Chevron U.S.A. Inc.
2410 Camino Ramon, San Ramon, California • Phone (415) 842-9500
Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804

Marketing Operations

D. Moller
Manager, Operations
S. L. Patterson
Area Manager, Operations
C. G. Trimbach
Manager, Engineering

October 2, 1989

Rafat Shahid
Alameda County Environmental Health Department
80 Swan Way #200
Oakland, California 94621

Re: Former Chevron Facility #94612
3616 San Leandro Street
Oakland, California

Dear Mr. Shahid:

Enclosed are the results of the quarterly ground water sampling conducted by Weiss Associates at the above-referenced site. As indicated in the report, the water sample was analyzed for total purgeable petroleum hydrocarbons (TPPH) and aromatic hydrocarbons. The water sample from well VH-1 contained TPPH at 5,600 parts per billion (ppb), benzene at 1,900 ppb, ethylbenzene at 350 ppb, toluene at 90 ppb, and xylenes at 160 ppb. Chevron will continue to monitor the ground water beneath the site on a quarterly basis. If you have any questions or comments, please contact John Randall at (415) 842-9625.

I declare under penalty of perjury that the information contained in the attached report is true and correct, and that any recommended actions are appropriate under the circumstances, to the best of my knowledge.

Sincerely,
D. Moller

By _____
John Randall
Engineer

JMR/wa
Enclosure

cc: Don Dalke, Regonal Water Quality Control Board, 1111 Jackson Street, Oakland, California 94607

Mark Lindquist, 1600 Broadway, Suite 280, Oakland, California 94612

Terry McIlrath, 407 Castello Road, Lafayette, California 94549

WEISS ASSOCIATES Consulting in Geology & Geohydrology
2938 McClure Street, Oakland, CA 94609 415-465-1100

October 2, 1989

John Randall
Chevron USA
P.O. Box 5004
San Ramon, CA 94583-0804

OCT 5 '89 H.C.H.

Re: Former Chevron Service Station #94612
3616 San Leandro Street
Oakland, California
WA Job #4-438-01

Dear Mr. Randall:

Weiss Associates (WA) collected a ground water sample from one monitoring well on September 15, 1989 as part of the quarterly ground water monitoring program at former Chevron Service Station #94612 in Oakland, California (Figures 1 and 2). The ground water sample from monitoring well VH-1 contained total purgeable petroleum hydrocarbons (TPPH) at 5,600 parts per billion, benzene at 1,900 ppb, ethylbenzene at 350 ppb, toluene at 90 ppb and xylenes at 160 ppb.

GROUND WATER SAMPLING

Robert Kitay, WA geologist, collected a ground water sample from monitoring well VH-1 on September 15, 1989. Prior to sampling, the well was purged of over four well-casing volumes of ground water, approximately 35 gallons, using a steam-cleaned PVC bailer. The ground water sample was decanted from a disposable polyethylene bailer into a 40 ml glass volatile organic analysis vial (VOA) with a Teflon septum, preserved with sodium bisulfate, and refrigerated for transport to Superior Analytical Laboratory, Inc. of San Francisco, California. To reduce the possibility of sample contamination during transport or storage, the sample was sealed within a plastic guard bottle containing activated carbon pellets. The water sample collection record and chain of custody form are included as Attachments A and B, respectively.

A laboratory supplied travel blank of certified organic-free distilled water accompanied the sample to provide assurance that contamination was not introduced during sample bottle transport or sample storage.

