KLEINFELDER

FILE COPY

DRAFT REPORT
SUMMARY OF DOMESTIC WATER SAMPLING ACTIVITIES AND ANALYTICAL RESULTS CHEVRON SERVICE STATION #7127 SOUTH GRANT LINE ROAD TRACY, CALIFORNIA

March 8, 1988

KLEINFELDER

March 8, 1988
File: 10-1782-01

FILE COPY

Ms. Kay Huffman
Chevron U.S.A.
2 Annabel Lane, Suite 200
San Ramon CA 94583

SUBJECT: Draft Report - Summary of Domestic Water Sampling Activities and Analytical Results for Chevron Service Station #7127, South Grant Line Road, Tracy, California

Dear Ms. Huffman:

Enclosed is a summary of the domestic water supply sampling activities and sample analyses for the five sampling rounds to date. Analysis of samples collected during the February 19, 1988 round did not detect any EPA Test Method 602 or 8015 compounds above laboratory detection limits.

Because the analytical results have in the past identified low concentrations of EPA 602 compounds only in the domestic tap water supply, it is likely that there may be an intermittent source of contamination somewhere in the water delivery system beyond the well head and its immediate plumbing.

As reported earlier to Chevron, there are several adjacent residences which have accessed the onsite domestic well through agreements with prior station operators. Plumbing details of their well access are not known. However, it is anticipated that they have connected to the pressurized tank rather than the well pump itself.

Although benzene concentrations in past samples obtained have not exceeded the EPA maximum allowed drinking water standard of 5 ppb, the recommended EPA maximum concentration is 0 ppb. The recent implementation of Proposition 65, which requires notification of any potential health threats, imposes greater regulatory authority over reporting requirements. Given the sensitive nature of this situation we recommend that continued bi-weekly sampling be performed at the site until which time you determine your course of action.

We hope that this draft summary report serves your needs at this time. If there are any comments or questions regarding the contents of this draft, please do not hesitate to call us so we may clarify any questions and issue the final report to you. The final report, when submitted, should also be delivered to the appropriate regulatory agencies for their review.

Very truly yours,

KLEINFELDER

James N. Falls
Staff Geologist

R. Jeffrey Dunn, Ph.D., G.E.
Assistant Engineering Manager

JNF:RJD:wh

TABLE OF CONTENTS

1 INTRODUCTION

Detectable concentrations of benzene in the tap water supply at the Chevron Service Station #7127, located on South Grant Line Road in Tracy, California (Plate 1), have been found since water sampling began on December 21, 1987. The two most recent rounds of water sampling did not detect any EPA test Method 602 compounds above the lowermost laboratory limits of detection. Additionally, analysis for total petroleum hydrocarbons performed for the most recent sampling round did not detect any of these compounds above the lowermost detection limits.

The most recent sampling round was performed in order to obtain comparative water samples from an onsite domestic tap and a drain cock located immediately adjacent to the domestic wellhead on the outlet pipe (Plate 2). Based on field observations, this drain cock provides a direct well water sampling point prior to water routing through the station water system and is believed to reflect representative ground water conditions.

This data report provides a summary of the most recent water sampling activities and analytical results in addition to summaries of the four previous sampling episodes.

2 SAMPLING ACTIVITIES AND OBSERVATIONS

Summaries of the five sampling rounds in chronological order are presented in this section along with discussions of the sampling protocol for each event. Analytical results are presented in the next section.

DECEMBER 21, 1987

An initial water sample was obtained at the site from to tap T-1 near the domestic well (Plate 3). Approximately 115 gallons of water were purged from the station water system before collecting the sample. The flow of water was greatly reduced during sampling to minimize the possibility of hydrocarbon volitilization, and the sample was then collected from the tap into a 40 ml glass VOA bottle. After collection, the sample was placed in refrigerated storage and transported to the analytical laboratory under chain of custody control.

