Chevron

Chevron U.S.A. Products Company
2410 Camino Ramon
San Ramon, CA 94583

Marketing Department
Phone 510 842 9500

December 8, 1993

Ms. Eva Chu
Alameda County Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Re: Former Chevron Service Station No. 9-7127
Highway I-580 and Grantline Rd.
Tracy, California

Dear Ms. Chu :

Pacific Environmental Group (PEG) installed two off-site monitoring wells and drilled one on-site soil boring. The results of the investigation is documented in PEG's report dated December 3, 1993.

Chevron will select a consultant to monitor and sample the monitoring wells (MW-1 through MW-5) on a quarterly basis. Results from the sampling event will be sent to your office for review.

Please refer to the enclosed report for additional information. If you have any questions or comments, please feel free to call me at (510) 842-8752.

Sincerely,

Chevron U.S.A. Products Co.

Kenneth Kan
Engineer

LKAN/MacFile 9-7127R7

Enclosure

cc: Mr. Eddy So, RWQCB-S.F.Bay Region
2101 Webster Street, Suite 500, Oakland, CA 94612

William S. Carnazzo, M.D., Carnazzo Land Company, Inc.
P.O. Box 6031, Atascadero, CA 93423

Mr. & Mrs. Joe Jess, Jess Ranch
Route 5, Box 704-A, Tracy, CA 95376

Ms. Bette Owen, Chevron U.S.A.Products Co.

DEC 8 '93 J.M.M.

PACIFIC
ENVIRONMENTAL
GROUP, INC.

December 3, 1993
Project 325-04.04

Mr. Kenneth Kan
Chevron U.S.A. Products Company
P.O. Box 5004
San Ramon, California 94583-0804

Re: Former Chevron U.S.A. Service Station 9-7127
Interstate 580 at Grant Line Road
Tracy, California

Dear Mr. Kan:

This report, prepared by Pacific Environmental Group, Inc. (PACIFIC), documents the installation of off-site groundwater Monitoring Wells MW-4/B-2 and MW-5/B-4 and drilling of on-site soil Boring B-3 at the site referenced above. This investigation was conducted in accordance with the Alameda County Health Care Services regulatory oversight program. The purpose of this investigation was to investigate groundwater conditions upgradient, crossgradient, and downgradient of the site. The investigation was performed in accordance with the PACIFIC *Work Plan*, dated June 4, 1993.

This report includes a discussion of the scope of work of the investigation and the findings of the investigation including subsurface conditions and soil and groundwater analytical results. A detailed description of site background, regional hydrogeologic setting, and previous investigations is contained in PACIFIC's investigation report, dated March 22, 1993. Field and laboratory procedures are presented as Attachment A. Boring logs, well completion data, and well elevation survey data are presented as Attachment B. Certified analytical reports and chain-of-custody documentation are presented as Attachment C.

Note: work performed in May 1993
WP submitted June 1993

SCOPE OF WORK

PACIFIC supervised the installation of Wells MW-4/B-2 and MW-5/B-4 and Boring B-3 on May 21 and 25, 1993 (Figure 1). Groundwater "grab" samples were collected from each borehole. Soil samples collected at 5-foot depth intervals were screened for hydrocarbons using an HNU Model PI-101 photo-ionization detector (PID). Selected soil samples and groundwater "grab" samples were analyzed in the laboratory and correlated with PID analysis. Each well was then

developed and sampled. Selected soil and groundwater samples were analyzed for total petroleum hydrocarbons calculated as gasoline (TPH-g), benzene, toluene, ethylbenzene, and xylenes (BTEX compounds). In addition, PACIFIC prepared an extended site map depicting the site and including Interstate 580, and the surface water catch basin (Figure 2).

FINDINGS

Subsurface Conditions

Soil lithology encountered during this investigation was as anticipated and consisted of a surficial fill prism where the station was located, underlain by sandstone bedrock. Boring B-3 and Well MW-5/B-4 were drilled outside the surficial fill prism. Groundwater was therefore encountered at a shallower depth than Well MW-4/B-2, which was drilled through surficial fill. Groundwater was encountered during drilling at approximately 14 and 15 feet below ground surface (bgs) in Boring B-3 and Well MW-5/B-4, respectively. Groundwater in Well MW-4/B-2 was encountered at a depth of approximately 27 feet bgs.

Soils Analysis

Soil samples collected from Well MW-5/B-4 and the spoils pile on May 25, 1993, were analyzed for TPH-g and BTEX compounds. No detectable TPH-g or BTEX compounds were present in the samples (Table 1). ~~Soil samples were not analyzed from Boring B-3 or Well MW-4/B-2 as they were not drilled in areas of potential hydrocarbon sources.~~ Soil analytical data are presented in Table 1.

Borings B-5 and B-6 were not drilled during this investigation. These borings were proposed to investigate hydrocarbons in groundwater further downgradient of Boring B-3, and further crossgradient of Boring B-4. Boring B-5 was proposed in the offramp of Interstate 580. Encroachment in this area has not been secured from Caltrans; therefore, Boring B-5 was not drilled.

Boring B-6 was proposed, if further definition of hydrocarbons in groundwater was necessary, east of Boring B-4. Additional definition of groundwater to the east was unnecessary. TPH-g and benzene were not detected during the screening of soil and groundwater "grab" samples analyzed in the laboratory from Boring B-4.

Groundwater Analysis

Groundwater "grab" samples collected from each borehole were analyzed for TPH-g and BTEX compounds. TPH-g was not detected in the groundwater "grab" samples collected from Borings B-2 and B-4 (Table 2). Benzene was detected in the "grab" sample collected from Well MW-4/B-2 at a concentration of 12 parts

per billion (ppb). Borings B-2 and B-4 were converted to 2-inch diameter groundwater monitoring wells and designated Wells MW-4 and MW-5, respectively.

The groundwater "grab" sample collected from Boring B-3 contained TPH-g at a concentration of 96 ppb and benzene at a concentration of 1 ppb. This boring was backfilled with cement grout via tremie pipe.

Groundwater samples collected after well development from Well MW-4\B-2 contained TPH-g and benzene at concentrations of 300 and 5.6 ppb, respectively (Table 2). TPH-g and benzene were not detected in groundwater samples collected from Well MW-5\B-4.

