb	PbWET	418.1
SAN/SAS	9/11/90	ND	ND	ND	.01	.01	0.1	28	NS	ND	NS
SB1-N/S	9/11/90	16	ND	.01	.02	.2	.7	NS	NS	ND	NS
SB2-AW/AE	"	140	ND	.4	.4	2.7	3	NS	NS	ND	NS
SB2-BE/BW	"	72	ND	.09	.3	1	6	NS	NS	ND	NS
T-N	"	ND	ND	ND	.01	ND	.05	NS	NS	ND	NS
T-S	"	20	ND	.8	2	.05	3	NS	NS	ND	NS
SS-1-4	9/14/90	18	NS	.02	.04	.06	.7	NS	NS	NS	NS
ST1	9/18/90	17	ND	.01	ND	.02	.07	NS	14	NS	NS
SWO1	9/18/90	20	ND	.06	.02	.02	.1	NS	22	NS	NS
COMP1	9/20/90	NS	NS	ND	14	ND	21	NS	NS	NS	110
COMP1D	9/20/90	NS	NS	ND	16	ND	24	NS	NS	NS	94
SP5-1	9/21/90	4	ND	ND	ND	ND	ND	250	97	NS	NS
SP5-2	"	7	ND	ND	ND	ND	ND	220	37	NS	NS
SP4-1	"	1	ND	ND	ND	ND	ND	210	15	NS	NS
SP4-2	"	ND	ND	ND	ND	ND	ND	23	16	NS	NS
SP4-3	"	ND	ND	ND	.01	ND	ND	47	15	NS	NS
SP3-1	"	ND	ND	ND	ND	ND	ND	10	16	NS	NS
SP3-2	"	2	ND	ND	ND	ND	ND	120	19	NS	NS
SP6-2	"	ND	ND	.005	.005	.005	.015	53	15	NS	NS
SP6-1	"	ND	ND	ND	ND	ND	ND	72	18	NS	NS
SP7	"	ND	ND	ND	ND	ND	ND	88	19	NS	NS
SP8	9/22/90	ND	150	ND	ND	ND	ND	NS	11	NS	NS

ND = not detected at the minimum detection limit (MDL)
Benzene MDL = .005 ppm; Toluene MDL = .005 ppm
Ethylbenzene MDL = .005 ppm; Xylenes MDL = .015 ppm
NS = Not Sampled
Pb = Total lead by ICP EPA Method 6010
PbWET = California Title 22 (C.A.M.)

TABLE 5
SUMMARY OF SOIL PILE
ANALYSES FOR METALS
DATE SAMPLED (9/20/90)
Metals in soil pile (ppm)

	COMP1	COMP1D	METHOD
ANTIMONY	ND	ND	EPA METHOD 3050/6010
ARSENIC	ND	ND	EPA METHOD 3050/6010
BARIUM	120	140	EPA METHOD 3050/6010
BERYLLIUM	ND	ND	EPA METHOD 3050/6010
CADMIUM	ND	ND	EPA METHOD 3050/6010
CHROMIUM	34	32	EPA METHOD 3050/6010
COBALT	11	12	EPA METHOD 3050/6010
COPPER	22	26	EPA METHOD 3050/6010
LEAD	14	15	EPA METHOD 3050/6010
MERCURY	ND	ND	EPA METHOD 7471
MOLYBDENUM	ND	ND	EPA METHOD 3050/6010
NICKEL	29	28	EPA METHOD 3050/6010
SELENIUM	ND	ND	EPA METHOD 3050/6010
SILVER	ND	ND	EPA METHOD 3050/6010
THALLIUM	ND	ND	EPA METHOD 3050/6010
VANADIUM	50	57	EPA METHOD 3050/6010
ZINC	38	42	EPA METHOD 3050/6010
CYANIDE	ND	ND	EPA METHOD 9010

After receiving permission for disposal, based on soil sample analyses results, a total of 700-cubic yards of soils were moved to either a Class III or a modified Class III landfill site. The latter landfill (Gibson Oil) receives soils containing petroleum hydrocarbons in excess of 100 ppm, as determined by soil sample laboratory analyses. Removal of the aboveground soils from the site occurred over the period of September 18, through September 21, 1990. Soils were also screened by on-site Groundwater Technology technicians using a photo-ionization detector (PID) before the soils were transported to landfills in San Jose (Zanker), and Bakersfield (Gibson Oil).

EXCAVATION BACKFILLING

No new storage tanks or product lines were installed. The underground-storage gasoline and waste-oil tank excavation pits, and the product-line trenches were backfilled with clean imported soil.

SUMMARY AND CONCLUSIONS

The following summary of work performed presents the findings and conclusions developed during the excavations.

- Two underground storage tanks and associated product lines were excavated, removed and disposed of in accordance with regulatory guidelines established by federal, state, and local agencies.

- Soil samples were collected in the native soils below the base of the excavation to define the lateral extent of soil impacted by gasoline hydrocarbons. Based on

these results, the waste-oil pit and the south product-line trench were subjected to further excavation. Excavation continued until non-detectable analyses were achieved or until excavation to the north and west of the waste-oil pit became impractical.

- Approximately 700-cubic yards of backfill material and native soil were excavated, field screened, stockpiled on site, laboratory analyzed, and later transported to an appropriate landfill facility using a licensed hauler under Uniform Hazardous Waste Manifest.

- No new underground-storage tanks were installed.

- Groundwater in the gasoline tank excavation and the waste-oil tank excavation was sampled on September 11, 1990 and September 18, 1990, respectively. Analytical results indicated detectable concentrations of gasoline hydrocarbons. The depth-to-water was approximately 11-feet in the product-tank excavation.

CLOSURE

Groundwater Technology, Inc. is pleased to provide Chevron U.S.A. Inc. with this report. If you have any questions or need additional information regarding this site, please contact our Concord office at (415) 671-2387.

APPENDIX A
TANK REMOVAL MANIFESTS

(12-pitch typewriter).

Toxic Substances Control Division
Sacramento, California

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CALOOO3OO391 | Manifest Document No. 6VBFGV | 2. Page 1 of | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
CHEVRON U.S.A. INC.
P.O. BOX 5004
San Ramon, CA 94583
CHEVRON U.S.A
2920 - Castro Vly Blvd
Castro Vly CA

4. Generator's Phone (415) 842-[illegible]

A. State Manifest Document Number 88312241

B. State Generator's ID

5. Transporter 1 Company Name: EXCEL TRANS
6. US EPA ID Number: CAD981982663
C. State Transporter's ID: 2283
D. Transporter's Phone: 707-746-[illegible]

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
ERICKSON INC.
255 PARR BLVd.
RICHMOND, CA. 94801
10. US EPA ID Number: CAD009466392
G. State Facility's ID: CAD009466392
H. Facility's Phone: (415) 235-1393

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. 10,000 Single Wall FRP. TRIPLE RINSE Waste Empty Stor. Tanks (NON RCRA Haz)	001	TP	1,000	P	State 512 / EPA/Other NONE
b. 1,000 Single Wall FRP TANK, TRIPLE RINSE. Waste Empty Storage Tank (NON - RCRA Haz. Mat.)	001	TP	2,000	P	State 512 / EPA/Other NONE
c.					State / EPA/Other
d.					State / EPA/Other

J. Additional Descriptions for Materials Listed Above
Empty 10,000 FRP Tank
1,000 FRP Tank
A418 & A419 (tank numbers)

K. Handling Codes for Wastes Listed Above
a. 99
b. 99
c.
d.

15. Special Handling Instructions and Additional Information
Handle with gloves & goggles

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Cynthia Wong | Signature: Cynthia Wong | Month Day Year: 09 11 90

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Russell T. Spencer | Signature: Russell T Spencer | Month Day Year: 09 11 90

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space
#2 incomplete
11a.) b.) Waste Empty Storage tank Non RCRA Hazardous waste 512

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Shannan Lowry | Signature: Shannan Lowry | Month Day Year: 09 11 90

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

GENERATOR · TRANSPORTER · FACILITY

DHS 8022 A (1/88)
EPA 8700—22
(Rev. 9-88) Previous editions are obsolete.

Do Not Write Below This Line

NOV 29 '90 14:59 FROM ERICKSON INC PAGE.002

No. 4419 - 72775

Cliff Iron Mkt.

CERTIFICATE

Certified Services Company
255 Parr Boulevard
Richmond, California 94801

Day or Night
Telephone
(415) 235-1393

NOV 29 '90 15:00 FROM ERICKSON INC

For: Erickson, Inc. Tank No.(s.) 4419 Location: Richmond Date: 09/19/900700 Time:

Test Method: Visual Gastech/1314 SMPN Last Product: Petroleum Hydrocarbons

This is to certify that I have personally determined that the tank(s) in the following list are in accordance with the American Petroleum Institute and have found the condition of each to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Tank(s)	Condition
1- 10,000 Gal. Tank	Safe for Fire
	Oxy 20.9%
	LEL- less than 0.1%

Remarks:

In the event of any physical or atmospheric changes affecting the gas-free condition of the above tanks, or if in any doubt immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

Standard Safety Designation:
Safe for Men: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the inspector's certificate.

Safe for Fire: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the inspector, the residues are not capable of producing a higher concentration than permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

Representative

Title

Inspector

PAGE.003

No. 4418 - 72775
CHEVRON MRKT.

CERTIFICATE

Certified Services Company
255 Parr Boulevard
Richmond, California 94801

Day or Night
Telephone
(415) 235-1393

For: Erickson, Inc. Tank No.(s.) 4418 Location: Richmond Date: 09/19/90 Time 0700

Test Method: Visual Gastech/1314 SMPN Last Product: Waste Oil

This is to certify that I have personally determined that the tank(s) in the following list are in accordance with the American Petroleum Institute and have found the condition of each to be in accordance with its assigned designation. This certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Tank(s)	Condition
1- 1000 Gal. Tank	Safe for Fire
	Oxy 20.9%
	~~LEL Less than 0.1%~~

Remarks:

In the event of any physical or atmospheric changes affecting the gas-free condition of the above tanks, or if in any doubt immediately stop all hot work and contact the undersigned. This permit is valid for 24 hours if no physical or atmospheric changes occur.

Standard Safety Designation:

Safe for Men: Means that in the compartment or space so designated (a) The oxygen content of the atmosphere is at least 19.5 percent by volume; and that (b) Toxic materials in the atmosphere are within permissable concentrations; and (c) In the judgment of the inspector, the residues are not capable of producing toxic materials under existing atmospheric conditions while maintained as directed on the inspector's certificate.

Safe for Fire: Means that in the compartment so designated (a) The concentration of flammable materials in the atmosphere is below 10 percent of the lower explosive limit; and that (b) In the judgment of the inspector, the residues are not capable of producing a higher concentration than permitted under existing atmospheric conditions in the presence of fire and while maintained as directed on the inspector's certificate, and further, (c) All adjacent spaces have either been cleaned sufficiently to prevent the spread of fire, are satisfactorily inerted, or in the case of fuel tanks, have been treated as deemed necessary by the Inspector.

The undersigned representative acknowledges receipt of this certificate and understands the conditions and limitations under which it was issued.

Representative [signature] Title SUPV.

Inspector [signature]

NOV 29 '90 15:01 FROM ERICKSON INC PAGE.004

ORIGINAL - NOT NEGOTIABLE

Shipper's No. _____

CARRIER: Erickson Trucking, Inc. SCAC Carrier's No. _____ Date

TO: Consignee / Street / Destination: BFI Waste System, 4001 Vasco, Livermore, CA 94550 Zip

FROM: Shipper / Street / Origin: Erickson, Inc., 255 Parr Blvd., Richmond, CA 94801 Zip

Route: Vehicle Number

No. Shipping Units	HM	Kind of Packages, Description of Articles (If Hazardous Materials - Proper Shipping Name)	Hazard Class	I.D. Number	Weight (Subject to correction)	Rate	Labels Required (If any required)
		Non-Dot regulated material gas free triple rinsed underground storage tank for scrap.					
		72787/4466					
		72775/4469	None	N/A	N/A	N/A	None
		72775/4465					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE: Prepaid ☐ Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

FREIGHT CHARGES ☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.

Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Per _____

PLACARDS REQUIRED PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER

DRIVER SIGNATURE:

SHIPPER: CARRIER: PARKER TRUCKING

PER: PER:

DATE: Erickson, Inc. DATE: 9-19-90

EMERGENCY RESPONSE TELEPHONE NUMBER: Sherman Lowry

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

3-BLS-A3 (Rev. 9/88)

VASCO ROAD SANITARY LANDFILL No: 153274

A DIVISION OF BFI BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD
LIVERMORE, CA 94550
(415) 447-0491

Ticket : A20084 09/19/90 10:01 am
Customer: ERICKSON
Account : 1005909 LMS #909
Truck : 1
Manifest: PARKER
Checker : JOE G.

Volume	Contents	Rate	Charge
40.00	YD COMPACTED	5.50	220.00
1.50	EA PULL OFF	50.00	75.00
TOTAL		$	295.00

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

All children must remain in vehicles. Absolutely no salvaging allowed.

Ningún debe de permanecerán en los carros [illegible]. No se permite llevar cosas del dompe [illegible].

HAVE A NICE DAY!!!

3500

NOV 29 '90 15:02 FROM ERICKSON INC PAGE.005

ORIGINAL - NOT NEGOTIABLE

Shipper's No. _____

Carrier's No. _____ Date

CARRIER: Erickson Trucking, Inc. SCAC

TO: Consignee / Street Destination: BFI Waste System, 4001 Vasco, Livermore, CA 94550 Zip

FROM: Shipper / Street Origin: Erickson, Inc., 255 Parr Blvd., Richmond, CA 94801 Zip

Route:

Vehicle Number

No. Shipping Units	HM	Kind of Packages, Description of Articles (If Hazardous Materials - Proper Shipping Name)	Hazard Class	I.D. Number	Weight (subject to correction)	Rate	Labels Required (for exemption)
		Non-Dot regulated material gas free triple rinsed underground storage tank for scrap.					
		72787/4466					
		72775/4449	None	N/A	N/A	N/A	None
		72775/4485					

Remit C.O.D. to:
Address:
City: State: Zip:

COD Amt: $

C.O.D. FEE:
Prepaid ☐
Collect ☐ $

NOTE — Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding $ Per

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
Signature of Consignor

FREIGHT CHARGES
☐ PREPAID ☐ COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.
By _____

PLACARDS REQUIRED

PLACARDS SUPPLIED ☐ YES ☐ NO — FURNISHED BY CARRIER

DRIVER SIGNATURE:

SHIPPER: _____

PER: _____

DATE: Erickson, Inc.

CARRIER: PARKER TRUCKING

PER: _____

DATE: 9-19-90

EMERGENCY RESPONSE TELEPHONE NUMBER: Herman Lowry [illegible]

Manned 24 hours/day by a person with knowledge of the hazards of the material and emergency response information or who has access to a person with that knowledge.