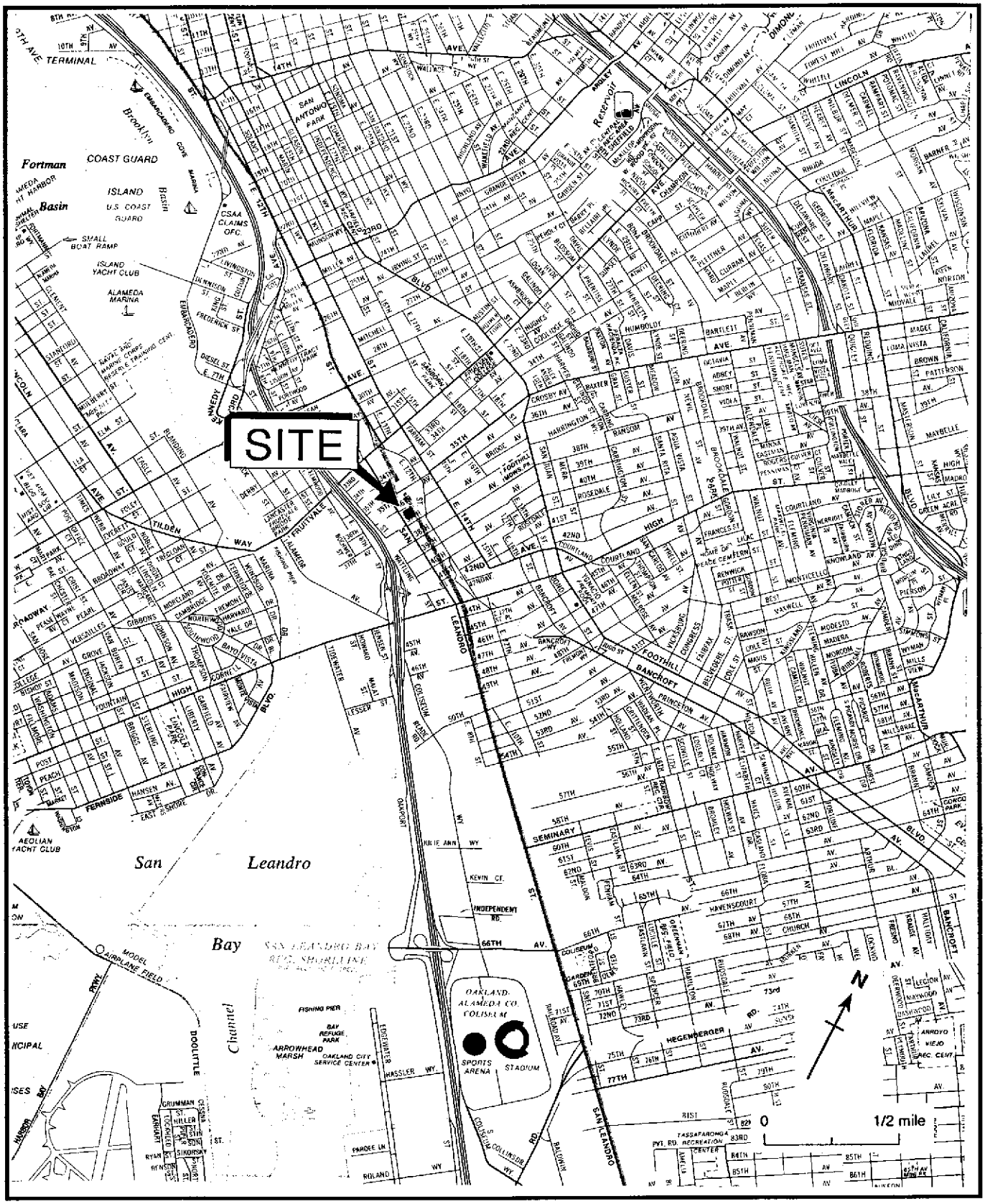


Figure 1. Site Location Map - Chevron Service Station #94612, Oakland, California