If there are any questions regarding the contents of this report, please do not hesitate to call.

Sincerely,

Pacific Environmental Group, Inc.

Steven E. Krcik
Senior Geologist
RG 4976

REGISTERED GEOLOGIST
STEVEN E. KRCIK
No. 4976
12/6/94
STATE OF CALIFORNIA

Attachments:
Table 1 - Soil Analytical Data - Total Petroleum Hydrocarbons (TPH as Gasoline and BTEX Compounds)
Table 2 - Groundwater Analytical Data - Total Petroleum Hydrocarbons (TPH as Gasoline and BTEX Compounds)
Figure 1 - Site Map
Figure 2 - Extended Site Map
Attachment A - Field and Laboratory Procedures
Attachment B - Boring Logs, Well Completion Data, and Well Elevation Survey Data
Attachment C - Certified Analytical Reports and Chain-of-Custody Documentation

Table 1
Soil Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

Former Chevron U.S.A. Service Station 9-7127
Interstate 580 at Grant Line Road
Tracy, California

Boring Number	Date Sampled	Sample Depth (feet)	TPH as Gasoline (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Xylenes (ppm)
MW-5/B-4	05/25/93	10	ND	ND	ND	ND	ND
		15	ND	ND	ND	ND	ND
SPOILS	05/25/93	N/A	ND	ND	ND	ND	ND
Detection Limits:			1.0	0.005	0.005	0.005	0.015

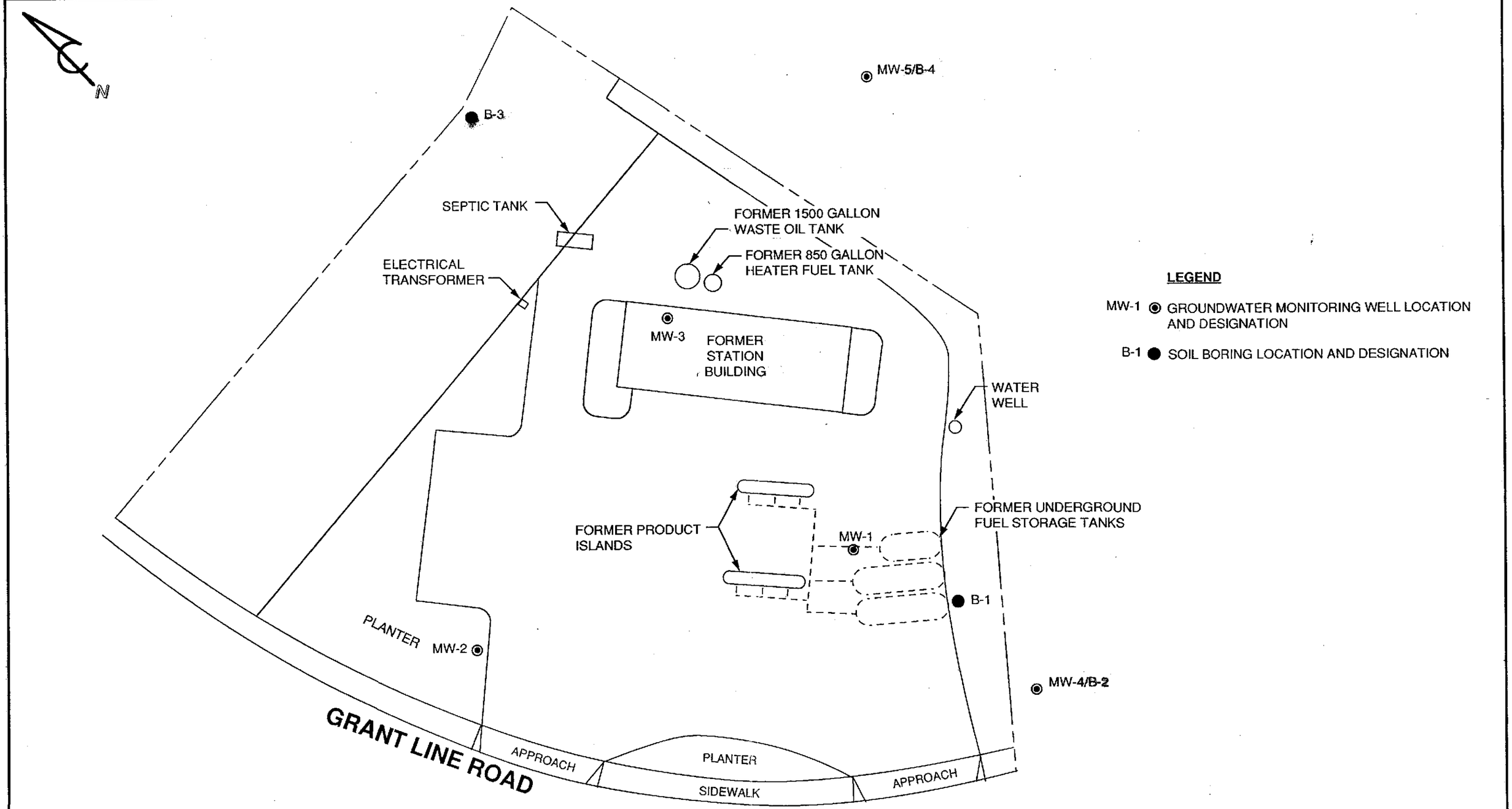
ppm = Parts per million
ND = Not detected
N/A = Not applicable

Table 2
[redacted]ter Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

Former Chevron U.S.A. Service Station 9-7127
Interstate 580 at Grant Line Road
Tracy, California

Boring Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
(Grab Sample) MW-4/B-2	05/21/93	ND	12	2	ND	1
B-3	05/21/93	96	1	0.5	ND	ND
(Grab Sample) MW-5/B-4	05/25/93	ND	ND	ND	ND	0.9
MW-4	05/25/93	300	56	10	0.8	3
MW-5	05/25/93	ND	ND	ND	ND	ND
Detection Limits:		50	0.5	0.5	0.5	0.5

ppb = Parts per billion
ND = Not detected at or above limit of detection.