9-BLS-A3 (Rev. 9/88)

FOR HELP IN CHEMICAL EMERGENCIES INVOLVING SPILL, LEAK, FIRE OR EXPOSURE CALL TOLL-FREE 1-800-424-9300 DAY OR NIGHT

VASCO ROAD SANITARY LANDFILL No: 153274

A DIVISION OF BFI BROWNING-FERRIS INDUSTRIES

4001 VASCO ROAD
LIVERMORE, CA 94550
(415) 447-0491

Ticket : A20084 09/19/90 10:01 am
Customer: ERICKSON
Account : 1005909 LMS #909
Truck : 1
Manifest: PARKER
Checker : JOE G.

Volume		Contents	Rate	Charge
40.00	YD	COMPACTED	5.50	220.00
1.50	EA	PULL OFF	50.00	75.00
TOTAL			$	295.00

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

All children must remain in vehicles.
Absolutely no salvaging allowed.

Niños deben de permanecer en los carros
Absolutamente
No se permite llevar cosas del dompe

HAVE A NICE DAY!!!

3400

NOV 29 '90 15:02 FROM ERICKSON INC PAGE.006

APPENDIX B
SOIL AND WATER SAMPLE LABORATORY ANALYSES

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080-C Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 *from inside California*
(800) 423-7143 *from outside California*
(415) 825-0720 (FAX)

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009525,C009526 C009527
Report Issue Date: September 27, 1990

Joe Ramage
Groundwater Technology, Inc.
4080-D Pike Lane
Concord, CA 94520

Dear Mr. Ramage:

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories on 09/24/90.

A formal quality control/quality assurance 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 California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to approved protocols.

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

Sincerely,

GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009525
Report Issue Date: September 26, 1990

Table 1

ANALYTICAL RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015[1]

GTEL Sample Number		01			
Client Identification		SP-8			
Date Sampled		09/22/90			
Date Extracted		09/24/90			
Date Analyzed		09/24/90			
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Benzene	0.005	<0.005			
Toluene	0.005	<0.005			
Ethylbenzene	0.005	<0.005			
Xylene (total)	0.015	<0.015			
TPH as Gasoline	10	<10			

1 = Extraction by EPA Method 5030

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009525
Report Issue Date: September 26, 1990

QA Conformance Summary

Purgeable Aromatics and Total Petroleum Hydrocarbons as Gasoline in Soil EPA Method 8020/8015

1.0 Blanks

Five of 5 target compounds were below detection limits in the reagent water blank and reagent methanol blank as shown in Tables 2a and 2b.

2.0 Independent QC Check Sample

The control limits were met for 4 out of 4 QC check compounds as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (naphthalene) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Accuracy and Precision

4.1 Percent recovery limits were met for 4 of 4 compounds in the MS and MSD as shown in Table 5.

4.2 Relative percent difference (RPD) criteria was met for 4 of 4 analytes in the MS and MSD as shown in Table 5.

5.0 Sample Handling

5.1 Sample handling and holding time criteria were met for all samples.

5.2 There were no exceptional conditions requiring dilution of samples.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009525
Report Issue Date: September 26, 1990

Table 2a

REAGENT WATER BLANK DATA

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/24/90

Analyte	Concentration, ug/L
Benzene	<0.3
Toluene	<0.3
Ethylbenzene	<0.3
Xylene (total)	<0.6
Gasoline	<50

<# = Not detected at the indicated detection limit.

Table 2b

REAGENT METHANOL BLANK DATA

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/24/90
MeOH Lot No: AX 659

Analyte	Concentration, mg/Kg
Benzene	<0.005
Toluene	<0.005
Ethylbenzene	<0.005
Xylene (total)	<0.015
Gasoline	<10

<# = Not detected at the indicated detection limit.

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/21/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Benzene	50	48.6	97	85-115
Toluene	50	48.8	98	85-115
Ethylbenzene	50	48.7	97	85-115
Xylene (total)	150	156.1	104	85-115

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Analyte	Lot Number	Source
Benzene	LA18042	Supelco
Toluene	LA18042	Supelco
Ethylbenzene	LA18042	Supelco
Xylene (total)	LA18042	Supelco

Table 4

SURROGATE COMPOUND RECOVERY

Naphthalene

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Acceptability Limits[1]: 60 - 130 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Water Blank	200	164	82
MeOH Blank	200	156	78
01	200	179	90
MS	200	149	75
MSD	200	158	79

MS = Matrix Spike
MSD = Matrix Spike Duplicate
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Table 5

MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD) RECOVERY
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/24/90
Sample Used: C009524-06

Client ID: 6-A,B,C
Units: mg/Kg

Analyte	Sample Result	Concentration Added	MS Result	MS, % Recovery	MSD Result	MSD, % Recovery
Benzene	<0.005	2.86	2.38	83	2.37	83
Toluene	<0.005	2.86	2.45	86	2.45	86
Ethylbenzene	<0.005	2.86	2.43	85	2.40	84
Xylene (total)	<0.015	8.56	7.14	83	7.15	84

Analyte	RPD, %	Maximum RPD, %	Acceptability Limits[1] % Recovery
Benzene	0	30	50 - 112
Toluene	0	30	50 - 108
Ethylbenzene	1	30	50 - 113
Xylene (total)	1	30	50 - 114

< # = Not Detected at the indicated detection limit
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009526
Report Issue Date: September 26, 1990

Table 1

ANALYTICAL RESULTS

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015[1]

Sample Identification		Date Sampled	Date Extracted	Date Analyzed	Concentration, mg/Kg[2]
GTEL No.	Client ID				
01	SP-8	09/22/90	09/24/90	09/25/90	150

1 = Extraction by EPA Method 3550
2 = Method detection limit = 10 mg/Kg; analyte below this level would not be detected.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009526
Report Issue Date: September 26, 1990

QA Conformance Summary

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

1.0 Blanks

The Reagent blank was below the detection limit as shown in Table 2.

2.0 Independent QC Check Sample

The control limits were met for diesel in the aqueous independent QC check sample as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (Octadecane) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

Percent recovery limits were met for diesel in the MS as shown in Table 5.

5.0 Sample Duplicate Precision

Relative percent difference (RPD) criterion was met for diesel in the sample duplicate as shown in Table 6.

6.0 Sample Handling

6.1 Sample handling and holding time criteria were met for all samples.

6.2 There were no exceptional conditions requiring dilution of samples.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009526
Report Issue Date: September 26, 1990

Table 2

REAGENT BLANK DATA

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/25/90

Analyte	Concentration, mg/Kg
Diesel	<10

<# = Not detected at the indicated detection limit.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009526
Report Issue Date: September 26, 1990

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/25/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Diesel	1294	1078	83	80 - 120

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Analyte	Source
Diesel	SHELL

GTEL ENVIRONMENTAL LABORATORIES, INC.

Table 4

SURROGATE COMPOUND RECOVERY

Octadecane

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Acceptability Limits[1]: 70 - 130 %

GTEL No.	Expected Result, mg/Kg	Surrogate Result, mg/Kg	Surrogate Recovery, %
Blank	100	86	86
01	100	97	97
MS	100	105	105

MS = Matrix Spike
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009526
Report Issue Date: September 26, 1990

Table 5

MATRIX SPIKE (MS) RECOVERY REPORT

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/25/90
Sample Spiked: C009520-01 Units: mg/Kg

Analyte	Sample Result	Concentration Added	MS Result	MS, % Recovery	Acceptability Limits, %[1]
Diesel	136	500	591	91	63 - 127

1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.
<# = Not detected at the indicated detection limit.

Table 6

LABORATORY DUPLICATE SAMPLE RESULTS
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/25/90 Client ID: SP-8
Sample Used: C009526-01 Units: mg/Kg

Analyte	Sample Result	Duplicate Result	RPD, %	Maximum RPD, %
Diesel	146	141	3	30

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009527
Report Issue Date: September 27, 1990

Table 1

ANALYTICAL RESULTS

Total Lead in Soil by ICP
EPA Method 6010[1]

Sample Identification		Date Sampled	Date Extracted	Date Analyzed	Concentration, mg/Kg [2]
GTEL No.	Client ID				
C009527-1	SP-8	09/22/90	09/24/90	09/25/90	11

1 = Extraction by EPA Method 3050
2 = Method detection limit = 5 mg/Kg; analyte below this level would not be detected.

GTEL ENVIRONMENTAL LABORATORIES, INC.

QA Conformance Summary

Total Lead in Soil by ICP
EPA Method 6010

1.0 Blanks

The method blank was below the detection limit as shown in Table 2.

2.0 Initial Instrument Calibration

The range of concentrations of the initial instrument calibration are shown in Table 3.

3.0 Calibration Verification Standards

3.1 The control limits were met for the initial calibration verification standard (ICVS) as shown in Table 4.

3.2 If applicable, the control limits were met for the continuing calibration verification standard (CCVS) as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

The control limits were met for 1 of 1 elements in the MS as shown in Table 5.

5.0 Sample Duplicate Precision

Relative percent difference criterion was met for the sample duplicate as shown in Table 6.

6.0 Sample Handling

6.1 Sample handling and holding time criteria were met for all samples.

6.2 There were no exceptional conditions requiring dilution of samples.

Table 2

METHOD BLANK DATA

Total Lead in Soil by ICP
EPA Method 6010

Date of Analysis: 09/25/90

Analyte	Concentration, mg/Kg
Total Lead	<5

< # = Not detected at the indicated detection limit.

Table 3

INITIAL CALIBRATION STANDARDS DATA

Total Lead in Soil by ICP
EPA Method 6010

Date of Analysis: 09/25/90

Standard Number	Concentration, mg/L
1	10.0

Table 4

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS RESULTS

Total Lead in Soil by ICP
EPA Method 6010

Date of Analysis: 09/25/90

Initial Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %
Total Lead	5.00	5.21	104	80 - 120
Continuing Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %
Total Lead	5.00	5.31	106	80 - 120

Table 4a

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS SOURCE

Total Lead in Soil by ICP
EPA Method 6010

Initial Calibration Verification Standard		
Analyte	Lot Number	Source
Total Lead	2-57-VS	SPEX
Continuing Calibration Verification Standard		
Analyte	Lot Number	Source
Total Lead	3-83-VS	SPEX

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009527
Report Issue Date: September 27, 1990

Table 5

MATRIX SPIKE (MS) RECOVERY REPORT

Total Lead in Soil by ICP
EPA Method 6010

Date of Analysis: 09/25/90
Sample Spiked: C009527-01
Client ID: SP-8
Units: mg/Kg

Analyte	MS Result	Sample Result	Amount Recovered	Amount Added	MS, % Recovery	Acceptability Limits, %
Total Lead	57	11	46	50	92	80 - 120

<# = Not detected at the indicated detection limit.

Table 6

LABORATORY DUPLICATE SAMPLE RESULTS
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Total Lead in Soil by ICP
EPA Method 6010

Date of Analysis: 09-25-90
Sample Used: C009527-01
Client ID: SP-8
Units: mg/Kg

Analyte	Sample Result	Duplicate Result	RPD, %	Maximum RPD, %
Total Lead	57	61	7	20

GTEL ENVIRONMENTAL LABORATORIES, INC.

Chain-of-Custody Record

Chevron U.S.A. Inc.
P.O. Box 5004
San Ramon, CA 94583
FAX (415) 842-9591

Chevron Facility Number: 9-6991
Consultant Release Number: 414 6671
Consultant Project Number: 203 175 3322
Consultant Name: GTI
Address: 4990 Pike Lane, Concord, CA
Fax Number:
Project Contact (Name): Joe Ramey / Fred Hayden
(Phone): 415 671-2387

Chevron Contact (Name): Cynthia Wong
(Phone): (415) 842-9103
Laboratory Name: GTEL
Contract Number: 414 6670
Samples Collected by (Name): Jamie Bethell
Collection Date: 9-22-90
Signature:

Sample Number	Lab Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite	Time	Sample Preservation	Iced	Analyses To Be Performed: Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline + Diesel	503 Oil and Grease	Arom. Volatiles - BTXE Soil: 8020/Wtr.: 602	Arom. Volatiles - BTXE Soil: 8240/Wtr.: 624	(Total) Lead DHS-Luft	EDB DHS-AB 1803				Remarks
SP-8		1	S		3:10/9-22		X		X		X		X					

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	GTI				
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
			Parminder Sha		9/24/90 8:10

Turn Around Time (Circle Choice)
(24 Hrs)
48 Hrs
5 Days
10 Days

Form # 834

Chain-of-Custody Record

Chevron U.S.A. Inc.
P.O. Box 5004
San Ramon, CA 94583
FAX (415) 842-9591

Chevron Facility Number: 9-6991
Consultant Release Number: 414 6671
Consultant Project Number: 203 17 3322
Consultant Name: Environmental Technology
Address: 4080 Pike Lane Concord
Fax Number:
Project Contact (Name): Fred Hayden / Joe Romayor
(Phone): (415) 671 23 87

Chevron Contact (Name): Cynthia Wong
(Phone):
Laboratory Name: GTEL
Contract Number: 414-6670
Samples Collected by (Name): Jamie Bothell
Collection Date: 9/20/90
Signature:

Sample Number	Lab Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite	Time	Sample Preservation	Iced	Analyses To Be Performed: Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline + Diesel	TPH 418.1 SGT-HEM and Grease	Arom. Volatiles - BTXE Soil: 8020/Wtr.: 602	Arom. Volatiles - BTXE Soil: 8240/Wtr.: 624	Total Lead DHS-Luft	CAM 17 Metals EPA 6010 DHS AB 1803	pH	Flash point	Sulfide & Cyanide	Remarks
COMP1			S	C	1255		X			X		X		X	X	X	X	HOLD
COMP1D			S	C	1255		X			X		X		X	X	X	X	HOLD
																		Fred took off of Hold on 9-25-90 @ 10:35 AM - FB

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
		9-20-90 / 4:40			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
		/			
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
			Patty Blair		9-20-90 4:35

Turn Around Time (Circle Choice)
24 Hrs
(48 Hrs)
5 Days
10 Days

Printed in U.S.A.

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080-C Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 *from inside California*
(800) 423-7143 *from outside California*
(415) 825-0720 (FAX)

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009519,C009520
C009521,C009522
Report Issue Date: October 2, 1990

Joe Ramage
Groundwater Technology, Inc.
4080-D Pike Lane
Concord, CA 94520

Dear Mr. Ramage:

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories on 09/21/90.

A formal quality control/quality assurance 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 California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to approved protocols.

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

Sincerely,

GTEL Environmental Laboratories, Inc.