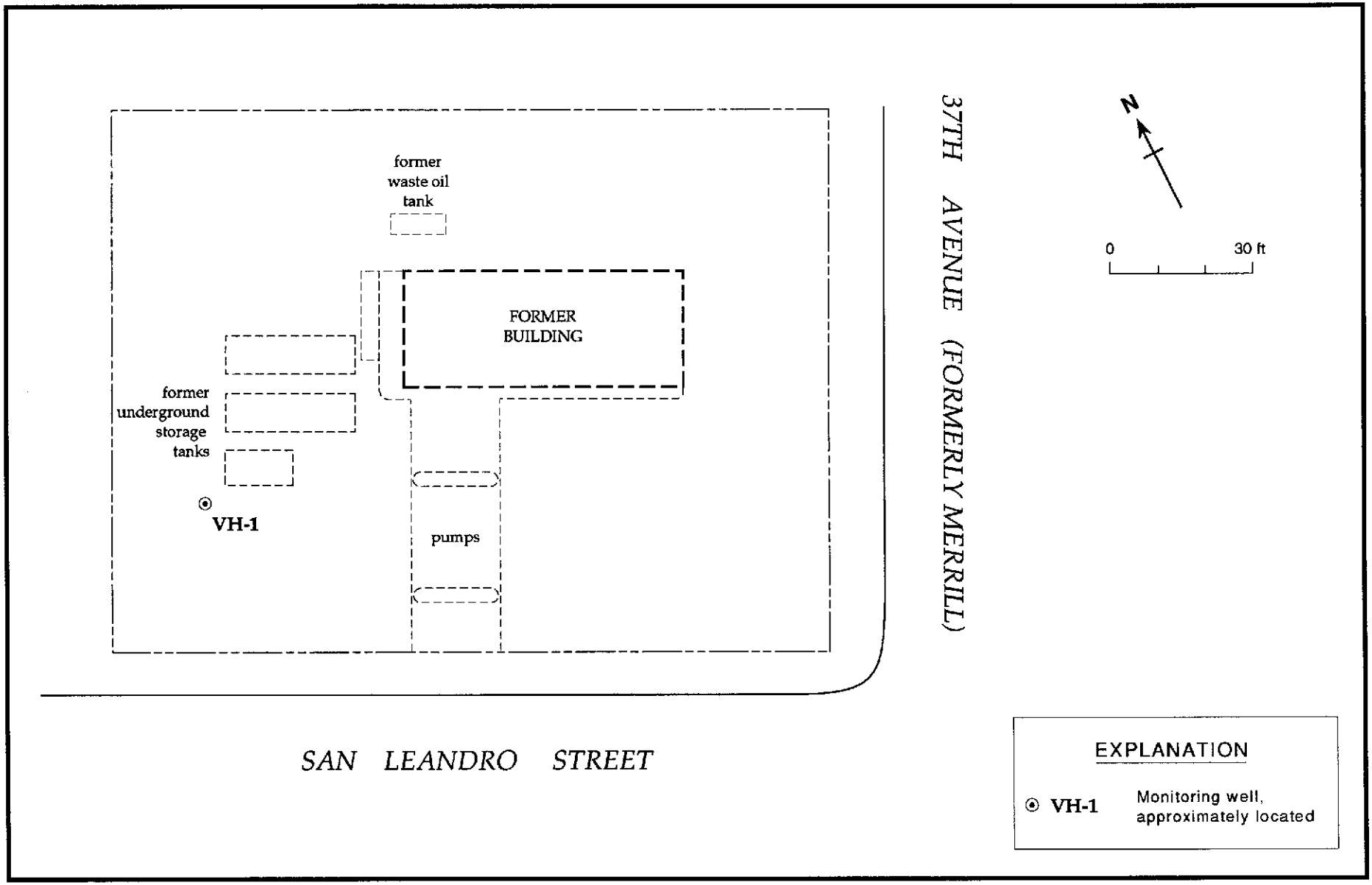
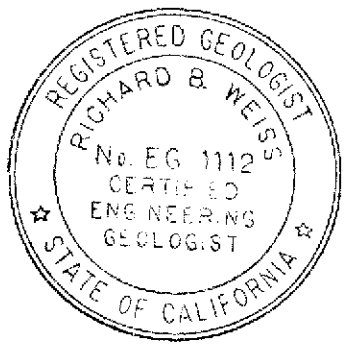


Figure 2. Monitoring Well Location - Former Chevron Service Station #94612, 3616 San Leandro Street, Oakland, California

CHEMICAL ANALYSES

The water sample was analyzed for total purgeable petroleum hydrocarbons (TPPH) by modified EPA Method 8015 and for benzene, ethylbenzene, toluene and xylenes (BETX) by EPA Method 8020. The results of the water analysis are presented in Table 1, and the analytic report is included as Attachment C. Analytic results for this sampling show hydrocarbon concentrations at a historic low.