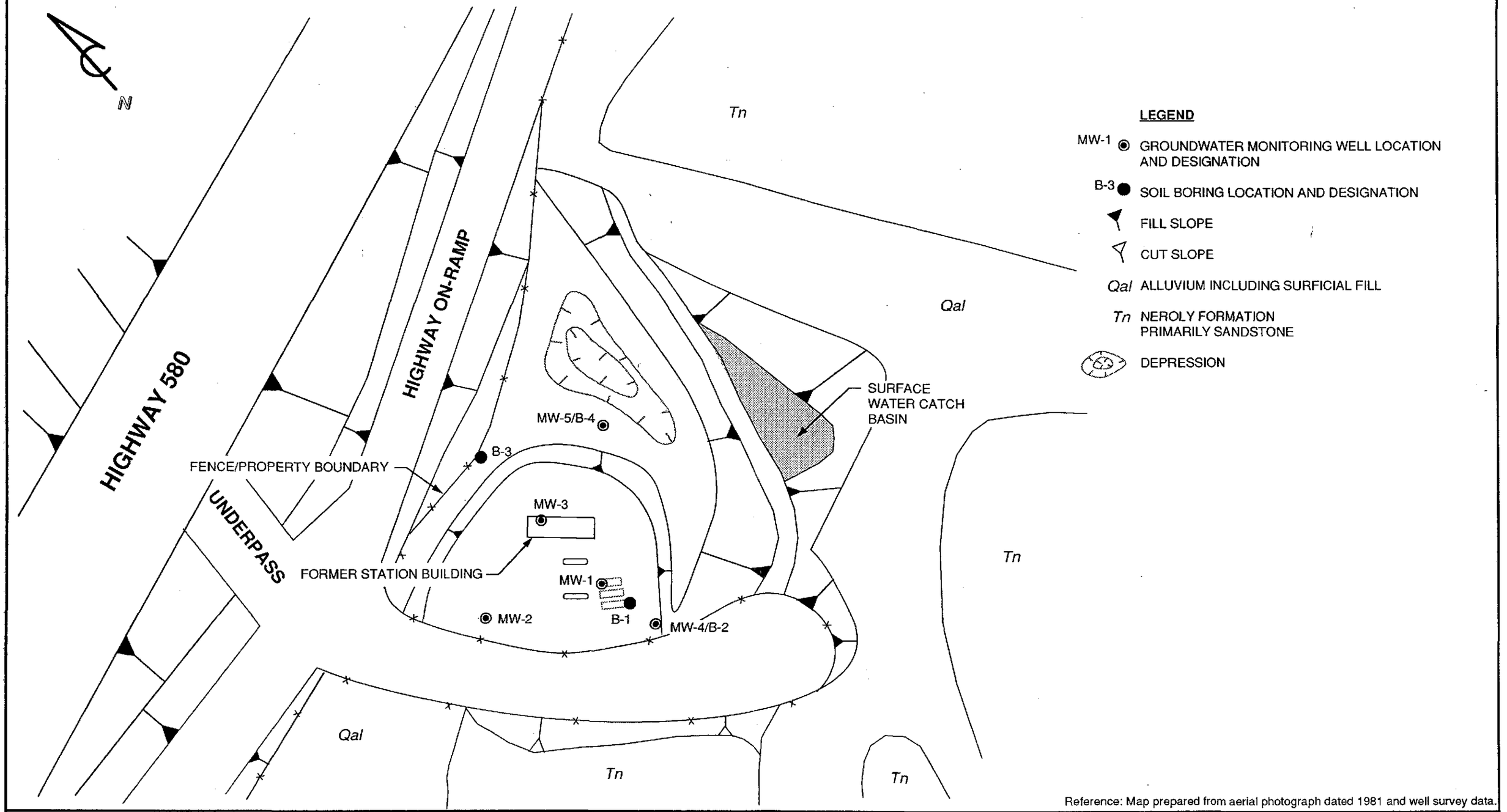
PACIFIC ENVIRONMENTAL GROUP, INC.

SCALE
0 30 60 FEET

FORMER CHEVRON USA SERVICE STATION 9-7127
I-580 at Grant Line Road
Tracy, California

SITE MAP

FIGURE:
1
PROJECT:
325-04.04



Reference: Map prepared from aerial photograph dated 1981 and well survey data.

PACIFIC ENVIRONMENTAL GROUP, INC.

APPROXIMATE SCALE
0 100 200 FEET

FORMER CHEVRON USA SERVICE STATION 9-7127
I-580 at Grant Line Road
Tracy, California

EXTENDED SITE MAP

FIGURE: **2**
PROJECT: 325-04.04

ATTACHMENT A

FIELD AND LABORATORY PROCEDURES

ATTACHMENT A
FIELD AND LABORATORY PROCEDURES

Soil Boring and Monitoring Well Installation

The soil borings were drilled using air rotary drilling equipment and logged by a Pacific Environmental Group, Inc. geologist using the Unified Soil Classification System and standard geologic techniques. Soil samples for logging and chemical analysis from Borings B-2 through B-4 were collected using a split-spoon sampler with brass sample liners. Soil samples for chemical analysis were retained in the brass liners, capped with Teflon squares and plastic end caps, and sealed in zip-lock bags. The samples were placed on ice and transported to the laboratory accompanied by the appropriate chain-of-custody documentation. The drilling equipment was steam-cleaned after each boring. Soil Boring B-3 was backfilled to the ground surface with cement grout.

Borings B-2 and B-4 were converted to groundwater monitoring wells (MW-4 and MW-5) by the installation of 2-inch diameter, flush-threaded Schedule 40 PVC casing with 0.020-inch factory-slotted screen. Graded 2 x 12 sand pack was placed in the annular space across the screened interval, and the wells were surge-blocked to remove void spaces in the sand pack. A bentonite and concrete seal was placed from the top of the sand pack to the ground surface. A locking cap and protective vault box were installed on the top of each well. Well elevations were surveyed by a licensed surveyor to an accuracy of 0.01 foot, relative to a benchmark. Three hundred feet must be added to all elevations to bring them to the US Geological Survey mean sea level datum.

Organic Vapor Procedures

Soil samples collected during drilling were analyzed in the field for ionizable organic compounds using the HNU Model PI-101 photo-ionization detector (PID) with a 10.2 eV lamp. The test procedure involves measuring approximately 30 grams from an undisturbed soil sample, placing this subsample in a clean glass jar, and sealing the jar with aluminum foil secured under a ring-type threaded lid. The jar is warmed for approximately 20 minutes, then the foil is pierced and the head-space within the jar is tested for total organic vapor, measured in parts per million as benzene (ppm;

volume/volume). The instrument was previously calibrated using a 100-ppm isobutylene standard (in air) and a sensitivity factor of 0.7, which relates the photo-ionization sensitivity of benzene (10.0 ppm) to the ionization potential of isobutylene (7.0 ppm).