Emma P. Popek /RMB

Emma P. Popek
Laboratory Director

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009519
Report Issue Date: October 1, 1990

Table 1

ANALYTICAL RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015[1]

GTEL Sample Number		01	02	03	04
Client Identification		PT-N-7	PT-S-7	PT-S-1-7	PT-S-2-7
Date Sampled		09/21/90	09/21/90	09/21/90	09/21/90
Date Extracted		09/24/90	09/24/90	09/24/90	09/24/90
Date Analyzed		09/24/90	09/24/90	09/24/90	09/24/90
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Benzene	0.005	<0.005	<0.005	<0.005	<0.005
Toluene	0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	0.005	<0.005	<0.005	<0.005	<0.005
Xylene (total)	0.015	<0.015	<0.015	<0.015	<0.015
TPH as Gasoline	1	<1	<1	<1	<1

1 = Extraction by EPA Method 5030

GTEL ENVIRONMENTAL LABORATORIES, INC.

QA Conformance Summary

Purgeable Aromatics and Total Petroleum Hydrocarbons as Gasoline in Soil EPA Method 8020/8015

1.0 Blanks

Five of 5 target compounds were below detection limits in the reagent water blank and reagent methanol blank as shown in Tables 2a and 2b.

2.0 Independent QC Check Sample

The control limits were met for 4 out of 4 QC check compounds as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (naphthalene) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Accuracy and Precision

4.1 Percent recovery limits were met for 4 of 4 compounds in the MS and MSD as shown in Table 5.

4.2 Relative percent difference (RPD) criteria was met for 4 of 4 analytes in the MS and MSD as shown in Table 5.

5.0 Sample Handling

5.1 Sample handling and holding time criteria were met for all samples.

5.2 There were no exceptional conditions requiring dilution of samples.

Table 2a

REAGENT WATER BLANK DATA

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/24/90

Analyte	Concentration, ug/L
Benzene	<0.3
Toluene	<0.3
Ethylbenzene	<0.3
Xylene (total)	<0.6
Gasoline	<50

< # = Not detected at the indicated detection limit.

Table 2b

REAGENT METHANOL BLANK DATA

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/24/90
MeOH Lot No: AK 659

Analyte	Concentration, mg/Kg
Benzene	<0.005
Toluene	<0.005
Ethylbenzene	<0.005
Xylene (total)	<0.015
Gasoline	<10

< # = Not detected at the indicated detection limit.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009519
Report Issue Date: October 1, 1990

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/21/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Benzene	50	48.6	97	85-115
Toluene	50	48.8	98	85-115
Ethylbenzene	50	48.7	97	85-115
Xylene (total)	150	156.1	104	85-115

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Analyte	Lot Number	Source
Benzene	LA18042	Supelco
Toluene	LA18042	Supelco
Ethylbenzene	LA18042	Supelco
Xylene (total)	LA18042	Supelco

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009513
Report Issue Date: September 25, 1990

Table 1

ANALYTICAL RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015[1]

GTEL Sample Number		01	02	03	04
Client Identification		SP 51	SP 52	SP 41	SP 42
Date Sampled		09/21/90	09/21/90	09/21/90	09/21/90
Date Extracted		09/21/90	09/21/90	09/21/90	09/21/90
Date Analyzed		09/21/90	09/21/90	09/21/90	09/21/90
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Benzene	0.005	<0.005	<0.005	<0.005	<0.005
Toluene	0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	0.005	<0.005	<0.005	<0.005	<0.005
Xylene (total)	0.015	<0.015	<0.015	<0.015	<0.015
TPH as Gasoline	10	4	7	1	<1

GTEL Sample Number		05	06	07	08
Client Identification		SP 43	SP 31	SP 32	SP 62
Date Sampled		09/21/90	09/21/90	09/21/90	0-9/21/90
Date Extracted		09/21/90	09/21/90	09/21/90	09/21/90
Date Analyzed		09/21/90	09/21/90	09/21/90	09/21/90
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Benzene	0.005	<0.005	<0.005	<0.005	0.005
Toluene	0.005	0.01	<0.005	<0.005	0.005
Ethylbenzene	0.005	<0.005	<0.005	<0.005	0.005
Xylene (total)	0.015	<0.015	<0.015	<0.015	0.015
TPH as Gasoline	1	<1	<1	2	<1

1 = Extraction by EPA Method 5030

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009513
Report Issue Date: September 25, 1990

Table 1

ANALYTICAL RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons as Gasoline in Soil EPA Method 8020/8015[1]

GTEL Sample Number		09	10		
Client Identification		SP 61	SP 7		
Date Sampled		09/21/90	09/21/90		
Date Extracted		09/21/90	09/21/90		
Date Analyzed		09/21/90	09/21/90		
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Benzene	0.005	<0.005	<0.005		
Toluene	0.005	<0.005	<0.005		
Ethylbenzene	0.005	<0.005	<0.005		
Xylene (total)	0.015	<0.015	<0.015		
TPH as Gasoline	10	<1	<1		

1 = Extraction by EPA Method 5030

GTEL ENVIRONMENTAL LABORATORIES, INC.

QA Conformance Summary

Purgeable Aromatics and Total Petroleum Hydrocarbons as Gasoline in Soil EPA Method 8020/8015

1.0 Blanks

Five of 5 target compounds were below detection limits in the reagent water blank and reagent methanol blank as shown in Tables 2a and 2b.

2.0 Independent QC Check Sample

The control limits were met for 4 out of 4 QC check compounds as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (naphthalene) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Accuracy and Precision

4.1 Percent recovery limits were met for 4 of 4 compounds in the MS and MSD as shown in Table 5.

4.2 Relative percent difference (RPD) criteria was met for 4 of 4 analytes in the MS and MSD as shown in Table 5.

5.0 Sample Handling

5.1 Sample handling and holding time criteria were met for all samples.

5.2 There were no exceptional conditions requiring dilution of samples.

Table 2a

REAGENT WATER BLANK DATA

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/21/90

Analyte	Concentration, ug/L
Benzene	<0.3
Toluene	<0.3
Ethylbenzene	<0.3
Xylene (total)	<0.6
Gasoline	<50

<# = Not detected at the indicated detection limit.

Table 2b

REAGENT METHANOL BLANK DATA

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/21/90
MeOH Lot No: AX 659

Analyte	Concentration, mg/Kg
Benzene	<0.005
Toluene	<0.005
Ethylbenzene	<0.005
Xylene (total)	<0.015
Gasoline	<10

<# = Not detected at the indicated detection limit.

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/21/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Benzene	50	49	98	85-115
Toluene	50	49	98	85-115
Ethylbenzene	50	49	98	85-115
Xylene (total)	100	156	104	85-115

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Analyte	Lot Number	Source
Benzene	LA14042	Supelco
Toluene	LA14042	Supelco
Ethylbenzene	LA14042	Supelco
Xylene (total)	LA14042	Supelco

Table 4

SURROGATE COMPOUND RECOVERY

Naphthalene

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Acceptability Limits[1]: 60 - 130 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Water Blank	200	217	109
MeOH Blank	200	160	80
01	200	204	102
02	200	231	116
03	200	181	91
04	200	167	83
05	200	157	78
06	200	151	76
07	200	156	78
08	200	147	74
09	200	148	74
10	200	149	75
MS	200	158	79
MSD	200	135	68

MS = Matrix Spike
MSD = Matrix Spike Duplicate
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009513
Report Issue Date: September 25, 1990

Table 5

MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD) RECOVERY
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/21/90
Sample Used: C009486
Units: mg/Kg

Analyte	Sample Result	Concentration Added	MS Result	MS, % Recovery	MSD Result	MSD, % Recovery
Benzene	ND	2.86	2.23	78	2.23	78
Toluene	ND	2.86	2.38	83	2.37	83
Ethylbenzene	ND	2.86	2.35	82	2.35	82
Xylene (total)	ND	8.58	7.08	83	7.0	82

Analyte	RPD, %	Maximum RPD, %	Acceptability Limits[1] % Recovery
Benzene	0	30	50 - 112
Toluene	0	30	50 - 108
Ethylbenzene	0	30	50 - 113
Xylene (total)	1	30	50 - 114

< # = Not Detected at the indicated detection limit
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009514
Report Issue Date: October 1, 1990

Table 1

ANALYTICAL RESULTS

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015[1]

Sample Identification		Date Sampled	Date Extracted	Date Analyzed	Concentration, mg/Kg[2]
GTEL No.	Client ID				
01	SP 51	09/21/90	09/21/90	09/24/90	<10
02	SP 52	09/21/90	09/21/90	09/24/90	<10
03	SP 41	09/21/90	09/21/90	09/24/90	<10
04	SP 42	09/21/90	09/21/90	09/24/90	<10
05	SP 43	09/21/90	09/21/90	09/24/90	<10
06	SP 31	09/21/90	09/21/90	09/24/90	<10
07	SP 32	09/21/90	09/21/90	09/24/90	<10
08	SP 62	09/21/90	09/21/90	09/24/90	<10
09	SP 61	09/21/90	09/21/90	09/24/90	<10
10	SP 7	09/21/90	09/21/90	09/24/90	<10

1 = Extraction by EPA Method 3550
2 = Method detection limit = 10 mg/Kg; analyte below this level would not be detected.

QA Conformance Summary

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

1.0 Blanks

The Reagent blank was below the detection limit as shown in Table 2.

2.0 Independent QC Check Sample

The control limits were met for diesel in the aqueous independent QC check sample as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (Octadecane) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

Percent recovery limits were met for diesel in the MS as shown in Table 5.

5.0 Sample Duplicate Precision

Relative percent difference (RPD) criterion was met for diesel in the sample duplicate as shown in Table 6.

6.0 Sample Handling

6.1 Sample handling and holding time criteria were met for all samples.

6.2 There were no exceptional conditions requiring dilution of samples.

Table 2

REAGENT BLANK DATA

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis:

Analyte	Concentration, mg/Kg
Diesel	<10

< # = Not detected at the indicated detection limit.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009514
Report Issue Date: Octpber 1, 1990

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/24/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Diesel	1294	1043	81	80 - 120

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Analyte	Source
Diesel	SHELL

GTEL ENVIRONMENTAL LABORATORIES, INC.

Table 4

SURROGATE COMPOUND RECOVERY

Octadecane

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Acceptability Limits[1]: 70 - 130 %

GTEL No.	Expected Result, mg/Kg	Surrogate Result, mg/Kg	Surrogate Recovery, %
Blank	100	97	97
01	100	83	83
02	100	81	81
03	100	86	86
04	100	80	80
05	100	81	81
06	100	85	85
07	100	95	95
08	100	85	85
09	100	85	85
10	100	85	85
MS	100	85	96

MS = Matrix Spike
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009514
Report Issue Date: October 1, 1990

Table 5

MATRIX SPIKE (MS) RECOVERY REPORT

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/24/90
Sample Spiked: C009514-01
Client ID: SP51
Units: mg/Kg

Analyte	Sample Result	Concentration Added	MS Result	MS, % Recovery	Acceptability Limits, %[1]
Diesel	<10	500	500	100	63 - 127

1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.
<# = Not detected at the indicated detection limit.

Table 6

LABORATORY DUPLICATE SAMPLE RESULTS
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/24/90
Sample Used: C009514-01
Client ID: SP51
Units: mg/Kg

Analyte	Sample Result	Duplicate Result	RPD, %	Maximum RPD, %
Diesel	<10	<10	ND	30

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009515
Report Issue Date: September 25, 1990

Table 1

ANALYTICAL RESULTS

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Sample Identification		Date Sampled	Date Extracted	Date Analyzed	Concentration, mg/Kg[1]
GTEL No.	Client ID				
01	SP51	09/21/90	09/21/90	09/21/90	250
02	SP52	09/21/90	09/21/90	09/21/90	220
03	SP41	09/21/90	09/21/90	09/21/90	210
04	SP42	09/21/90	09/21/90	09/21/90	23
05	SP43	09/21/90	09/21/90	09/21/90	47
06	SP31	09/21/90	09/21/90	09/21/90	10
07	SP32	09/21/90	09/21/90	09/21/90	120
08	SP62	09/21/90	09/21/90	09/21/90	53
09	SP61	09/21/90	09/21/90	09/21/90	72
10	SP7	09/21/90	09/21/90	09/21/90	88

1 = Method detection limit = 5.0 mg/Kg; analyte below this level would not be detected.

SOIL FILES

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009515
Report Issue Date: September 25, 1990

QA Conformance Summary

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

1.0 Blanks

The method blank was below the detection limit as shown in Table 2.

2.0 Initial Instrument Calibration

The range of concentrations of the initial instrument calibration are shown in Table 3.

3.0 Calibration Verification Standards

3.1 The control limits were met for the initial calibration verification standard (ICVS) as shown in Table 4.

3.2 The control limits were met for the continuing calibration verification standard (CCVS) as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

The control limits were met for the reference oil in the MS as shown in Table 5.

5.0 Sample Duplicate Precision

Relative percent difference (RPD) criterion was met for the sample duplicate as shown in Table 6.

Table 2

METHOD BLANK DATA

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/21/90

Analyte	Concentration, mg/Kg
Oil and Grease	<5

< # = Not detected at the indicated detection limit.

Table 3

INITIAL CALIBRATION STANDARDS DATA

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/21/90

Standard Number	Concentration, mg/L
1	1.0
2	5.0
3	10.0
4	50.0
5	100.0

Table 4

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS RESULTS

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/21/90

Initial Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %[1]
Oil and Grease	5.3	5.6	106	80 - 120
Continuing Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %[1]
Oil and Grease	5.3	5.1	96	80 - 120

1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Table 4a

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS SOURCE

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Initial Calibration Verification Standard		
Analyte	Lot Number	Source
Oil and Grease	R07/STK12	GTEL
Continuing Calibration Verification Standard		
Analyte	Lot Number	Source
Oil and Grease	R06/STK7	GTEL

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009515
Report Issue Date: September 25, 1990

Table 5

MATRIX SPIKE (MS) RECOVERY REPORT

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/21/90
Sample Spiked: C009515-06
Client ID: SP31
Units: mg/Kg

Analyte	MS Result	Sample Result	Amount Recovered	Amount Added	MS, % Recovery	Acceptability Limits, %[1]
Oil and Grease	57.7	10	47.7	47.5	101	70 - 130

Table 6

LABORATORY DUPLICATE SAMPLE RESULTS
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/21/90
Sample Used: C009515-06
Client ID: SP31
Units: mg/Kg

Analyte	Sample Result	Duplicate Result	RPD, %	Maximum RPD, %
Oil and Grease	10	10.1	5.0	20

GTEL ENVIRONMENTAL LABORATORIES, INC.