We appreciate the opportunity to provide hydrogeologic consulting services to Chevron and trust that this report meets your needs. If you have any questions, please call Jim Carmody.



Sincerely,
Weiss Associates

Robert E. Kitay
Staff Geologist

Richard B. Weiss
Principal Hydrogeologist

REK/RBW

C:\WP50\CHEVRON\QMLETTER\438L3SE9.WP

Attachments: A - Water Sample Collection Records
B - Chain of Custody
C - Analytic Report

ATTACHMENT A

WATER SAMPLE COLLECTION RECORDS

WEISS ASSOCIATES

WATER SAMPLING DATA Well Name VH-1 Date 9-15-89 Time 12:35
Job Name/Number Chevron Oakland IV Initials RER
Well X Spring ___ Surface ___ Other ___
Location In restroom
WELL DATA: Well type M (Describe; M = monitoring well)
Depth to Water 15.69 ft (pump/stat) Maximum Drawdown Limit (MDL) NA ft
Well depth 28.57 ft (sounded) Well depth 28.5 ft (spec)
Well diameter 4 in. TOC height above ground NA ft Water elev. NA ft

Volume Evacuated:	Pumped	Pumped	Bailed
Time: Stop			12:20
Start			11:50
Total hrs/min			30min
Total Evacuated	35 gal.		
Evacuation Rate	gpm		

Pump # and type / Bailer # and type PVC** XX
Hose # and type /

Formulas/Conversions
r = well radius in ft
h = ht of water col in ft
vol. in cyl. = $\pi r^2 h$
7.48 gal/ft^3
V_2" casing = 0.163 gal/ft
V_3" casing = 0.367 gal/ft
V_4" casing = 0.653 gal/ft
$V_{4.5}$" casing = 0.826 gal/ft
V_6" casing = 1.47 gal/ft
V_8" casing = 2.61 gal/ft

Sampling Port: Rate / gpm Volume / gal.
Location/description /

Initial height of water in casing = 12.88 ft; volume = 8.4 gal. x4
Evacuation at drawdown limit = 3 x initial volume = / gal.
Evacuation at sampling point = 1 x initial volume = / gal.
Total to be evacuated = 33.6 gal.

Water Color: turbid Odor: very strong
Description of sediment and/or foreign matter in sample: Moderate amount of fine green to brown silt
Point of collection: End of disposible polyethylene bailer
Depth to water during pumping / ft / time Sampling / ft / time
Pumped dry? No After / gal. Recovery rate /
ADDITIONAL COMMENTS, LOCATION SKETCH, ENVIRONMENTAL CONDITIONS, e.g., weather, van running nearby, problems with equipment or sampling, etc., pump on/off times, etc. (over).

CHEMICAL DATA
Temperature / °C Thermometer # / Specific Conductance / umhos
pH / Calibration / 4.0, / 7.0, / 10.0 Calibration Temp. / °C

SAMPLES COLLECTED:

Sample ID No.		Bottle/ Cap (Specify)	Filtered (size, u) (N = No)	Preservative (specify) (R = Refrigerated)		Analysis	Lab
CP11438-1	40 ml	V/C	N	NaHSO4	R	Gas/BETX	SAL
	ml						
	ml						
	ml						
	ml						
	ml						
	ml						
	ml						
	ml						
	ml						

Bottles: P = Polyethylene; Pp = Polypropylene; C or B = Clear/Brown Glass; O = Other (describe)
Additional Cap Codes: Py = Polyseal; V = VOA/Teflon septa; M = Metal