Groundwater "Grab" Sampling

Groundwater "grab" samples were collected from each boring from 2-inch diameter, 0.020-inch factory-slotted casing temporarily installed in each boring. The groundwater samples were collected using a Teflon bailer and placed into appropriate EPA-approved containers. The samples were labeled, logged onto chain-of-custody documents, and transported on ice to the laboratory.

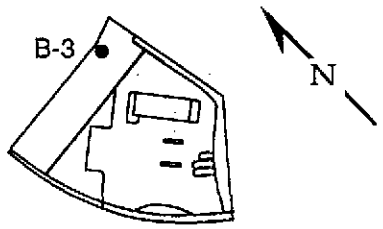
Laboratory Procedures

Selected soil samples and each groundwater "grab" sample were analyzed in the laboratory for the presence of total petroleum hydrocarbons calculated as gasoline (TPH-g), benzene, toluene, ethylbenzene, and xylenes (BTEX compounds). Analysis for TPH-g and BTEX compounds was by EPA Methods 8015 (modified) and 8020. Final analysis was performed by the purge and trap technique with final detection by gas chromatography using a flame-ionization detector and a PID. All analyses were performed by a state-certified laboratory.

ATTACHMENT B

BORING LOGS, WELL COMPLETION DATA, AND WELL ELEVATION SURVEY DATA

LOCATION MAP



PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-3
PAGE 1 OF 1

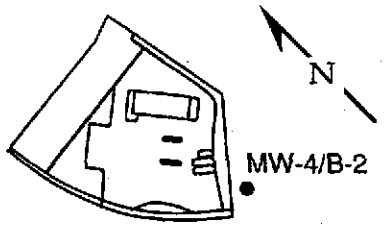
PROJECT NO. 325-04.04
LOGGED BY: CJM
DRILLER: Great Sierra
DRILLING METHOD: AIR
SAMPLING METHOD: CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: Chevron
DATE DRILLED: 5-21-93
LOCATION: Grant Line Road
HOLE DIAMETER: 94 mm
HOLE DEPTH: 25'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
Backfilled With Cement	Mst	0		6			SS	SANDSTONE (Neroly Formation): green; >85% coarse sand; subangular; lithic fragments; moderate to hard no product odor.
	Dp	0		16				@15': bluish/green; 90% medium to fine sand; quartz; no lithic fragments; moderate to hard, no product odor.
								BOTTOM OF BORING 25'

2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44

LOCATION MAP



PACIFIC ENVIRONMENTAL GROUP, INC.

WELL NO. MW-4/B-2
PAGE 1 OF 1

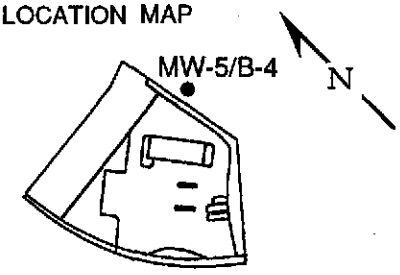
PROJECT NO. 325-04.04
LOGGED BY: AFW
DRILLER: Great Sierra
DRILLING METHOD: AIR
SAMPLING METHOD: CORE
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2 X 12 Sand

CLIENT: Chevron
DATE DRILLED: 5-21-93
LOCATION: Grant Line Road
HOLE DIAMETER: 8 7/8"
HOLE DEPTH: 37'
WELL DIAMETER: 2"
WELL DEPTH: 37"
CASING STICKUP: 3'

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
GROUT	Dp	0	push	6			SC	CLAYEY SAND - FILL: dark brown; 30-40% fines; abundant lithic fragments; loose; no product odor.
	Dp	0.1		10			SS	SANDSTONE (Neroly Formation): olive green >90% fine to medium sand; subangular quartz, lithic fragments, and weakly altered feldspar; faint product odor.
BENTONITE								
SAND	Wt	2.0		30				@30': as above; no product odor.

2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44

LOCATION MAP



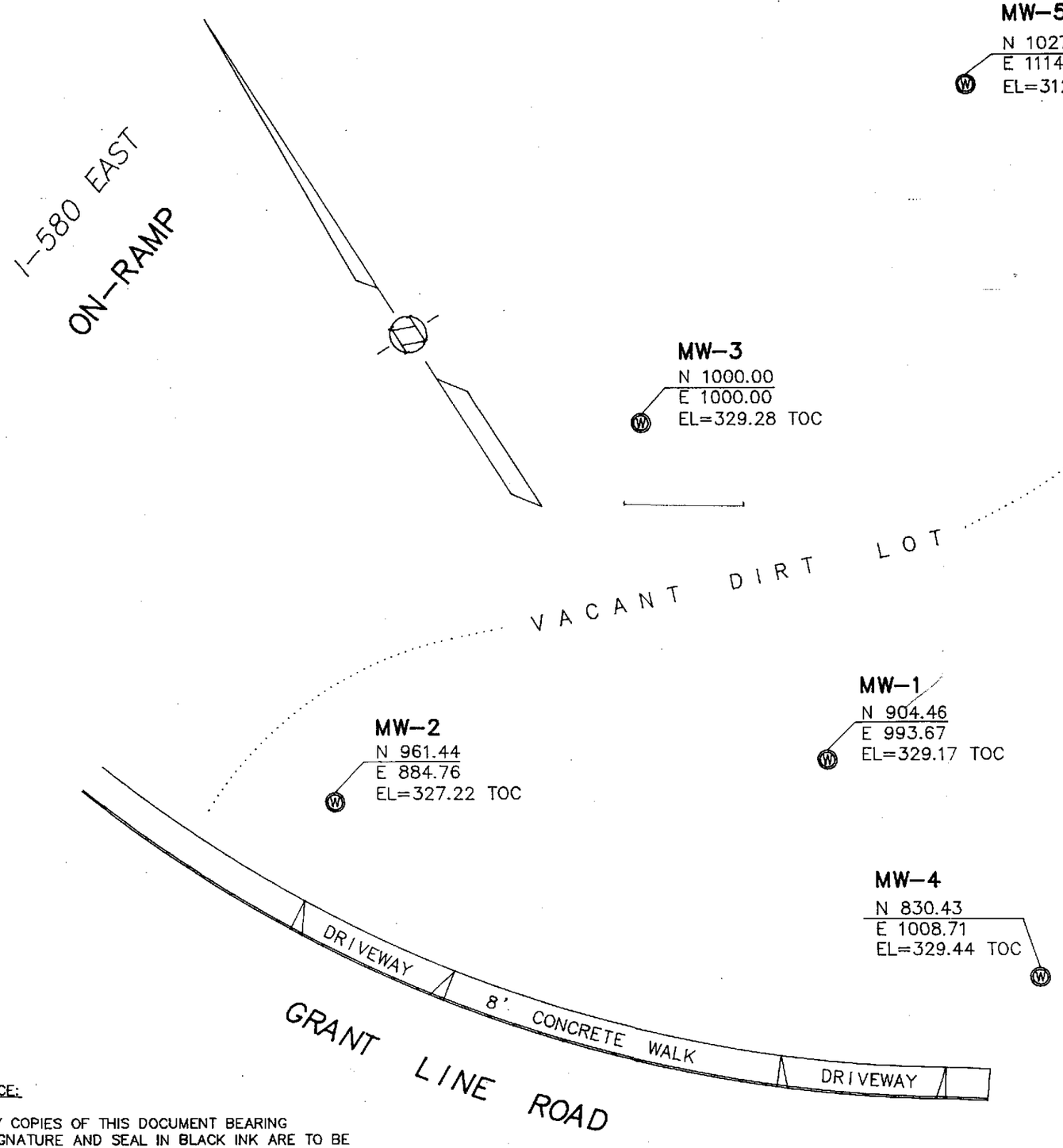
PACIFIC ENVIRONMENTAL GROUP, INC.