Chain-of-Custody Record

Chevron U.S.A. Inc.
P.O. Box 5004
San Ramon, CA 94583
FAX (415) 842-9591

Chevron Facility Number: 9-6991
Consultant Release Number: 44 6671
Consultant Project Number: 203 175 3322
Consultant Name: GTI
Address: 4080 Pike Lane Concord
Fax Number:
Project Contact (Name): Joe Ramacy / Fred Hayden
(Phone): (415) 631-2387

Chevron Contact (Name): Cynthia Wong
(Phone): (415) 842-9103
Laboratory Name: GTEL
Contract Number: 414 6670
Samples Collected by (Name): Jamie
Collection Date: 9/21/90
Signature:

Sample Number	Lab Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite	Time	Sample Preservation	Iced	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline + Diesel	503 Oil and Grease	Arom. Volatiles - BTXE Soil: 8020/Wtr.: 602	Arom. Volatiles - BTXE Soil: 8240/Wtr.: 624	Total Lead DHS-Luft	EDB DHS-AB 1803	Remarks
SP51		1		C	755		X		X	X	X		1/1		Please use MDL 1ppm for TPH G&D "C" indicates they were composited in the field. Per Zanker Landfill request.
SP52		1		C	800		X		X	X	X				
SP41		1		C	903		X		X	X	X				
SP42		1		C	909		X		X	X	X				
SP43		1		C	915		X		X	X	X				
SP31		1		C	920		X		X	X	X				
SP32		1		C	926		X		X	X	X				
SP62		1		C	930		X		X	X	X				
SP61		1		C	936		X		X	X	X				
SP7		1		C	950		X		X	X	X				

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
				GTI	9/21/90 10AM
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
	GTI	9/21/90 11AM			9/21/90 11 WD

Turn Around Time (Circle Choice): (24 Hrs) 48 Hrs 5 Days 10 Days

Rev. 6 91A

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080-C Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 *from inside California*
(800) 423-7143 *from outside California*
(415) 825-0720 (FAX)

Project Number: SFB-175-0204.72
Consultant Project Number: 2031753322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009581, C009582, C009583, C009584
Report Issue Date: October 4, 1990

Fred Hayden
Groundwater Technology, Inc.
4080-D Pike Lane
Concord, CA 94520

Dear Mr. Hayden:

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories on 09/20/90.

A formal quality control/quality assurance 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 California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to approved protocols.

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

Sincerely,

GTEL Environmental Laboratories, Inc.

Emma P. Popek

Emma P. Popek
Laboratory Director

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009581
Report Issue Date: October 2, 1990

Table 1

ANALYTICAL RESULTS

Petroleum Hydrocarbons in Soil by Infrared
Modified EPA Method 418.1

Sample Identification		Date Sampled	Date Extracted	Date Analyzed	Concentration, mg/Kg[1]
GTEL No.	Client ID				
01	COMP 1	09/20/90	09/27/90	09/27/90	110
02	COMP 1 D	09/20/90	09/27/90	098/27/90	94

1 = Method detection limit = 5.0 mg/Kg; analyte below this level would not be detected.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009581
Report Issue Date: October 2, 1990

QA Conformance Summary

Petroleum Hydrocarbons In Soil by Infrared
Modified EPA Method 418.1

1.0 Blanks

The method blank was below the detection limit as shown in Table 2.

2.0 Initial Instrument Calibration

The range of concentrations of the initial instrument calibration are shown in Table 3.

3.0 Calibration Verification Standards

3.1 The control limits were met for the initial calibration verification standard (ICVS) as shown in Table 4.

3.2 The control limits were met for the continuing calibration verification standard (CCVS) as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

The control limits were met for the reference oil in the MS as shown in Table 5.

5.0 Sample Duplicate Precision

Relative percent difference (RPD) criterion was met for the sample duplicate as shown in Table 6.

Table 2

METHOD BLANK DATA

Petroleum Hydrocarbons in Soil by Infrared
Modified EPA Method 418.1

Date of Analysis: 09/27/90

Analyte	Concentration, mg/Kg
Petroleum Hydrocarbons	<5

<# = Not detected at the indicated detection limit.

Table 3

INITIAL CALIBRATION STANDARDS DATA

Petroleum Hydrocarbons in Soil by Infrared
Modified EPA Method 418.1

Date of Analysis: 09/27/90

Standard Number	Concentration, mg/L
1	1.0
2	5.0
3	10.0
4	50.0
5	100.0

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009581
Report Issue Date: October 2, 1990

Table 4

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS RESULTS
Petroleum Hydrocarbons in Soil by Infrared
Modified EPA Method 418.1

Date of Analysis: 09/27/90

Initial Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %[1]
Petroleum Hydrocarbons	5.3	4.9	92	80 - 120
Continuing Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %[1]
Petroleum Hydrocarbons	5.3	5.3	100	80 - 120

1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Table 4a

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS SOURCE
Petroleum Hydrocarbons in Soil by Infrared
Modified EPA Method 418.1

Initial Calibration Verification Standard		
Analyte	Lot Number	Source
Petroleum Hydrocarbons	R07/STK12	GTEL
Continuing Calibration Verification Standard		
Analyte	Lot Number	Source
Petroleum Hydrocarbons	RO6/STK7	GTEL

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009581
Report Issue Date: October 2, 1990

Table 5

MATRIX SPIKE (MS) RECOVERY REPORT

Petroleum Hydrocarbons in Soil by Infrared
Modified EPA Method 418.1

Date of Analysis: 09/27/90
Sample Spiked: Sand (EM Science Lot #9236) Units: mg/Kg

Analyte	MS Result	Sample Result	Amount Recovered	Amount Added	MS, % Recovery	Acceptability Limits, %[1]
Petroleum Hydrocarbons	47.4	<5	47.4	50.4	94	70 - 130

1 = Arbitrary limits, pending experimental determination.
< # = Not detected at the indicated detection limit.

Table 6

LABORATORY DUPLICATE SAMPLE RESULTS
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Petroleum Hydrocarbons in Soil by Infrared
Modified EPA Method 418.1

Date of Analysis: 09/27/90 Client ID: COMP1
Sample Used: C009581-01 Units: mg/Kg

Analyte	Sample Result	Duplicate Result	RPD, %	Maximum RPD, %
Petroleum Hydrocarbons	106.6	106.9	0.28	20

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009582
Report Issue Date: October 1, 1990

Table 1

ANALYTICAL RESULTS

Purgeable Hydrocarbons in Soil
EPA Method 8240

Date Sampled		09/20/90	09/20/90		
Date Analyzed		09/26/90	09/26/90		
Client Identification		COMP1	COMP1D		
GTEL Sample Number		01	02		
Analyte	Detection Limit, ug/Kg	Concentration, ug/Kg			
Chloromethane	10	<10	<10		
Bromomethane	10	<10	<10		
Vinyl Chloride	10	<10	<10		
Chloroethane	10	<10	<10		
Methylene Chloride	5	<5	<5		
Acetone	100	<100	<100		
Carbon Disulfide	5	<5	<5		
1,1-Dichloroethene	5	<5	<5		
1,1-Dichloroethane	5	<5	<5		
trans-1,2-Dichloroethene	5	<5	<5		
Chloroform	5	<5	<5		
1,2-Dichloroethane	5	<5	<5		
2-Butanone	100	<100	<100		
1,1,1-Trichloroethane	5	<5	<5		
Carbon Tetrachloride	5	<5	<5		
Vinyl Acetate	50	<50	<50		
Bromodichloromethane	5	<5	<5		
1,2-Dichloropropane	5	<5	<5		
cis-1,3-Dichloropropene	5	<5	<5		
Trichloroethene	5	<5	<5		
Dibromochloromethane	5	<5	<5		
1,1,2-Trichloroethane	5	<5	<5		
Benzene	5	<5	<5		
trans-1,3-Dichloropropene	5	<5	<5		
2-Chloroethylvinylether	10	<10	<10		

Table 1 (continued)

ANALYTICAL RESULTS

Purgeable Hydrocarbons in Soil
EPA Method 8240

Date Sampled		09/20/90	09/20/90		
Date Analyzed		09/26/90	09/26/90		
Client Identification		COMP1	COMP1D		
GTEL Sample Number		01	02		
Analyte	Detection Limit,ug/Kg	Concentration, ug/Kg			
Bromoform	5	<5	<5		
4-Methyl-2-Pentanone	50	<50	<50		
2-Hexanone	50	<50	<50		
Tetrachloroethene	5	<5	<5		
1,1,2,2-Tetrachloroethane	5	<5	<5		
Toluene	5	14	16		
Chlorobenzene	5	<5	<5		
Ethylbenzene	5	<5	<5		
Styrene	5	<5	5.4		
1,2-Dichlorobenzene	5	<5	<5		
1,3-Dichlorobenzene	5	<5	<5		
1,4-Dichlorobenzene	5	<5	<5		
Xylene (total)	5	21	24		
Trichlorofluoromethane	5	<5	<5		

QA Conformance Summary

Purgeable Hydrocarbons In Soil
EPA Method 8240

1.0 Blanks

Zero of 39 target compounds found in Reagent water blank and as shown in Table 2.

2.0 Independent QC Check Sample

The control limits were met for 8 of 8 QC check compounds in the aqueous QC check sample as shown in Table 3.

3.0 Surrogate Compound Recoveries

Recovery limits were met for all three surrogate compounds for all samples as shown in Tables 4a, 4b, and 4c.

4.0 Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Accuracy and Precision

4.1 Accuracy:

Percent recovery limits were met for 10 of 10 compounds in the MS and MSD as shown in Table 5.

4.2 Precision:

Relative Percent Difference (RPD) criteria were met for 5 of 5 compounds in the MS and MSD as shown in Table 5.

5.0 Sample Handling

5.1 Sample handling and holding time criteria were met for all samples.

5.2 There were no exceptional conditions requiring dilution of samples.

Table 2

REAGENT WATER BLANK DATA

Purgeable Hydrocarbons in Soil
EPA Method 8240

Date of Analysis: 09/26/90

Analyte	Observed Result, ug/Kg
Chloromethane	ND
Bromomethane	ND
Vinyl Chloride	ND
Chloroethane	ND
Methylene Chloride	ND
Acetone	ND
Carbon Disulfide	ND
1,1-Dichloroethene	ND
1,1-Dichloroethane	ND
trans-1,2-Dichloroethene	ND
Chloroform	ND
1,2-Dichloroethane	ND
2-Butanone	ND
1,1,1-Trichloroethane	ND
Carbon Tetrachloride	ND
Vinyl Acetate	ND
Bromodichloromethane	ND
1,2-Dichloropropane	ND
cis-1,3-Dichloropropene	ND
Trichloroethene	ND
Dibromochloromethane	ND
1,1,2-Trichloroethane	ND
Benzene	ND
trans-1,3-Dichloropropene	ND
2-Chloroethylvinylether	ND

Table 2 (continued)

REAGENT WATER BLANK DATA

Purgeable Hydrocarbons
EPA Method 8240

Analyte	Observed Result, ug/Kg
Bromoform	ND
4-Methyl-2-Pentanone	ND
2-Hexanone	ND
Tetrachloroethene	ND
1,1,2,2-Tetrachloroethane	ND
Toluene	ND
Chlorobenzene	ND
Ethylbenzene	ND
Styrene	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
Xylene (total)	ND
Trichlorofluoromethane	ND

ND = Not detected above the statistical detection limit.

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Purgeable Hydrocarbons
EPA Method 8240

Date of Analysis: 09/26/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Trichloroethylene	50	57	114	60-140
Chloroform	50	56	112	80-120
1,1,1-Trichloroethane	50	66	132	60-140
1,1,2-Trichloroethane	50	56	112	60-140
Chloroethane	50	50	100	60-140
Benzene	50	61	122	60-140
1,1-Dichloroethylene	50	60	120	60-140
chlorobenzene	50	56	112	60-140

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Purgeable Hydrocarbons in Soil
EPA Method 8240

Analyte	Lot Number	Source
Trichloroethylene	LA21868	Purgeable A Supelco
Chloroform	LA21868	Purgeable A Supelco
1,1,1-Trichloroethane	LA21150	Purgeable B Supelco
1,1,2-Trichloroethane	LA21150	Purgeable B Supelco
Chloroethane	LA21338	Purgeable C Supelco
Benzene	LA21150	Purgeable B Supelco
1,1-Dichloroethylene	LA21868	Purgeable A Supelco
chlorobenzene	LA21868	Purgeable A Supelco

Table 4a

SURROGATE COMPOUND RECOVERY

d8-Toluene

Purgeable Hydrocarbons in Soil
EPA Method 8240

Recovery Acceptability Limits[1]: 81 - 117 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Water Blank	50	50	100
01	50	57	114
02	50	55	110
MS	50	50	100
MSD	50	52	104

MS = Matrix spike sample
MSD = Matrix spike duplicate sample
1 = Acceptability limits are derived from USEPA Contract Laboratory Program (CLP) requirements.

Table 4b

SURROGATE COMPOUND RECOVERY

Bromofluorobenzene

Purgeable Hydrocarbons in Soil
EPA Method 8240

Recovery Acceptability Limits[1]: 74 - 121 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Water Blank	50	48	96
01	50	57	114
02	50	58	116
MS	50	48	96
MSD	50	49	98

MS = Matrix spike sample
MSD = Matrix spike duplicate sample
1 = Acceptability limits are derived from USEPA Contract Laboratory Program (CLP) requirements.

Table 4c

SURROGATE COMPOUND RECOVERY

d4-1,2-Dichloroethane

Purgeable Hydrocarbons in Soil
EPA Method 8240

Recovery Acceptability Limits[1]: 70 - 121 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Water Blank	50	56	112
01	50	50	118
02	50	50	118
MS	50	55	110
MSD	50	55	110

MS = Matrix spike sample
MSD = Matrix spike duplicate sample
1 = Acceptability limits are derived from USEPA Contract Laboratory Program (CLP) requirements.

Table 5

MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD)
RECOVERY AND RELATIVE PERCENT DEVIATION (RPD)
REPORT

Purgeable Hydrocarbons in Soil
EPA Method 8240

Date of Analysis: 09/24/90
Sample Spiked: C009522-02
Client ID: NA
Units: ug/Kg

Analyte	Sample Result	Amount Added	MS Result	MSD Result
1,1-Dichloroethene	ND	50	61	55
Trichloroethene	ND	50	57	61
Benzene	ND	50	60	55
Toluene	ND	50	60	61
Chlorobenzene	ND	50	60	57

Analyte	MS, % Recovery	MSD, % Recovery	RPD, %	Acceptability Limits[1]	
				Maximum RPD, %	% Recovery
1,1-Dichloroethene	122	110	10	22	59-172
Trichloroethene	114	122	9	24	62-137
Benzene	120	110	9	21	66-142
Toluene	120	122	2	21	59-139
Chlorobenzene	120	114	5	21	60-133

ND = Not Detected above the statistical detection limit
1 = Acceptability limits are derived from USEPA Contract Laboratory Program (CLP) requirements.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009583
Report Issue Date: October 4, 1990

Table 1

ANALYTICAL RESULTS

Total Threshold Limit Concentration in Soil
California Title 22 (C.A.M.)[1]

GTEL Sample Number		C009583-1	C009583-2		
Client Identification		COMP 1	COMP 1D		
Date Sampled		09/20/90	09/20/90		
Date Extracted		09/25/90	09/25/90		
Date Analyzed		09/26/90	09/26/90		
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Antimony	30	<30	<30		
Arsenic	50	<50	<50		
Barium	1	120	140		
Beryllium	1	<1	<1		
Cadmium	1	<1	<1		
Chromium	1	34	32		
Cobalt	1	11	12		
Copper	2	22	26		
Lead	5	14	15		
Mercury	0.05	<0.05	<0.05		
Molybdenum	1	<1	<1		
Nickel	5	29	28		
Selenium	50	<50	<50		
Silver	30	<30	<30		
Thallium	10	<10	<10		
Vanadium	2	50	57		
Zinc	2	38	42		

1 = Mercury analyzed by EPA Method 7471; all others analyzed by EPA Method 3050/6010.