WEISS ASSOCIATES
938 McClure St., Oakland, CA 94609 415-465-1100

SH # 10145

Page 1 of 1

SEND RESULTS TO: Jim Carmody

WA Personnel: Be sure to include copy of this form in the field sampling files

CHAIN-OF-CUSTODY RECORD AND ANALYTIC INSTRUCTIONS

Shuttle Inventory Number: _____

Project ID: 4-438-01

Shipping Seal No. _____

NOTES TO LAB:
1) Specify analytic method and detection limit in report.
2) Notify us if there are any anomalous peaks on GC or other scans.
3) ANY QUESTIONS/CLARIFICATIONS: CALL US.

Sampled by: Robert Kitay Laboratory Name: Superior

No. of Containers	Sample ID	Sampling Date	Container Type[A]	Sample/ Analyze/ Hold[B]	Turn-around[C]	Analyze For:	Analytic Method/ Detection Limit	Comments
2	099438-1	9/15/89	W/V	A	N	Gas/BETX		
2	099438-21	↓	↓	↓	↓	↓		

1 Robert E. Kitay 9/15/89
Released by (Signature), Date

2 Brent Wood 9/15/89
Received by (Signature), Date

3 [signature] 9/18/89
Released by (Signature), Date

4 Don Moon 9/18/89
Shipping Carrier, Method, Date
Express It

5 _____
Released by (Signature), Date

6 Laura Wright 9/18/89
Received by Lab Personnel, Date, Telephone

x _____
Seal intact?, Number

A Sample Type Codes: W = Water, S = Soil, O = Other (Specify) Container Type Codes: P = Plastic bottles, G = Glass bottle, T = Brass tube, O = Other (Specifiy)
B Analyze/Hold: A = Analyze; HOLD (spell out) = DO NOT ANALYZE UNLESS NECESSARY OR REQUESTED.
C N = Normal Turnaround, F = 1-Week Turnaround, R = 24-hour Turnaround

SUPERIOR ANALYTICAL LABORATORY, INC.

1385 FAIRFAX ST., STE. D. • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 10145
CLIENT: Weiss Associates
CLIENT JOB NO.: 4-438-01

DATE RECEIVED: 09/18/89
DATE REPORTED: 09/25/89

Lab Number	Customer Sample Identification	Date Sampled
10145- 1	099438-1	09/15/89
10145- 2	099438-21	09/15/89

Laboratory Number:	10145 1	10145 2
ANALYTE LIST	Amounts/Quantitation Limits (ug/l)	
OIL AND GREASE:	NA	NA
TPH/GASOLINE RANGE:	5600	ND<500
TPH/DIESEL RANGE:	NA	NA
BENZENE:	1900	ND<.5
TOLUENE:	90	ND<.5
ETHYL BENZENE:	350	ND<.5
XYLENES:	160	ND<.5

SUPERIOR ANALYTICAL LABORATORY, INC.
1385 FAIRFAX ST., STE. D. • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS
Diesel by Modified EPA SW-846 Method 8015
Gasoline by Purge and Trap: EPA MEthod 8015/5030
ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES
by EPA SW-846 Methods 5030 and 8020

QA/QC INFORMATION
SET: 10145

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT

ug/L = part per billion (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 503E:
Duplicate RPD NA
Minimum Detection Limit in Water: 5000ug/L

Modified EPA Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 1000ug/L
Daily Standard run at 200mg/L; RPD Diesel = NA
MS/MSD Average Recovery = NA: Duplicate RPD = NA

8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 500ug/L
Daily Standard run at 2mg/L; RPD Gasoline = 2%
MS/MSD Average Recovery = 99%%: Duplicate RPD = 4%

8020/BTXE
Minimum Quantitation Limit in Water: 0.50ug/L
Daily Standard run at 20ug/L; RPD = <15%
MS/MSD Average Recovery = 99%%: Duplicate RPD = 4%

Richard Srna, Ph.D.
Laboratory Director