WELL NO. MW-5/B-4
PAGE 1 OF 1

PROJECT NO. 325-04.04
LOGGED BY: CJM
DRILLER: Great Sierra
DRILLING METHOD: AIR
SAMPLING METHOD: CORE
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2 X 12 SAND

CLIENT: Chevron
DATE DRILLED: 5-25-93
LOCATION: Grant Line Road
HOLE DIAMETER: 8 7/8"
HOLE DEPTH: 25'
WELL DIAMETER: 2"
WELL DEPTH: 25'
CASING STICKUP: 3'

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
GROUT, BENTONITE, SAND	Mst	0		2–44				SS	SANDSTONE: greenish brown; 90% coarse sand; lithic fragments; no product odor.
									@10': grayish brown; 90% coarse to medium sand; subrounded to subangular; lithic fragments; hard to very hard; no product odor.
	Wt	0							BOTTOM OF BORING 25'



NOTES:

1. VERTICAL DATUM: EXISTING WELL CASING ELEVATIONS AS PROVIDED BY PACIFIC ENVIRONMENTAL GROUP.
2. COORDINATE BASIS: LOCAL.
3. TOC = TOP OF PVC CASING.

LICENSED LAND SURVEYOR
BRUCE T. TRONOFF
EXP. 12/31/94
NO. 6415
STATE OF CALIFORNIA

GROUNDWATER MONITORING WELL SURVEY

I-580 AT GRANTLINE ROAD

ALTAMONT PASS AREA, ALAMEDA COUNTY, CALIFORNIA

PEG PROJECT NO. 325-04.04

FOR

PACIFIC ENVIRONMENTAL GROUP

BY

TRONOFF LAND SURVEYING

516 HUBBLE STREET
DAVIS, CALIFORNIA 95616
(916) 758-4599

SCALE: 1"= 30' NOVEMBER 2, 1993

SURVEY NO. 2684 SJP

ATTACHMENT C

CERTIFIED ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region
4080-C Pike Lane
Concord, CA 94520
(510) 685-7852
(800) 544-3422 *from inside California*
(800) 423-7143 *from outside California*
(510) 825-0720 (FAX)

June 11,1993

Mr. Ed Buskirk
Pacific Environmental Group, Inc.
2025 Gateway Place #440
San Jose, CA 95110

re: Resampling of Chevron facility # 9-7127 (Tracy)

Dear Ed:

Due to mishandling of the water sample, B4, it will have to be resampled. GTEL regrets to have caused this inconvience and we will gladly pay the resampling costs.

Thank you for the quick response in calculating the resampling costs and I have issued a Purchase Order for this. When you resample please send the bill in to my attention with reference to this PO: # 141658.

Thanks for your understanding. If you have any questions or need sample containers give me a call (510) 685-7852.

Sincerely,
GTEL Environmental Laboratories, Inc

William Svoboda

William Svoboda
Technical Project Manager

cc: Maree Doden, Pacific Environmental Group, Inc., Sample Coordinator
Steve Krcik, Pacific Environmental Group, Inc., Senior Geologist
Barbara Heineman, Pacific Environmental Group, Inc., Controller

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

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

Client Number: PAC01CHV08
Consultant Project Number: 3250404
Facility Number: 9-7127
Project ID: Grantlin RD. @ Hwy. 58
Work Order Number: C3-05-0514

June 10, 1993

Maree Doden
Pacific Environmental Group
2025 Gateway Pl., Ste. 440
San Jose, CA 95110

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 05/27/93.

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

GTEL is certified by the California State Department of Health Services, Laboratory certificate numbers 194 and 1075, to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA 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.

Eileen F. Bullen

Eileen F. Bullen
Laboratory Director

Client Number: PAC01CHV08
Consultant Project Number: 3250404
Facility Number: 9-7127
Project ID: Grantlin RD. @ Hwy. 58
Work Order Number: C3-05-0514

Table 1

ANALYTICAL RESULTS

Aromatic Volatile Organics and Total Petroleum Hydrocarbons as Gasoline in Water

EPA Methods 5030, 8020, and Modified 8015[a]

GTEL Sample Number		01*	M60993		
Client Identification		B4	METHOD BLANK		
Date Sampled		05/25/93	--		
Date Analyzed		06/09/93	06/09/93		
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	<0.5	<0.5		
Toluene	0.5	<0.5	<0.5		
Ethylbenzene	0.5	<0.5	<0.5		
Xylene, total	0.5	0.9	<0.5		
BTEX, total	--	1	--		
TPH as Gasoline	50	<50	<50		
Detection Limit Multiplier		1	1		
BFB surrogate, % recovery		118	122		

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Control Board LUFT Manual protocols, May 1988 revision. Bromofluorobenzene surrogate recovery acceptability limits are 70 - 130%.