GTEL ENVIRONMENTAL LABORATORIES, INC.

QA Conformance Summary

Total Threshold Limit Concentration in Soil
California Title 22 (C.A.M.)

1.0 Blanks

The method blank was below the detection limit for all analytes as shown in Table 2.

2.0 Laboratory Control Sample (LCS)

The control limits were met for all analytes in the aqueous LCS as shown in Table 3.

3.0 Calibration Verification Standard

The control limits were met for all analytes in the initial calibration verification standard (ICVS) as shown in Table 5.

4.0 Matrix Spike (MS) Accuracy

Percent recovery limits were met for all analytes in the MS as shown in Table 6.

5.0 Sample Duplicate Precision

Relative percent difference criteria were met for the sample duplicate as shown in Table 7.

6.0 Sample Handling

6.1 Sample handling and holding time criteria were met for all samples.

6.2 There were no exceptional conditions requiring dilution of samples.

Table 2

REAGENT BLANK DATA

Total Threshold Limit Concentration in Soil
California Title 22 (C.A.M.)

Date of Analysis: 09/26/90

Analyte	Concentration, mg/Kg
Antimony	<30
Arsenic	<50
Barium	<1
Beryllium	<1
Cadmium	<1
Chromium	<1
Cobalt	<1
Copper	<2
Lead	<5
Mercury	<0.05
Molybdenum	<1
Nickel	<5
Selenium	<50
Silver	<30
Thallium	<10
Vanadium	<2
Zinc	<2

<# = Not detected at the indicated detection limit.

Table 3

LABORATORY CONTROL SAMPLE RESULTS

Total Threshold Limit Concentration in Soil
California Title 22 (C.A.M.)

Date of Analysis: 09/26/90

Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %
Antimony	1.00	0.92	92	80 - 120
Arsenic	1.00	0.98	98	80 - 120
Barium	0.10	0.10	100	80 - 120
Beryllium	0.10	0.10	100	80 - 120
Cadmium	1.00	0.95	95	80 - 120
Chromium	1.00	0.98	98	80 - 120
Cobalt	1.00	0.96	96	80 - 120
Copper	1.00	0.99	99	80 - 120
Lead	1.00	0.94	94	80 - 120
Mercury	0.0005	0.0006	120	80 - 120
Molybdenum	1.00	0.96	96	80 - 120
Nickel	1.00	0.99	99	80 - 120
Selenium	1.00	0.98	98	80 - 120
Silver	1.00	0.82	82	80 - 120
Thallium	1.00	0.87	87	80 - 120
Vanadium	1.00	0.96	96	80 - 120
Zinc	1.00	1.00	100	80 - 120

Table 3a

LABORATORY CONTROL SAMPLE SOURCE

Total Threshold Limit Concentration in Soil
California Title 22 (C.A.M.)

Analyte	Lot Number	Source
Antimony	1-76-SB	SPEX
Arsenic	3-83-VS	SPEX
Barium	3-83-VS	SPEX
Beryllium	3-83-VS	SPEX
Cadmium	3-83-VS	SPEX
Chromium	3-83-VS	SPEX
Cobalt	3-83-VS	SPEX
Copper	3-83-VS	SPEX
Lead	3-83-VS	SPEX
Mercury	1-97-HG	SPEX
Molybdenum	1-115-MO	SPEX
Nickel	3-83-VS	SPEX
Selenium	3-83-VS	SPEX
Silver	3-83-VS	SPEX
Thallium	3-83-VS	SPEX
Vanadium	3-83-VS	SPEX
Zinc	3-83-VS	SPEX

Table 4

INITIAL CALIBRATION STANDARDS DATA

Total Threshold Limit Concentration in Soil
California Title 22 (C.A.M.)

Standard ID	CAL STD				
Date of Analysis	09/26/90				
Analyte	Standard Concentration, mg/L				
Antimony	10.0				
Arsenic	10.0				
Barium	10.0				
Beryllium	1.0				
Cadmium	1.0				
Chromium	10.0				
Cobalt	10.0				
Copper	10.0				
Lead	10.0				
Mercury	.0001	.0005	.0010		
Molybdenum	10.0				
Nickel	10.0				
Selenium	10.0				
Silver	1.0				
Thallium	10.0				
Vanadium	10.0				
Zinc	10.0				

Table 5

INITIAL CALIBRATION VERIFICATION STANDARDS RESULTS

Total Threshold Limit Concentration in Soil
California Title 22 (C.A.M.)

Date of Analysis: 09/26/90

Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %
Antimony	5.00	5.08	102	80 - 120
Arsenic	5.00	5.15	103	80 - 120
Barium	0.50	0.51	102	80 - 120
Beryllium	5.00	5.18	104	80 - 120
Cadmium	5.00	5.10	102	80 - 120
Chromium	5.00	5.16	103	80 - 120
Cobalt	5.00	5.22	104	80 - 120
Copper	5.00	5.09	102	80 - 120
Lead	5.00	5.16	102	80 - 120
Mercury	0.0005	0.0005	100	80 - 120
Molybdenum	5.00	5.02	100	80 - 120
Nickel	5.00	5.23	105	80 - 120
Selenium	5.00	5.13	103	80 - 120
Silver	1.00	1.02	102	80 - 120
Thallium	5.00	5.10	102	80 - 120
Vanadium	5.00	5.07	101	80 - 120
Zinc	5.00	5.12	102	80 - 120

Table 5a

INITIAL CALIBRATION VERIFICATION STANDARDS SOURCE

Total Threshold Limit Concentration in Soil
California Title 22 (C.A.M.)

Analyte	Lot Number	Source
Antimony	1-76-SB	SPEX
Arsenic	2-57-VS	SPEX
Barium	2-57-VS	SPEX
Beryllium	2-57-VS	SPEX
Cadmium	2-57-VS	SPEX
Chromium	2-57-VS	SPEX
Cobalt	2-57-VS	SPEX
Copper	2-57-VS	SPEX
Lead	2-57-VS	SPEX
Mercury	8013	Perkin-Elme-
Molybdenum	1-1-VK	SPEX
Nickel	2-57-VS	SPEX
Selenium	2-57-VS	SPEX
Silver	2-57-VS	SPEX
Thallium	2-57-VS	SPEX
Vanadium	2-57-VS	SPEX
Zinc	2-57-VS	SPEX

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009583
Report Issue Date: October 4, 1990

Table 6

MATRIX SPIKE (MS) RECOVERY REPORT

Total Threshold Limit Concentration in Soil
California Title 22 (C.A.M.)

Date of Analysis: 09/26/90
Sample Spiked: C009583-1
Client ID: COMP 1
Units: mg/Kg

Analyte	MS Result	Sample Result	Amount Recovered	Amount Added	MS, % Recovery	Acceptability Limits, %
Antimony	8	51	43	50	86	80 - 120
Arsenic	46	<50	46	50	92	80 - 120
Barium	126	122	4	5	80	80 - 120
Beryllium	4.6	<1	4.6	5	92	80 - 120
Cadmium	47	<1	47	50	94	80 - 120
Chromium	81	34	47	50	94	80 - 120
Cobalt	58	11	47	50	94	80 - 120
Copper	68	22	46	50	92	80 - 120
Lead	58	14	44	50	88	80 - 120
Mercury	0.26	<0.05	0.26	0.25	104	80 - 120
Molybdenum	44	<1	44	50	88	80 - 120
Nickel	77	29	48	50	96	80 - 120
Selenium	45	<50	45	50	90	80 - 120
Silver	40	<30	40	50	80	80 - 120
Thallium	18	<10	18	50	36	80 - 120
Vanadium	93	50	43	50	86	80 - 120
Zinc	85	38	47	50	94	80 - 120

<# = Not detected at the indicated detection limit.
* Spike results on C009580-4

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009583
Report Issue Date: October 4, 1990

Table 7

LABORATORY DUPLICATE SAMPLE RESULTS AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Total Threshold Limit Concentration in Soil
California Title 22 (C.A.M.)

Date of Analysis: 09/26/90
Sample Used: C009583-1, spiked
Client ID: COMP 1
Units: mg/Kg

Analyte	Sample Result	Duplicate Result	RPD, %	Maximum RPD, %
Antimony	<30	<30	0	20
Arsenic	46	39	16	20
Barium	126	124	2	20
Beryllium	4.6	4.7	2	20
Cadmium	47	46	2	20
Chromium	81	82	1	20
Cobalt	58	56	4	20
Copper	68	74	8	20
Lead	58	57	2	20
Mercury	0.26	0.30	14	20
Molybdenum	44	42	5	20
Nickel	77	76	1	20
Selenium	45	46	2	20
Silver	40	38	5	20
Thallium	18	16	12	20
Vanadium	93	94	1	20
Zinc	85	91	7	20

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009584
Report Issue Date: October 3, 1990

Table 1

ANALYTICAL RESULTS

Total Cyanide in Soil
EPA Method 9010 (Modified)

Sample Identification		Date Sampled	Date Analyzed	Concentration, mg/Kg[1]
GTEL No.	Client ID			
C009584-01	COMP 1	09/20/90	09/29/90	<0.08
C009584-02	COMP 1D	09/20/90	09/29/90	<0.08

1 = Method detection limit = 0.08 mg/Kg; analyte below this level would not be detected.

QA Conformance Summary

Total Cyanide in Soil
EPA Method 9010 (Modified)

1.0 Method Calibration

1.1 The concentrations of the calibration standards are shown in Table 2.
1.2 The calibration verification standard was within acceptable limits, as shown in Table 2a.

2.0 Laboratory Control Samples (LCS)

The control limits were met for the blank and spiked blank LCS as shown in Table 3.

3.0 Matrix Spike (MS) Recovery

Insufficient sample for matrix spike.

4.0 Sample Duplicate Precision

Relative percent difference (RPD) criterion was met for the sample duplicate as shown in Table 4.

Table 2

INITIAL CALIBRATION STANDARDS DATA

Total Cyanide in Soil
EPA Method 9010 (Modified)

Date of Analysis: 09/29/90

Standard Number	Concentration, mg/L
1	0.00
2	0.02
3	0.05
4	0.10
5	0.20

Table 2a

CALIBRATION VERIFICATION STANDARD

Total Cyanide in Soil
EPA Method 9010 (Modified)

Source: Mallincrodt Lot Number: 6881 BSN

Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %
Total Cyanide	0.04	0.033	83	80-120

GTEL ENVIRONMENTAL LABORATORIES, INC.

Table 3

LABORATORY CONTROL SAMPLE BLANK

Total Cyanide in Soil
EPA Method 9010 (Modified)

Date of Analysis: 09/29/90

Analyte	Concentration, mg/L
Total Cyanide	<0.01

< # = Not detected at the indicated detection level.

Sample blank is a distilled D.I. water/reagent blank.

Table 3a

LABORATORY CONTROL SAMPLE SPIKED BLANK

Total Cyanide in Soil
EPA Method 9010 (Modified)

Analyte	Expected Result, ug	Observed Result, ug	Recovery, %	Acceptability Limits, %
Total Cyanide	0.04	0.033	83	80-120

Chain-of-Custody Record

Chevron U.S.A. Inc.
P.O. Box 5004
San Ramon, CA 94583
FAX (415) 842-9591

Chevron Facility Number: 9-6991
Consultant Release Number: 414 6671
Consultant Project Number: 203 17 3322
Consultant Name: Consultant Technology
Address: 4080 Pike Lane Concord
Fax Number:
Project Contact (Name): Fred Hayden / Joe Romagno
(Phone): (415) 671 23.87

Chevron Contact (Name): Cynthia Wong
(Phone):
Laboratory Name: GTEL
Contract Number: 414-6670
Samples Collected by (Name): Jamie Bothell
Collection Date: 9/20/90
Signature:

Sample Number	Lab Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite	Time	Sample Preservation	Iced	Analyses To Be Performed: Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline + Diesel	TPH 418.1 SGS Oil and Grease	Arom. Volatiles - BTXE Soil: 8020/Wtr.: 802	Arom. Volatiles - BTXE Soil: 8240/Wtr.: 824	Total Lead DHS-Luft	CAM 17 Metals EPA 6010 DHS AB 1803	pH	Flash point	Sulfide & Cyanide	Remarks
COMP1			S	C	1255		X			X		X		X	X	X	X	HOLD
COMP1D			S	C	1255		X			X		X		X	X	X	X	HOLD
																		Fred took off of Hold on 9-25-90 @ 10:35 AM - RB

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
		9-20-90 4:40			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
			Patty Blair		9-20-90 4:35

Turn Around Time (Circle Choice)
24 Hrs
(48 Hrs)
5 Days
10 Days

Printed in U.S.A.

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080 Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California

Project Number: 203-175-3322
Location: 2920 Castro Blvd.
Castro Valley, CA
Report Issue Date: November 2, 1990

Joe Ramage
Groundwater Technology, Inc.
4080-D Pike Lane
Concord, CA 94520

Dear Mr. Ramage:

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories on 09/20/90.

A formal quality control/quality assurance 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 California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to approved protocols.