* Sample was analyzed 15 days after sampling.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Client Number: PAC01CHV08
Consultant Project Number: 3250404
Facility Number: 9-7127
Project ID: Grantlin RD. @ Hwy. 58
Work Order Number: C3-05-0514

ANALYTICAL RESULTS

Volatile Organics in Soil

EPA Methods 8020 and Modified 8015[a]

GTEL Sample Number		02	03	04	0605F
Client Identification		B4(10')	B4(15')	SPOILS COMPOSITE	METHOD BLANK
Date Sampled		05/25/93	05/25/93	05/25/93	--
Date Extracted		06/05/93	06/05/93	06/03/93	NA
Date Analyzed		06/05/93	06/05/93	06/05/93	06/05/93
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
BTEX, total	--	--	--	--	--
Gasoline	1	<1	<1	<1	<1
Detection Limit Multiplier		1	1	1	1
Percent solids		85.9	84.2	90.4	NA
BFB surrogate, % recovery		102	73.1	73.1	79.6

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual procedures. Bromofluorobenzene surrogate recovery acceptability limits are 60-140%

NA = Not Applicable.

GTEL ENVIRONMENTAL LABORATORIES, INC.

QC Acceptability Limits

Analyte	QC Check Sample Recovery (%)	Duplicate Air Sample RPD (%)	Matrix Spike Recovery (%)
Modified EPA 8020:			
Benzene	---	38	---
Toluene	---	34	---
Ethylbenzene	---	48	---
Xylene, total	---	34	---
Modified EPA 8015:			
Gasoline	---	---	---

GTEL ENVIRONMENTAL LABORATORIES, INC.

QC Acceptability Limits

Analyte	QC Check Sample Recovery (%)	Duplicate Water Sample RPD (%)	Duplicate Soil Sample RPD (%)	Water Matrix Spike Recovery (%)	Soil Matrix Spike Recovery (%)	Reagent Water Spike Recovery (%)
EPA 8310:						
Fluorene	80 - 120	68	---	---	---	49 - 116
Anthracene	80 - 120	41.7	---	---	---	24 - 116
Chrysene	80 - 120	65.2	---	---	---	44 - 128
Benzo(a)pyrene	80 - 120	52.8	---	---	---	26 - 126
Naphthalene	80 - 120	42.3	---	---	---	51 - 106
EPA 8240:						
All 8240 Compounds	60 - 140	---	---	---	---	---
Trichloroethene	---	14	24	71 - 120	62 - 137	71 - 120
Toluene	---	13	21	76 - 125	59 - 139	76 - 125
Chlorobenzene	---	13	21	75 - 130	60 - 133	75 - 130
1,1-Dichloroethene	---	14	22	61 - 145	59 - 172	61 - 145
Benzene	---	11	21	76 - 127	66 - 142	76 - 127
TPH/IR:	80 - 120	20	20	70 - 130	70 - 130	70 - 130
Metals:						
Arsenic	90 - 110	20	20	80 - 120	80 - 120	80 - 120
Barium	90 - 110	20	20	80 - 120	80 - 120	80 - 120
Cadmium	90 - 110	20	20	80 - 120	80 - 120	80 - 120
Chromium	90 - 110	20	20	80 - 120	80 - 120	80 - 120
Iron	90 - 110	20	20	80 - 120	80 - 120	80 - 120
Lead	90 - 110	20	20	80 - 120	80 - 120	80 - 120
Manganese	90 - 110	20	20	80 - 120	80 - 120	80 - 120
Mercury	90 - 110	20	20	80 - 120	80 - 120	80 - 120
Selenium	90 - 110	20	20	80 - 120	80 - 120	90 - 110
Silver	90 - 110	20	20	80 - 120	80 - 120	90 - 110
Wet Chemistry:						
TOC	90 - 110	20	NA	90 - 110	NA	90 -110

NA = Not Applicable.

GTEL ENVIRONMENTAL LABORATORIES, INC.

QC Acceptability Limits

Analyte	QC Check Sample Recovery (%)	Duplicate Water Sample RPD (%)	Duplicate Soil Sample RPD (%)	Water Matrix Spike Recovery (%)	Soil Matrix Spike Recovery (%)	Reagent Water Spike Recovery (%)
Modified EPA 8020:						
Benzene	80 - 120	30	30	55 - 129	24 - 127	70 - 147
Toluene	80 - 120	30	30	72 - 149	17 - 124	67 - 150
Ethylbenzene	80 - 120	30	30	75 - 138	19 - 129	69 - 145
Xylene, total	80 - 120	30	30	74 - 147	23 - 124	71 - 152
Modified EPA 8015:						
Gasoline	---	30	30	---	---	---

Analyte	QC Check Sample Recovery (%)	Duplicate Water Sample RPD (%)	Duplicate Soil Sample RPD (%)	Water Matrix Spike Recovery (%)	Soil Matrix Spike Recovery (%)	Reagent Water Spike Recovery (%)
Diesel	---	30	30	63 - 127	58 - 144	48 - 134
EPA 8010/8020:						
Chlorobenzene	80 - 120	30	---	34 - 134	58 - 126	62 - 111
Benzene	80 - 120	30	---	66 - 118	24 - 127	58 - 127
Toluene	80 - 120	30	---	53 - 115	17 - 124	60 - 120
Ethylbenzene	80 - 120	30	---	43 - 131	19 - 129	58 - 126
Xylene, total	80 - 120	30	---	55 - 115	23 - 124	63 - 128
1,1-Dichloroethene	80 - 120	30	---	30 - 160	72 - 116	56 - 138
Trichloroethene	80 - 120	30	---	78 - 184	79 - 120	82 - 187
EPA 8080:						
Heptachlor	80 - 120	30	---	---	34 - 111	34 - 111
Aldrin	80 - 120	30	---	---	42 - 122	42 - 122
DDE	80 - 120	30	---	---	30 - 145	30 - 145
Dieldrin	80 - 120	30	---	---	36 - 146	36 - 146
Endrin	80 - 120	30	---	---	30 - 147	30 - 147
DDD	80 - 120	30	---	---	31 - 141	31 - 114
DDT	80 - 120	30	---	---	10 - 180	10 - 180
Arochlor 1260	45 - 127	30	---	---	53 - 128	53 - 128

Client Number: PAC01CHV08
Consultant Project Number: 3250404
Facility Number: 9-7127
Project ID: Grantlin RD. @ Hwy. 58
Work Order Number: C3-05-0514

QC Matrix Spike and Duplicate Spike Results

Matrix: Soil

Analyte	Sample ID	Date of Analysis	Spike Amount	Units	Recovery, %	Duplicate Recovery, %	RPD[a], %
Modified EPA 8020:							
Benzene	Sand Spike	05/06/93	0.050	mg/Kg	92.0	NA	NA
Toluene	Sand Spike	05/06/93	0.050	mg/Kg	92.0	NA	NA
Ethylbenzene	Sand Spike	05/06/93	0.050	mg/Kg	88.0	NA	NA
Xylene, total	Sand Spike	05/06/93	0.150	mg/Kg	111	NA	NA

Sample and Sample Duplicate Results

Matrix: Soil

Analyte	Sample ID	Date of Analysis	Sample Results	Sample Duplicate Results	Units	RPD[a], %
Modified EPA 8020:						
Benzene	C3060064-09	06/05/93	ND	ND	mg/Kg	NA
Toluene	C3060064-09	06/05/93	ND	ND	mg/Kg	NA
Ethylbenzene	C3060064-09	06/05/93	ND	ND	mg/Kg	NA
Xylene, total	C3060064-09	06/05/93	ND	ND	mg/Kg	NA

a. See attached table for acceptability limits.
NA = Not Applicable.
ND = Not Detected.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Client Number: PAC01CHV08
Consultant Project Number: 3250404
Facility Number: 9-7127
Project ID: Grantlin RD. @ Hwy. 58
Work Order Number: C3-05-0514

QC Matrix Spike and Duplicate Spike Results

Matrix: Water

Analyte	Sample ID	Spike Amount	Units	Recovery, %	Duplicate Recovery, %	RPD, %	Control Limits
Modified EPA 8020:							
Benzene	Reagent Water	20.0	ug/L	101	104	2.9	70 - 147
Toluene	Reagent Water	20.0	ug/L	106	109	2.8	67 - 150
Ethylbenzene	Reagent Water	20.0	ug/L	104	107	2.8	69 - 145
Xylene, total	Reagent Water	60.0	ug/L	114	116	1.7	71 - 152

GTEL ENVIRONMENTAL LABORATORIES, INC.

Fax copy of Lab Report and COC to Chevron Contact: ☐ No

Chain of Custody

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

Chevron Facility Number 9-7127
Facility Address grantline Rd @ Hwy 58
Consultant Project Number 325040.4
Consultant Name Pacific Environmental Group
Address 2025 Gateway Place Ste.440 San Jose 95110
Project Contact (Name) MAREE Doden
(Phone) (408)441-7500 (Fax Number) 441-7539

Chevron Contact (Name) Kenneth KAN
(Phone) FAX 842 9654
Laboratory Name GTEL
Laboratory Release Number 6679730
Samples Collected by (Name) CJ Motosicky
Collection Date 5-25-93
Signature CJ Motosicky

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)						Remarks
B4	01	5	W	G	NA	HCl	Y	X													NOTE: DO NOT BILL TB-LB SAMPLE; SEAL INTACT ON ICE AT 6C 5/27 (BEC); C3050514
B4(10')	02	1	S	G	NA	NP	↓	X													
B4(15')	03	1	S	G	NA	↓	↓	X													
Spoils (B2)	04 composite	1	S	C	NA	↓	↓	X													
Spoils (B4)		1	S	G	NA	↓	↓	X													

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
CJ Motosicky	PEG.	5/27/93 1120	John Weder	GTEL	5-27 1120
John Weder	GTEL	5-27 1250			
			Recieved For Laboratory By (Signature)		5/27/93 1330

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted (circled)

GTEL
ENVIRONMENTAL
LABORATORIES, INC.

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

Client Number: PAC01C-V08
Consultant Project Number: 325-04.04
Facility Number: 9-7127
Project ID: I-580 & Grant Line Road
Work Order Number: C3-05-0405

May 25, 1993

Steve Krcik
Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 05/24/93.

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

GTEL is certified by the California State Department of Health Services, Laboratory certificate numbers 194 and 1075, to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA 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.

Eileen F. Bullen

Eileen F. Bullen
Laboratory Director

Client Number: PAC01CHV08
Consultant Project Number: 325-04.04
Facility Number: 9-7127
Project ID: I-580 & Grant Line Road
Work Order Number: C3-05-0405

Table 1

ANALYTICAL RESULTS

Aromatic Volatile Organics and Total Petroleum Hydrocarbons as Gasoline in Water

EPA Methods 5030, 8020, and Modified 8015[a]

GTEL Sample Number		01	02*	052493GCE	
Client Identification		B-2	B-3	METHOD BLANK	
Date Sampled		05/21/93	05/21/93	--	
Date Analyzed		05/24/93	05/24/93	05/24/93	
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	12	1	<0.5	
Toluene	0.5	2	0.5	<0.5	
Ethylbenzene	0.5	<0.5	<0.5	<0.5	
Xylene, total	0.5	1	<0.5	<0.5	
BTEX, total	--	15	2	--	
TPH as Gasoline	50	<50	96	<50	
Detection Limit Multiplier		1	1	1	
BFB surrogate, % recovery		102	105	107	

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Control Board LUFT Manual protocols, May 1988 revision. Bromofluorobenzene surrogate recovery acceptability limits are 70 - 130%.

* Uncategorized compound not included in gasoline concentration.

GTEL ENVIRONMENTAL LABORATORIES, INC.