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

Sincerely,

GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

Project Number: 203-175-3322
Location: 2920 Castro Blvd.
Castro Valley, CA
Report Issue Date: November 2, 1990

Table 1

ANALYTICAL RESULTS

Petroleum Hydrocarbons in Soil by Infrared
Modified EPA Method 413.2

Sample Identification		Date Sampled	Date Extracted	Date Analyzed	Concentration, mg/Kg[1]
GTEL No.	Client ID				
01	A-1	09/20/90	09/20/90	09/20/90	710
02	2A	09/20/90	09/20/90	09/20/90	1500
03	3A	09/20/90	09/20/90	09/20/90	510
04	6A	09/20/90	09/20/90	09/20/90	3200
05	4A	09/20/90	09/20/90	09/20/90	39
06	5A	09/20/90	09/20/90	09/20/90	68
07	PT1	09/20/90	09/20/90	09/20/90	190
08	PT2	09/20/90	09/20/90	09/20/90	290
09	PTS WALL	09/20/90	09/20/90	09/20/90	380
10	PTN WALL	09/20/90	09/20/90	09/20/90	33
11	PH-1-6	09/20/90	09/20/90	09/20/90	42
12	PH-1-10	09/20/90	09/20/90	09/20/90	480
13	PH-2-6	09/20/90	09/20/90	09/20/90	58
14	PH-2-10	09/20/90	09/20/90	09/20/90	38
15	PH-3-6	09/20/90	09/20/90	09/20/90	22
16	PH-3-10	09/20/90	09/20/90	09/20/90	35

1 = Method detection limit = 10 mg/Kg; analyte below this level would not be detected.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: 203-175-3322
Location: 2920 Castro Blvd.
Castro Valley, CA
Report Issue Date: November 2, 1990

Table 1

ANALYTICAL RESULTS

Petroleum Hydrocarbons in Soil by Infrared
Modified EPA Method 413.2

Sample Identification		Date Sampled	Date Extracted	Date Analyzed	Concentration, mg/Kg[1]
GTEL No.	Client ID				
17	E-3-2	09/20/90	09/20/90	09/20/90	<10
18	E-2-10	09/20/90	09/20/90	09/20/90	11
19	E-6-10	09/20/90	09/20/90	09/20/90	<10
20	E-5-10	09/20/90	09/20/90	09/20/90	<10
21	E-4-10	09/20/90	09/20/90	09/20/90	11
22	E-1-10	09/20/90	09/20/90	09/20/90	12
23	E-3-1	09/20/90	09/20/90	09/20/90	<10
24	PTS-1-7	09/20/90	09/20/90	09/20/90	16
25	PTS-2-7	09/20/90	09/20/90	09/20/90	41

1 = Method detection limit = 10 mg/Kg; analyte below this level would not be detected.
This report replaces one of the same number dated 09/27/90.

GTEL ENVIRONMENTAL LABORATORIES, INC.

GTEL ENVIRONMENTAL LABORATORIES, INC.

4080- Pike Lane
Concord, CA 94520
415-685-7852

800-544-3422 (In CA)
800-423-7143 (Outside CA)

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

72- 7417

Project Manager: JOE RAMAGE / FRED HAYDEN

Phone #:

FAX #:

Site location:

Address: 2920 CASTRO BLVD

Project Name: CHEVRON - CASTRO VALLEY

Project Number: 203-175-3382

Sampler Name (Print):

I attest that the proper field sampling procedures were used during the collection of these samples.

Field Sample ID	Source of Sample	GTEL Lab # (Lab use only)	# CONTAINERS	Matrix: WATER	SOIL	AIR	SLUDGE	OTHER	Method Preserved: HCl	HNO_3	H_2SO_4	ICE	NONE	OTHER	Sampling: DATE	TIME
A-1		01			X							Y			9/20/90	
2A		02														
3A		03														
6A		04														
4A		05														
5A		06														
PT1		07														
PT2		08														
PTSWALL		09														
PTNWALL		10														
PH-1-6'		11														

ANALYSIS REQUEST

BTEX 602 ☐ 8020 ☐ with MTBE ☐	BTEX/TPH Gas 602/8015 ☐ 8020/8015 ☐ MTBE ☐	TPH as ☐ Gas ☐ Diesel ☐ Jet Fuel	Product I.D. by GC (SIMDIS) ☐	Total Oil & Grease 413.1 ☐ 413.2 ☐ 503A ☐ 503E ☐	Total Petroleum Hydrocarbons 418.1 ☐	EPA 601 ☐ 8010 ☐ DCA only ☐	EPA 602 ☐ 8020 ☐	EPA 608 ☐ 8080 ☐ PCBs only ☐	EPA 610 ☐ 8310 ☐	EPA 624 ☐ 8240 ☐ NBS +15 ☐	EPA 625 ☐ 8270 ☐ NBS +25 ☐	EPTOX: Metals ☐ Pesticides ☐ Herbicides ☐	TCLP Metals ☐ VOA ☐ Semi VOA ☐	EPA Priority Pollutant Metals ☐ HSL ☐	LEAD 7420 ☐ 7421 ☐ 239.2 ☐ 6010 ☐ Org. Lead ☐	CAM Metals ☐ STLC ☐ TTLC	Corrosivity ☐ Flashpoint ☐ Reactivity ☐
				X													

SPECIAL HANDLING

24 HOURS ☒
EXPEDITED 48 Hours ☐
SEVEN DAY ☐
OTHER _____ (#) BUSINESS DAYS
QA/QC CLP Level ☐ Blue Level ☐
FAX ☐

SPECIAL DETECTION LIMITS (Specify)

SPECIAL REPORTING REQUIREMENTS (Specify)

REMARKS:

Lab Use Only Storage Location

Lot #: Work Order #:

CUSTODY RECORD

Relinquished by Sampler:	Received by:	Time	Date
Relinquished by:	Received by:	Time	Date
Relinquished by:	Received by Laboratory:	Time 9:20	Date 9/20/90

Way bill #

GTEL ENVIRONMENTAL LABORATORIES, INC.

4080- Pike Lane
Concord, CA 94520
415-685-7852

800-544-3422 (In CA)
800-423-7143 (Outside CA)

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

72- 7418

CUSTODY RECORD

Project Manager: JOE RAMAGE

Phone #:

FAX #:

Address: 7920 CASTRO BLVD.

Site location:

Project Number: 203 - 175 - 3322

Project Name: CHEV. CASTRO VALLEY

I attest that the proper field sampling procedures were used during the collection of these samples.

Sampler Name (Print): DAVE FISCH

Field Sample ID	Source of Sample	GTEL Lab # (Lab use only)	# CONTAINERS	Matrix: WATER	SOIL	AIR	SLUDGE	OTHER	Method Preserved: HCl	HNO_3	H_2SO_4	ICE	NONE	OTHER	Sampling: DATE	TIME
PH-1-10'		12														
PH-2-6'		13														
PH-2-10'		14														
PH 3-6		15														
PH3-10		16														
E-3-2		17														
E-2-10		18														
E-6-10		19														
E-5-10		20														
E-4-10		21														
E-1-10		22														

ANALYSIS REQUEST

BTEX 602 ☐ 8020 ☐ with MTBE ☐
BTEX/TPH Gas 602/8015 ☐ 8020/8015 ☐ MTBE ☐
TPH as ☐ Gas ☐ Diesel ☐ Jet Fuel
Product I.D. by GC (SIMDIS) ☐
Total Oil & Grease: 413.1 ☐ 413.2 ☐ 503A ☐
Total Petroleum Hydrocarbons: 418.1 ☐ 503E ☐
EPA 601 ☐ 8010 ☐ DCA only ☐
EPA 602 ☐ 8020 ☐
EPA 608 ☐ 8080 ☐ PCBs only ☐
EPA 610 ☐ 8310 ☐
EPA 624 ☐ 8240 ☐ NBS +15 ☐
EPA 625 ☐ 8270 ☐ NBS +25 ☐
EPTOX: Metals ☐ Pesticides ☐ Herbicides ☐
TCLP Metals ☐ VOA ☐ Semi VOA ☐
EPA Priority Pollutant Metals ☐ HSL ☐
LEAD 7420 ☐ 7421 ☐ 239.2 ☐ 6010 ☐ Org. Lead ☐
CAM Metals ☐ STLC ☐ TTLC
Corrosivity ☐ Flashpoint ☐ Reactivity ☐

Received by: Date Time
Received by: Date Time
Received by Laboratory: Date Time
Way bill #

Relinquished by Sampler:
Relinquished by:
Relinquished by:

SPECIAL HANDLING

24 HOURS ☐
EXPEDITED 48 Hours ☐
SEVEN DAY ☐
OTHER _____(#) BUSINESS DAYS
QA/QC CLP Level ☐ Blue Level ☐
FAX ☐

SPECIAL DETECTION LIMITS (Specify)

SPECIAL REPORTING REQUIREMENTS (Specify)

REMARKS:

Lab Use Only Storage Location

Lot #: Work Order #:

GTEL ENVIRONMENTAL LABORATORIES, INC.

4080- Pike Lane
Concord, CA 94520
415-685-7852

800-544-3422 (In CA)
800-423-7143 (Outside CA)

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST 72- 7487

CUSTODY RECORD

Project Manager: | Phone #: | FAX #:

Address: | Site location:

Project Number: | Project Name:

I attest that the proper field sampling procedures were used during the collection of these samples. | Sampler Name (Print):

Field Sample ID	Source of Sample	GTEL Lab # (Lab use only)	# CONTAINERS	Matrix					Method Preserved						Sampling	
				WATER	SOIL	AIR	SLUDGE	OTHER	HCl	HNO_3	H_2SO_4	ICE	NONE	OTHER	DATE	TIME
E-3-1		23														
PTS-1-7		24														
PTS-2-7		25														

ANALYSIS REQUEST

BTEX 602 ☐ 8020 ☐ with MTBE ☐
BTEX/TPH Gas 602/8015 ☐ 8020/8015 ☐ MTBE ☐
TPH as ☐ Gas ☐ Diesel ☐ Jet Fuel
Product I.D. by GC (SIMDIS) ☐
Total Oil & Grease: 413.1 ☐ 413.2 ☐ 503A ☐
Total Petroleum Hydrocarbons: 418.1 ☐ 503E ☐
EPA 601 ☐ 8010 ☐ DCA only ☐
EPA 602 ☐ 8020 ☐
EPA 608 ☐ 8080 ☐ PCBs only ☐
EPA 610 ☐ 8310 ☐
EPA 624 ☐ 8240 ☐ NBS +15 ☐
EPA 625 ☐ 8270 ☐ NBS +25 ☐
EPTOX: Metals ☐ Pesticides ☐ Herbicides ☐
TCLP Metals ☐ VOA ☐ Semi VOA ☐
EPA Priority Pollutant Metals ☐ HSL ☐
LEAD 7420 ☐ 7421 ☐ 239.2 ☐ 6010 ☐ Org. Lead ☐
CAM Metals ☐ STLC ☐ TTLC
Corrosivity ☐ Flashpoint ☐ Reactivity ☐

Received by:	Received by:	Received by Laboratory: Way bill #
Time	Time	Time
Date	Date	Date
Relinquished by Sampler:	Relinquished by:	Relinquished by:

SPECIAL HANDLING

24 HOURS ☐
EXPEDITED 48 Hours ☐
SEVEN DAY ☐
OTHER _____(#) BUSINESS DAYS
QA/QC CLP Level ☐ Blue Level ☐
FAX ☐

SPECIAL DETECTION LIMITS (Specify)

SPECIAL REPORTING REQUIREMENTS (Specify)

REMARKS:

Lab Use Only **Storage Location**

Lot #: **Work Order #:**

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080-C Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 *from inside California*
(800) 423-7143 *from outside California*
(415) 825-0720 (FAX)

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009429, C009430, C009431, C009432, C009433, C009455
Report Issue Date: September 24, 1990

Fred Hayden
Groundwater Technology, Inc.
4080-Pike Lane
Concord, CA 94520

Dear Mr. Hayden:

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories on 09/18/90.

A formal quality control/quality assurance 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 California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to approved protocols.

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

Sincerely,

GTEL Environmental Laboratories, Inc.

Emma P. Popek

Emma P. Popek
Laboratory Director

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009429
Report Issue Date: September 21, 1990

Table 1

ANALYTICAL RESULTS

Purgeable Aromatics in Soil
MODIFIED EPA METHOD 8020[1]

GTEL Sample Number		01			
Client Identification		[redacted]			
Date Sampled		09/18/90			
Date Extracted		09/18/90			
Date Analyzed		09/18/90			
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Benzene	0.005	0.01			
Toluene	0.005	0.01			
Ethylbenzene	0.005	0.01			
Xylene (total)	0.015	0.02			

1 = Extraction by EPA Method 5030

GTEL ENVIRONMENTAL LABORATORIES, INC.

QA Conformance Summary

Purgeable Aromatics in Soil
MODIFIED EPA METHOD 8020

1.0 Blanks

Four of 4 target compounds were below detection limits in the reagent water blank and reagent methanol blank as shown in Tables 2a and 2b.

2.0 Independent QC Check Sample

The control limits were met for 4 out of 4 QC check compounds as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (naphthalene) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Accuracy and Precision

4.1 Percent recovery limits were met for 4 of 4 compounds in the MS and MSD as shown in Table 5.

4.2 Relative percent difference (RPD) criteria was met for 4 of 4 analytes in the MS and MSD as shown in Table 5.

5.0 Sample Handling

5.1 Sample handling and holding time criteria were met for all samples.

5.2 There were no exceptional conditions requiring dilution of samples.

Table 5

MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD)
RECOVERY AND RELATIVE PERCENT DEVIATION (RPD)
REPORT

Purgeable Hydrocarbons in Soil
EPA Method 8240

Date of Analysis: 09/24/90
Sample Spiked: C009522-02

Client ID: E-2-10
Units: ug/Kg

Analyte	Sample Result	Amount Added	MS Result	MSD Result
1,1-Dichloroethene	ND	50	61	55
Trichloroethene	ND	50	57	61
Benzene	ND	50	60	55
Toluene	ND	50	60	61
Chlorobenzene	ND	50	60	57

Analyte	MS, % Recovery	MSD, % Recovery	RPD, %	Acceptability Limits[1]	
				Maximum RPD, %	% Recovery
1,1-Dichloroethene	122	110	10	22	59-172
Trichloroethene	114	122	7	24	62-137
Benzene	120	110	9	21	66-142
Toluene	120	122	2	21	59-139
Chlorobenzene	120	114	5	21	60-133

ND = Not Detected above the statistical detection limit
1 = Acceptability limits are derived from USEPA Contract Laboratory Program (CLP) requirements.

Chain-of-Custody Record

Chevron U.S.A. Inc.
P.O. Box 5004
San Ramon, CA 94583
FAX (415) 842-9591

Chevron Facility Number: 9-6991
Consultant Release Number: 414 66 71
Consultant Project Number: 203 175 33.22
Consultant Name: GTI
Address: 4080 Pike Lane, Concord
Fax Number:
Project Contact (Name): Joe Ramaye / Fred Hayden
(Phone): (415) 671 2387

Chevron Contact (Name): Cynthia Wong
(Phone): (415) 842 9103
Laboratory Name: GTEL
Contract Number: 414 6670
Samples Collected by (Name): Jamie Bothell
Collection Date: 9/21/90
Signature:

Sample Number	Lab Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite	Time	Sample Preservation	Iced	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline + Diesel	503 Oil and Grease	Arom. Volatiles - BTXE Soil: 8020/Wtr.: 602	Arom. Volatiles - BTXE Soil: 8240/Wtr.: 624	Total Lead DHS-Luft	EDB DHS-AB 1803				Remarks
PT-10-7'		1	S		10:00			X	X		X							Please use
PT-S-7'		1	S		10:04			X	X		X							MDL of
PT-S-1-7'		1	S		14:08			X	X		X							1 PPM for
PT-S-2-7'		1	S		14:05			X	X		X							TPH G & D
E-1-10'		1	S		10:52				X	X		X						
E-2-10		1	S		10:54				X	X		X						
E-3-1-10		1	S		11:40				X	X		X						
E-3-2-10		1	S		11:43				X	X		X						
E-4-10'		1	S		10:59				X	X		X						
E-5 10'		1	S		1103				X	X		X						
E-6-10'		1	S		1106				X	X		X						

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	GTI	9-21-90 15:30			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
			Jamie Davis		9/21/90 3:30

Turn Around Time (Circle Choice)
24 Hrs
48 Hrs
5 Days
10 Days

Printed in U.S.A.