Client Number: PAC01CHV08
Consultant Project Number: 325-04.04
Facility Number: 9-7127
Project ID: I-580 & Grant Line Road
Work Order Number: C3-05-0405

QC Matrix Spike and Duplicate Spike Results

Matrix: Water

Analyte	Sample ID	Spike Amount	Units	Recovery, %	Duplicate Recovery, %	RPD, %	Control Limits
Modified EPA 8020:							
Benzene	C3050233-12	20.0	ug/L	106	101	4.8	55 - 129
Toluene	C3050233-12	20.0	ug/L	99.0	94.5	4.7	72 - 149
Ethylbenzene	C3050233-12	20.0	ug/L	107	102	4.8	75 - 138
Xylene, total	C3050233-12	60.0	ug/L	103	96.3	4.5	74 - 147

GTEL ENVIRONMENTAL LABORATORIES, INC.

Fax copy of Lab Report and COC to Chevron Contact: ☐ No

Chain-of-Custody-Record

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

Chevron Facility Number: 9-7127
Facility Address: I-580 @ GRANT LINE ROAD
Consultant Project Number: 325-04.04
Consultant Name: Pacific Environmental Group
Address: 2025 Gateway Place Ste.440 San Jose 95110
Project Contact (Name): STEVE KRCIK
(Phone) (408)441-7500 (Fax Number) 441-7539

Chevron Contact (Name): KENNETH KAN
(Phone): FAX 842-9657
Laboratory Name: GTEL
Laboratory Release Number: 86793730
Samples Collected by (Name): ANDREW WILLERTON
Collection Date: 5-21-93
Signature: [signature]

NOTE: DO NOT BILL TB-LB SAMPLE

Analyses To Be Performed

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	BTEX + TPH GAS (8020 + 8015) (602)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)						Remarks
B-2	01	3	W	G		HCl	Y	✓													Iced 7.°C Seal Intact 5/24/93 (LCB)
B-3	02	3	W	G		"	"	✓													C305040S

BTC 05/25/93

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
[signature]	P.E.G.	5/24/93 1020	[signature]	CCS	5-24 10:20
[signature]	CCS	5-24 11:25			
			Received For Laboratory By (Signature)		5/24/93 11:25

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

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

Client Number: PAC010H-V08
Consultant Project Number: 325-04.04
Facility Number: 9-7127
Project ID: Grant Line Rd. @ I-580 Tracy
Work Order Number: C3-11-0161

November 19, 1993

Maree Doden
Pacific Environmental Group
2025 Gateway Place, Ste. 440
San Jose, CA 95110

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 11/08/93.

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

GTEL is certified by the California State Department of Health Services, Laboratory certification number E1075, to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA 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.

Eileen F. Bullen

Eileen F. Bullen
Laboratory Director

Client Number: PAC01CHV08
Consultant Project Number: 325-04.04
Facility Number: 9-7127
Project ID: Grant Line Rd. @ I-580 Tracy
Work Order Number: C3-11-0161

Table 1

ANALYTICAL RESULTS

Aromatic Volatile Organics and Total Petroleum Hydrocarbons as Gasoline in Water

EPA Methods 5030, 8020, and Modified 8015[a]

GTEL Sample Number		01	02	03	Q111493-1
Client Identification		MW-4	MW-5	TB-1	METHOD BLANK
Date Sampled		11/05/93	11/05/93	11/05/93	--
Date Analyzed		11/15/93	11/15/93	11/14/93	11/14/93
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	56	<0.5	<0.5	<0.5
Toluene	0.5	10	<0.5	<0.5	<0.5
Ethylbenzene	0.5	0.8	<0.5	<0.5	<0.5
Xylene, total	0.5	3	<0.5	<0.5	<0.5
BTEX, total	--	70	--	--	--
TPH as Gasoline	50	300	<50	<50	<50
Detection Limit Multiplier		1	1	1	1
BFB surrogate, % recovery		88.2	90.1	92.4	91.0

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Control Board LUFT Manual protocols, May 1988 revision. Bromofluorobenzene surrogate recovery acceptability limits are 70 - 130%.

GTEL ENVIRONMENTAL LABORATORIES, INC

Client Number: PAC01CHV08
Consultant Project Number: 325-04.04
Facility Number: 9-7127
Project ID: Grant Line Rd. @ I-580 Tracy
Work Order Number: C3-11-0161

QC Matrix Spike and Duplicate Spike Results

Matrix: Water

Analyte	Sample ID	Spike Amount	Units	Recovery, %	Duplicate Recovery, %	RPD, %	Control Limits
Modified EPA 8020:							
Benzene	C3110131-1	20	ug/L	103	105	1.9	55 - 129
Toluene	C3110131-1	20	ug/L	106	108	1.8	72 - 149
Ethylbenzene	C3110131-1	20	ug/L	99.5	102	2.4	75 - 138
Xylene, total	C3110131-1	60	ug/L	93.5	95.0	1.6	74 - 147

GTEL ENVIRONMENTAL LABORATORIES, INC

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No

Chain-of-Custody-Recor

Chevron U.S.A. Inc.
P.O. BOX [illegible]
San Ramon, CA [illegible]
FAX (415) [illegible]

Chevron Facility Number 9-7127
Facility Address GRANT LINE RD @ I-580 TRACY
Consultant Project Number 325-04.04
Consultant Name Pacific Environmental Group
Address 2025 Gateway Place Ste.440 San Jose 95110
Project Contact (Name) MAREE DODEN
(Phone) (408)441-7500 (Fax Number) 441-7539

Chevron Contact (Name) KENNETH KAN
(Phone) FAX 510-842-9654
Laboratory Name GTEL
Laboratory Release Number 8679730
Samples Collected by (Name) JOHN RANDOLPH
Collection Date 11/5/93
Signature [signature]

Sample ID	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)					
01	3	W	G	1305	HCl	Y	X												
02	3	↓	G	1440	↓	↓	↓												
03	2	↓	D	N/A	↓	↓	↓												

Analyses To Be Performed

NOTE:
DO NOT BILL
TB-LB SAMPLI

8°C

Remarks

C3110161

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
[signature]	PEG	11/5/93 1620	[signature]	PEG	11/6/93 0730
[signature]	PEG	11/8/93 14:30	[signature]	GTEL	11/8/93 14:30
Relinquished By (Signature)	Organization	Date/Time 11/8 1600	Received For Laboratory By (Signature)		Date/Time 11-8-93

Turn Around Time (Circle Choice)
24 Hrs. TBOX
48 Hrs.
5 Days
10 Days
As Contracted