MS 5138 (6 89)

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080-C Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 *from inside California*
(800) 423-7143 *from outside California*
(415) 825-0720 (FAX)

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009513,C009514, C009515,C009517
Report Issue Date: September 26, 1990

Joe Ramage
Groundwater Technology, Inc.
4080-D Pike Lane
Concord, CA 94520

Dear Mr. Ramage:

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories on 09/21/90.

A formal quality control/quality assurance 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 California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to approved protocols.

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

Sincerely,

GTEL Environmental Laboratories, Inc.

Emma P. Popek
Laboratory Director

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009517
Report Issue Date: September 26, 1990

Table 1

ANALYTICAL RESULTS

Total Lead in Soil by ICP
EPA Method 6010[1]

Sample Identification		Date Sampled	Date Extracted	Date Analyzed	Concentration, mg/Kg [2]
GTEL No.	Client ID				
C009517-1	SP5-1	09/21/90	09/21/90	09/24/90	97
C009517-2	SP5-2	09/21/90	09/21/90	09/24/90	37
C009517-3	SP4-1	09/21/90	09/21/90	09/24/90	15
C009517-4	SP4-2	09/21/90	09/21/90	09/24/90	16
C009517-5	SP4-3	09/21/90	09/21/90	09/24/90	15
C009517-6	SP3-1	09/21/90	09/21/90	09/24/90	16
C009517-7	SP3-2	09/21/90	09/21/90	09/24/90	19
C009517-8	SP6-2	09/21/90	09/21/90	09/24/90	15
C009517-9	SP6-1	09/21/90	09/21/90	09/24/90	18
C009517-10	SP7	09/21/90	09/21/90	09/24/90	19

1 = Extraction by EPA Method 3050
2 = Method detection limit = 5 mg/Kg; analyte below this level would not be detected.

GTEL ENVIRONMENTAL LABORATORIES, INC.

QA Conformance Summary

Total Lead in Soil by ICP
EPA Method 6010

1.0 Blanks

The method blank was below the detection limit as shown in Table 2.

2.0 Initial Instrument Calibration

The range of concentrations of the initial instrument calibration are shown in Table 3.

3.0 Calibration Verification Standards

3.1 The control limits were met for the initial calibration verification standard (ICVS) as shown in Table 4.

3.2 If applicable, the control limits were met for the continuing calibration verification standard (CCVS) as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

The control limits were met for 1 of 1 elements in the MS as shown in Table 5.

5.0 Sample Duplicate Precision

Relative percent difference criterion was met for the sample duplicate as shown in Table 6.

6.0 Sample Handling

6.1 Sample handling and holding time criteria were met for all samples.

6.2 There were no exceptional conditions requiring dilution of samples.

Table 2

METHOD BLANK DATA

Total Lead in Soil by ICP
EPA Method 6010

Date of Analysis: 09/24/90

Analyte	Concentration, mg/Kg
Total Lead	<5

<# = Not detected at the indicated detection limit.

Table 3

INITIAL CALIBRATION STANDARDS DATA

Total Lead in Soil by ICP
EPA Method 6010

Date of Analysis: 09/24/90

Standard Number	Concentration, mg/L
1	10.0

Table 4

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS RESULTS

Total Lead in Soil by ICP
EPA Method 6010

Date of Analysis: 09/24/90

Initial Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %
Total Lead	5.00	5.13	103	80 - 120
Continuing Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %
Total Lead	5.00	5.63	113	80 - 120

Table 4a

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS SOURCE

Total Lead in Soil by ICP
EPA Method 6010

Initial Calibration Verification Standard		
Analyte	Lot Number	Source
Total Lead	2-57-VS	SPEX
Continuing Calibration Verification Standard		
Analyte	Lot Number	Source
Total Lead	3-83-VS	SPEX

Table 5

MATRIX SPIKE (MS) RECOVERY REPORT

Total Lead in Soil by ICP
EPA Method 6010

Date of Analysis: 09/24/90
Sample Spiked: C009517-05
Client ID: SP4-3
Units: mg/Kg

Analyte	MS Result	Sample Result	Amount Recovered	Amount Added	MS, % Recovery	Acceptability Limits, %
Total Lead	62.3	14.5	47.8	50.0	96	80 - 120

<# = Not detected at the indicated detection limit.

Table 6

LABORATORY DUPLICATE SAMPLE RESULTS
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Total Lead in Soil by ICP
EPA Method 6010

Date of Analysis: 09/24/90
Sample Used: C009517-05
Client ID: SP4-3
Units: mg/Kg

Analyte	Sample Result	Duplicate Result	RPD, %	Maximum RPD, %
Total Lead	62.3	65.1	4	20

GTEL ENVIRONMENTAL LABORATORIES, INC.

Table 2a

REAGENT WATER BLANK DATA

Purgeable Aromatics in Soil
MODIFIED EPA METHOD 8020

Date of Analysis: 09/18/90

Analyte	Concentration, ug/L
Benzene	<0.3
Toluene	<0.3
Ethylbenzene	<0.3
Xylene (total)	<0.6

<# = Not detected at the indicated detection limit.

Table 2b

REAGENT METHANOL BLANK DATA

Purgeable Aromatics in Soil
MODIFIED EPA METHOD 8020

Date of Analysis: 09/18/90
MeOH Lot No:AX 659

Analyte	Concentration, mg/Kg
Benzene	<0.005
Toluene	<0.005
Ethylbenzene	<0.005
Xylene (total)	<0.015

<# = Not detected at the indicated detection limit.

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Purgeable Aromatics in Soil
MODIFIED EPA METHOD 8020

Date of Analysis: 09/14/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Benzene	50	53	106	85-115
Toluene	50	47	94	85-115
Ethylbenzene	50	47	94	85-115
Xylene (total)	150	153	102	85-115

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Purgeable Aromatics in Soil
MODIFIED EPA METHOD 8020

Analyte	Lot Number	Source
Benzene	LA 19042	SUPELCO
Toluene	LA 19042	SUPELCO
Ethylbenzene	LA 19042	SUPELCO
Xylene (total)	LA 19042	SUPELCO

Table 4

SURROGATE COMPOUND RECOVERY

Naphthalene

Purgeable Aromatics in Soil
MODIFIED EPA METHOD 8020

Acceptability Limits[1]: 60 - 130 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Blank	200	177	89
01	200	260	130
MS	200	138	69
MSD	200	169	84

MS = Matrix Spike
MSD = Matrix Spike Duplicate
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Table 5

MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD) RECOVERY
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Purgeable Aromatics in Soil
MODIFIED EPA METHOD 8020

Date of Analysis: 09/18/90
Sample Used: C009365-01 Units: mg/Kg

Analyte	Sample Result	Concentration Added	MS Result	MS, % Recovery	MSD Result	MSD, % Recovery
Benzene	ND	2.86	2.16	76	2.43	85
Toluene	ND	2.86	2.02	71	2.23	78
Ethylbenzene	ND	2.86	2.03	71	2.27	79
Xylene (total)	ND	8.58	6.21	72	6.76	79

Analyte	RPD, %	Maximum RPD, %	Acceptability Limits[1] % Recovery
Benzene	11	30	50 - 112
Toluene	9	30	50 - 108
Ethylbenzene	11	30	50 - 113
Xylene (total)	9	30	50 - 114

< # = Not Detected at the indicated detection limit
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204-72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009430
Report Issue Date: September 20, 1990

Table 1

ANALYTICAL RESULTS

Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8015[1]

GTEL Sample Number		01	02	03	
Client Identification		WOW 15	WOE 15	WOM 15	
Date Sampled		09/18/90	09/18/90	09/18/90	
Date Extracted		09/18/90	09/18/90	09/18/90	
Date Analyzed		09/18/90	09/18/90	09/18/90	
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Gasoline	10	26	< 10	13	

1 = Extraction by EPA Method 5030

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204-72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009430
Report Issue Date: September 20, 1990

QA Conformance Summary

Total Petroleum Hydrocarbons as Gasoline in Soil EPA Method 8015

1.0 Blanks

One of 1 target compound were below detection limits in the reagent water blank and reagent methanol blank as shown in Tables 2a and 2b.

2.0 Independent QC Check Sample

The control limits were met for 1 out of 1 QC check compound as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (naphthalene) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Accuracy and Precision

4.1 Percent recovery limits were met for 4 of 4 compounds in the MS and MSD as shown in Table 5.

4.2 Relative percent difference (RPD) criteria was met for 4 of 4 analytes in the MS and MSD as shown in Table 5.

5.0 Sample Handling

5.1 Sample handling and holding time criteria were met for all samples.

5.2 There were no exceptional conditions requiring dilution of samples.

Table 2a

REAGENT WATER BLANK DATA

Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8015

Date of Analysis: 09/18/90

Analyte	Concentration, ug/L
Gasoline	< 10

<# = Not detected above the indicated detection limit.

Table 2b

REAGENT METHANOL BLANK DATA

Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8015

Date of Analysis: 09/18/90
MeOH Lot No: AX 659

Analyte	Concentration, mg/Kg
Gasoline	<10

<# = Not detected above the indicated detection limit.

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8015

Date of Analysis: 09/18/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Gasoline	1040	1019	98	85 - 115

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8015

Analyte	Source
Gasoline	LA 19042

Table 4

SURROGATE COMPOUND RECOVERY

Naphthalene

Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8015

Acceptability Limits[1]: 60 - 130 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Water Blank	200	177	89
MeOH Blank	200	157	79
01	200	205	103
02	200	130	65
03	200	161	81
MS	200	138	69
MSD	200	169	84

MS = Matrix Spike
MSD = Matrix Spike Duplicate
1 = Acceptability limits are derived from the 99% confidence Interval of all samples during the previous quarter.

Project Number: SFB-175-0204-72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009430
Report Issue Date: September 20, 1990

Table 5

MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD) RECOVERY
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8015

Date of Analysis: 09/18/90
Sample Used: C009365-01

Units: mg/Kg

Analyte	Sample Result	Concentration Added	MS Result	MS, % Recovery	MSD Result	MSD, % Recovery
Benzene	ND	2.86	2.16	76	2.43	85
Toluene	ND	2.86	2.02	71	2.33	78
Ethylbenzene	ND	2.86	2.03	71	2.27	79
Xylene (total)	ND	8.58	6.21	72	6.76	79

Analyte	RPD, %	Maximum RPD, %	Acceptability Limits[1] % Recovery
Benzene	11	30	50 - 112
Toluene	9	30	50 - 108
Ethylbenzene	11	30	50 - 113
Xylene (total)	9	30	50 - 114

< # = Not detected at the indicated detection limit.
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009431
Report Issue Date: September 20, 1990

Table 1

ANALYTICAL RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015[1]

GTEL Sample Number		01	02	03	
Client Identification		TW	ST1	SW 01	
Date Sampled		09/18/90	09/18/90	09/18/90	
Date Extracted		09/18/90	09/18/90	09/18/90	
Date Analyzed		09/18/90	09/18/90	09/18/90	
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Benzene	0.005	0.1	0.01	0.06	
Toluene	0.005	0.01	< 0.005	0.02	
Ethylbenzene	0.005	0.02	0.02	0.02	
Xylene (total)	0.015	0.1	0.07	0.1	
TPH as Gasoline	10	21	17	20	

1 = Extraction by EPA Method 5030

GTEL ENVIRONMENTAL LABORATORIES, INC.

QA Conformance Summary

Purgeable Aromatics and Total Petroleum Hydrocarbons as Gasoline in Soil EPA Method 8020/8015

1.0 Blanks

Five of 5 target compounds were below detection limits in the reagent water blank and reagent methanol blank as shown in Tables 2a and 2b.

2.0 Independent QC Check Sample

The control limits were met for 4 out of 4 QC check compounds as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (naphthalene) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Accuracy and Precision

4.1 Percent recovery limits were met for 4 of 4 compounds in the MS and MSD as shown in Table 5.

4.2 Relative percent difference (RPD) criteria was met for 4 of 4 analytes in the MS and MSD as shown in Table 5.

5.0 Sample Handling

5.1 Sample handling and holding time criteria were met for all samples.

5.2 There were no exceptional conditions requiring dilution of samples.

Table 2a

REAGENT WATER BLANK DATA

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/18/90

Analyte	Concentration, ug/L
Benzene	<0.3
Toluene	<0.3
Ethylbenzene	<0.3
Xylene (total)	<0.6
Gasoline	<50

< # = Not detected at the indicated detection limit.

Table 2b

REAGENT METHANOL BLANK DATA

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/18/90
MeOH Lot No: AX 659

Analyte	Concentration, mg/Kg
Benzene	<0.005
Toluene	<0.005
Ethylbenzene	<0.005
Xylene (total)	<0.015
Gasoline	<10

< # = Not detected at the indicated detection limit.

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/14/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Benzene	50	53	106	85-115
Toluene	50	47	94	85-115
Ethylbenzene	50	47	94	85-115
Xylene (total)	150	153	102	85-115

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Analyte	Lot Number	Source
Benzene	LA14092	Supelco
Toluene	LA14092	Supelco
Ethylbenzene	LA14092	Supelco
Xylene (total)	LA14092	Supelco

Table 4

SURROGATE COMPOUND RECOVERY

Naphthalene

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Acceptability Limits[1]: 60 - 130 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Water Blank	200	177	89
MeOH Blank	200	157	79
01	200	132	66
02	200	144	72
03	200	150	75
MS	200	138	69
MSD	200	169	84

MS = Matrix Spike
MSD = Matrix Spike Duplicate
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009431
Report Issue Date: September 20, 1990

Table 5

MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD) RECOVERY AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Purgeable Aromatics and Total Petroleum Hydrocarbons
as Gasoline in Soil
EPA Method 8020/8015

Date of Analysis: 09/18/90
Sample Used: C009365-01
Client ID: MW-1
Units: mg/Kg

Analyte	Sample Result	Concentration Added	MS Result	MS, % Recovery	MSD Result	MSD, % Recovery
Benzene	ND	2.86	2.16	76	2.43	85
Toluene	ND	8.58	2.02	71	2.23	78
Ethylbenzene	ND	8.58	2.03	71	2.27	79
Xylene (total)	ND	8.58	6.21	72	6.76	79

Analyte	RPD, %	Maximum RPD, %	Acceptability Limits[1] % Recovery
Benzene	11	30	50 - 112
Toluene	9	30	50 - 108
Ethylbenzene	11	30	50 - 113
Xylene (total)	9	30	50 - 114

< # = Not Detected at the indicated detection limit
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009432
Report Issue Date: September 21, 1990

Table 1

ANALYTICAL RESULTS

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015[1]

Sample Identification		Date Sampled	Date Extracted	Date Analyzed	Concentration, mg/Kg[2]
GTEL No.	Client ID				
01	TE	09/18/90	09/18/90	09/19/90	150
02	ST 1	09/18/90	09/18/90	09/19/90	< 10
03	SWO 1	09/18/90	09/18/90	09/19/90	< 10
04	WOW 15	09/18/90	09/18/90	09/19/90	< 10
05	WOE 15	09/18/90	09/18/90	09/19/90	< 10
06	WOM 15	09/18/90	09/18/90	09/19/90	< 10

1 = Extraction by EPA Method 3550
2 = Method detection limit = 10 mg/Kg; analyte below this level would not be detected.

GTEL ENVIRONMENTAL LABORATORIES, INC

QA Conformance Summary

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

1.0 Blanks

The Reagent blank was below the detection limit as shown in Table 2.

2.0 Independent QC Check Sample

The control limits were met for diesel in the aqueous independent QC check sample as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (Octadecane) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

Percent recovery limits were met for diesel in the MS as shown in Table 5.

5.0 Sample Duplicate Precision

Relative percent difference (RPD) criterion was met for diesel in the sample duplicate as shown in Table 6.

6.0 Sample Handling

6.1 Sample handling and holding time criteria were met for all samples.

6.2 There were no exceptional conditions requiring dilution of samples.

Table 2

REAGENT BLANK DATA

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/19/90

Analyte	Concentration, mg/Kg
Diesel	<10

< # = Not detected at the indicated detection limit.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009432
Report Issue Date: September 21, 1990

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/19/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Diesel	1294	1063	82	80 - 120

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Analyte	Source
Diesel	SHELL

GTEL ENVIRONMENTAL LABORATORIES, INC.

Table 4

SURROGATE COMPOUND RECOVERY

Octadecane

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Acceptability Limits[1]: 70 - 130 %

GTEL No.	Expected Result, mg/Kg	Surrogate Result, mg/Kg	Surrogate Recovery, %
Blank	100	98	98
01	100	99	99
02	100	106	106
03	100	99	99
04	100	97	97
05	100	97	97
06	100	97	97
MS	100	87	87

MS = Matrix Spike
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Table 5

MATRIX SPIKE (MS) RECOVERY REPORT

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/19/90
Sample Spiked: C009432-02
Client ID: ST-1
Units: mg/Kg

Analyte	Sample Result	Concentration Added	MS Result	MS, % Recovery	Acceptability Limits, %[1]
Diesel	< 10	500	494	98	63 - 127

1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.
< # = Not detected at the indicated detection limit.

Table 6

LABORATORY DUPLICATE SAMPLE RESULTS
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Total Petroleum Hydrocarbons as Diesel in Soil
Modified EPA Method 8015

Date of Analysis: 09/19/90
Sample Used: C009432-03
Client ID: SW01
Units: mg/Kg

Analyte	Sample Result	Duplicate Result	RPD, %	Maximum RPD, %
Diesel	< 10	< 10	N/A	30

NA = Not Applicable

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-6991
Work Order Number: C009433
Report Issue Date: September 20, 1990

Table 1

ANALYTICAL RESULTS

Total Recoverable Oil and Grease In Soil by Infrared
MODIFIED EPA Method 413.2

Sample Identification		Date Sampled	Date Extracted	Date Analyzed	Concentration, mg/Kg[1]
GTEL No.	Client ID				
01	WQW 15	09/18/90	09/18/90	09/18/90	780
02	WQE 15	09/18/90	09/18/90	09/18/90	160
03	WQM 15	09/18/90	09/18/90	09/18/90	480

1 = Method detection limit = 5.0 mg/Kg; analyte below this level would not be detected.

GTEL ENVIRONMENTAL LABORATORIES, INC.

QA Conformance Summary

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

1.0 Blanks

The method blank was below the detection limit as shown in Table 2.

2.0 Initial Instrument Calibration

The range of concentrations of the initial instrument calibration are shown in Table 3.

3.0 Calibration Verification Standards

3.1 The control limits were met for the initial calibration verification standard (ICVS) as shown in Table 4.

3.2 The control limits were met for the continuing calibration verification standard (CCVS) as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

The control limits were met for the reference oil in the MS as shown in Table 5.

5.0 Sample Duplicate Precision

Relative percent difference (RPD) criterion was met for the sample duplicate as shown in Table 6.

Table 2

METHOD BLANK DATA

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/18/90

Analyte	Concentration, mg/Kg
Oil and Grease	<5

<# = Not detected at the indicated detection limit.

Table 3

INITIAL CALIBRATION STANDARDS DATA

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/18/90

Standard Number	Concentration, mg/L
1	1.0
2	5.0
3	10.0
4	50.0
5	100.0

Table 4

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS RESULTS

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/18/90

Initial Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %[1]
Oil and Grease	5.3	4.9	92	80 - 120
Continuing Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, %[1]
Oil and Grease	5.3	5.0	94	80 - 120

1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Table 4a

INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS SOURCE

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Initial Calibration Verification Standard		
Analyte	Lot Number	Source
Oil and Grease	R07/Stk12	GTEL
Continuing Calibration Verification Standard		
Analyte	Lot Number	Source
Oil and Grease	R06/Stk7	GTEL

GTEL ENVIRONMENTAL LABORATORIES, INC.

Table 5

MATRIX SPIKE (MS) RECOVERY REPORT

Total Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/18/90
Sample Spiked: Sand (EM Science Lot # 9236) Units: mg/Kg

Analyte	MS Result	Sample Result	Amount Recovered	Amount Added	MS, % Recovery	Acceptability Limits, %[1]
Oil and Grease	56.2	9.6	46.6	47.4	98	70 - 130

Table 6

LABORATORY DUPLICATE SAMPLE RESULTS
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Tota Recoverable Oil and Grease in Soil by Infrared
MODIFIED EPA Method 413.2

Date of Analysis: 09/18/90 Client ID: WOW 15
Sample Used: C009433-01 Units: mg/Kg

Analyte	Sample Result	Duplicate Result	RPD, %	Maximum RPD, %
Oil and Grease	784.5	779.3	0.7	20

GTEL ENVIRONMENTAL LABORATORIES, INC.

Project Number: SFB-175-0204.72
Consultant Project Number: 203-175-3322
Contract Number: N46CWC0244-9-X
Facility Number: 9-8991
Work Order Number: C009455
Report Issue Date: September 21, 1990

Table 1

ANALYTICAL RESULTS

Total Petroleum Hydrocarbons
as Gasoline in Water
EPA Method 8015[1]

GTEL Sample Number		01	02		
Client Identification		WOWAT1	WOWAT2		
Date Sampled		09/18/90	09/18/90		
Date Analyzed		09/18/90	09/18/90		
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Gasoline	50	1400	510		

1 = Extraction by EPA Method 5030

GTEL ENVIRONMENTAL LABORATORIES, INC.

QA Conformance Summary

Total Petroleum Hydrocarbons as Gasoline in Water EPA Method 8015

1.0 Blanks

One of 1 target compound was below detection limits in the reagent blank as shown in Table 2.

2.0 Independent QC Check Sample

The control limits were met for 1 out of 1 QC check compound as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (octadecane) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

Percent recovery limits were met for 4 for 4 compounds in the MS as shown in Table 5.

5.0 Reagent Water Spike (WS) and Reagent Water Spike Duplicate (WSD) Accuracy and Precision

5.1 Percent recovery limits were met for 4 of 4 compounds in the WS and WSD as shown in Table 5.

5.2 Relative percent difference (RPD) criteria was met for 4 of 4 analytes in the WS and WSD as shown in Table 5.

6.0 Sample Handling

6.1 Sample handling and holding time criteria were met for all samples.

6.2 There were no exceptional conditions requiring dilution of samples.

Table 2

REAGENT BLANK DATA

Total Petroleum Hydrocarbons
as Gasoline in Water
EPA Method 8015

Date of Analysis: 09/18/90

Analyte	Concentration, ug/L
Gasoline	<50

<# = Not detected at the indicated detection limit.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Table 3

INDEPENDENT QC CHECK SAMPLE RESULTS

Total Petroleum Hydrocarbons
as Gasoline in Water
EPA Method 8015

Date of Analysis: 09/18/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Gasoline	1040	999	96	85 - 115

Table 3a

INDEPENDENT QC CHECK SAMPLE SOURCE

Total Petroleum Hydrocarbons
as Gasoline in Water
EPA Method 8015

Analyte	Source
Gasoline	Shell

Table 4

SURROGATE COMPOUND RECOVERY

Octadecane

Total Petroleum Hydrocarbons
as Gasoline in Water
EPA Method 8015

Acceptability Limits[1]: 70 - 130 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Blank	200	238	119
01	200	248	124
02	200	255	127
MS	200	250	125
WS	200	228	114
WSD	200	216	108

MS = Matrix Spike
WS = Reagent Water Spike
WSD = Reagent Water Spike Duplicate
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Table 5

MATRIX SPIKE (MS) RECOVERY REPORT

Total Petroleum Hydrocarbons
as Gasoline in Water
EPA Method 8015

Date of Analysis: 09/18/90
Sample Used: C009320-02

Client ID: MW9
Units: ug/L

Analyte	Sample Result	Concentration Added	MS Result	MS, % Recovery	Acceptability Limits, % Recovery [1]
Benzene	<0.3	25	29.2	117	71 - 123
Toluene	<0.3	25	28.5	114	69 - 120
Ethylbenzene	<0.3	25	29.1	116	72 - 121
Xylene	<0.6	75	93.5	123	75 - 123

<# = Not Detected at the indicated detection limit
1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Table 6

REAGENT WATER SPIKE (WS) AND REAGENT WATER SPIKE DUPLICATE (WSD) RECOVERY AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Total Petroleum Hydrocarbons
as Gasoline in Water
EPA Method 8015

Date of Analysis: 09/18/90 Units: ug/L

Analyte	Concentration Added	WS Result	WS, % Recovery	WSD Result	WSD, % Recovery
Benzene	25	23.3	93	22.9	92
Toluene	25	22.6	90	21.1	88
Ethylbenzene	25	22.8	91	22.4	90
Xylene	75	74.3	99	73.2	98

Analyte	RPD, %	Maximum RPD, %	Acceptability Limits[1] % Recovery
Benzene	1	30	76 - 120
Toluene	2	30	72 - 117
Ethylbenzene	1	30	73 - 123
Xylene	1	30	81 - 125

1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Chevron U.S.A. Inc.
P.O. Box 5004
San Ramon, CA 94583
FAX (415) 842-9591

Chevron Facility Number 9-6991
Consultant Release Number
Consultant Project Number 203 175 3322
Consultant Name Groundwater Technology
Address 4080 Pike Lane, Concord CA
Fax Number
Project Contact (Name) Fred Hayden / Joe Ramaye
(Phone) (415) 631-2387

Chevron Contact (Name) Cynthia Wine
(Phone) 842 9103
Laboratory Name
Contract Number
Samples Collected by (Name) Fred Hayden
Collection Date
Signature Fred Hayden

Sample Number	Lab Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite	Time	Sample Preservation	Iced	Analyses To Be Performed: Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline + Diesel	503 Oil and Grease	Arom. Volatiles - BTXE Soil: 8020/Wtr.: 602	Arom. Volatiles - BTXE Soil: 8240/Wtr.: 624	Total Lead DHS-Luft	EDB DHS-AB 1803				Remarks
TE		1	S	G	800		X		X		X	[redacted]						Please use
TW		1	S	G	815		X	X			X	[redacted]						Method Detect
STI		1	S	C	910		X		X		X							Limit of
SWOI		1	S	C	1000		X		X		X							1 ppm-soil
							X											for TPH on D & G
WOWIS		1	S	G			X		X	X		X						
WOEIS		1	S	G			X		X	X		X						*Sample TE
WOMIS		1	S	G			X		X	X		X						run TPH-D only
							X											(no TPH-G)
WOWATI		1	W			HCL	X		X	X		X						
WOWAT2		1	W			HCL	X		X	X		X						

Tolerance will be along 8240 work.

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Fred Hayden	GTI	9/18/90 1200			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
			Jamie Kaus		9-18 12:05

Turn Around Time (Circle Choice)
(24 Hrs)
48 Hrs
5 Days
10 Days

Chain-of-Custody Record

Chevron U.S.A. Inc.
P.O. Box 5004
San Ramon, CA 94583
FAX (415) 842-9591

Chevron Facility Number: 9-6991
Consultant Release Number:
Consultant Project Number: 203 175 3322
Consultant Name: Groundwater Technology
Address: 4080 Pike Lane, Concord CA
Fax Number:
Project Contact (Name): Fred Hayden / Joe Ramage
(Phone): (415) 631-2387

Chevron Contact (Name): Cynthia Wong
(Phone): 842 9103
Laboratory Name:
Contract Number:
Samples Collected by (Name): Fred Hayden
Collection Date:
Signature: Fred Hayden

Sample Number	Lab Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite	Time	Sample Preservation	Iced	Analyses To Be Performed: Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline + Diesel	503 Oil and Grease	Arom. Volatiles - BTXE Soil: 8020/Wtr.: 602	Arom. Volatiles - BTXE Soil: 8240/Wtr.: 624	Total Lead DHS-Luft	EDB DHS-AB 1803				Remarks
TE		1	S	G	800		X		X		X	[redacted]						Please use Method Detect. limit of 1 ppm-soil for TPH on D & G
TW		1	S	G	815		X	X			X	[redacted]						
STI		1	S	C	910		X		X		X							
SWOI		1	S	C	1000		X		X		X							
							X											
WOWIS		1	S	G			X		X	X		X						
WOEIS		1	S	G			X		X	X		X						*Sample TE run TPH-D only (Do TPH-G)
WOMIS		1	S	G			X		X	X		X						
							X											
WOWATI		1	W			HCL	X		X	X		X						
WOWAT2		1	W			HCL	X		X	X		X						

Tolerance will be doing 8240 work.

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Fred Hayden	GTI	9/18/90 12PM			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
			Jamie Davis		9-18 R:05

Turn Around Time (Circle Choice)
(24 Hrs)
48 Hrs
5 Days
10 Days