JANUARY 5, 1988

A confirmation sample was collected on this date due to prior detection of benzene in the December 21 sample obtained. This sample was obtained directly from a tap (T-2) adjacent to the domestic well (Plate 3). Approximately 135 gallons of water were purged from the station water system before sample collection. The sample was obtained in a manner similar to the initial sample and transported to the analytical laboratory.

JANUARY 8, 1988

Two additional water samples were obtained from the tap used in the previous sampling round (T-2) because there was concern regarding the analytical laboratory QA/QC procedures; benzene being the only constituent detected. These samples were split between two analytical laboratories, Med-Tox Associates and Clayton Environmental. The analytical results showed nearly identical and very low concentrations of benzene present. Laboratory QA/QC reports were reviewed and did not reveal blank method contamination.

Both of these samples were collected from tap location T-2 near the domestic well head after purging the water system of 170 gallons of water. The samples were collected in duplicate 40 ml glass VOA bottles, sealed once it was verified that no air bubbles were present, and labeled. The samples were placed in refrigerated storage containers for transport to the two analytical laboratories under chain-of-custody control. A chain of custody form accompanied each sample to its respective laboratory.

JANUARY 21, 1988

This sampling round was performed in order to obtain a water sample prior to water passing through the station's plumbing system. The original plan to accomplish this, was to dismantle the well head for direct access to well waters. This proved impossible without the danger of disabling the well. Instead, water samples were obtained from a drain cock located immediately adjacent to the wellhead on the outlet pipe (Plate 2). Based on field observations, this drain cock provides a direct well water sampling point prior to water routing through the station water system.

Two hundred gallons of water were purged from the domestic water system in order to allow collection of representative formation waters in the domestic supply well. The drain cock and nearby piping were thoroughly cleaned with distilled water and a clean cotton cloth. Samples were decanted from the threaded end of the drain cock when the flow was a slow trickle to minimize the possibility for volitilization of any hydrocarbon constituents contained in the well water. Samples were collected in duplicate glass VOA bottles, appropriately labeled, and placed in refrigerated storage for transport to the analytical laboratory under chain of custody control.

FEBRUARY 29, 1988

This most recent sampling round was performed to obtain comparative samples from an onsite domestic tap and the previously utilized drain cock located on the wellhead outlet pipe (Plates 2 and 3). Prior to purging the domestic water system, a water sample was obtained at a tap (T-1) adjacent to the station building (Plate 3). One gallon of water was purged from this tap during the initial cleaning, followed by a thorough distilled water rinse and wipe-down with a clean cotton cloth. The first sample was collected in a 40 ml glass VOA bottle after the flow of water from the tap was adjusted to a slow trickle. The sample bottle was labeled and placed in refrigerated storage. Two hundred gallons of water were purged through the tap before

collecting a second sample from tap T-1 and then the wellhead drain cock. During this sampling round, a trip blank was included during the site visit and throughout sample handling to assess whether hydrocarbons were being introduced into the samples during transport.

3 ANALYTICAL REPORTS

All water samples collected from the domestic water system were analyzed for volatile organic hydrocarbons using EPA Test Method 602 methodology. Samples collected during the February 19, 1988 sampling round were also analyzed for total petroleum hydrocarbons using EPA Test Method 8015. Copies of the laboratory reports for all samples analyzed are included in chronological order in the appendix. Table 1 presents the analytical results of samples collected to date.

TABLE 1

ANALYTICAL RESULTS OF WATER SAMPLES

Sample Date	Sample No.	Location (1)	Benzene (ppb)	Toluene (ppb)	Total Xylenes (ppb)	Ethylbenzene (ppb)	Total Petroleum Hydrocarbons (ppm)
12-21-87	W-T-1A	T-1	2	ND	ND	ND	NT
01-05-88	W-T-2A	T-2	4	ND	ND	ND	NT
01-08-88	W-T-3C	T-2	1.0	ND	ND	ND	NT
	W-T-3A(2)	T-2	1.1	ND	ND	ND	NT
01-21-88	W-W-4A	Well	ND	ND	ND	ND	NT
02-19-88	W-T-1A	T-1(3)	ND	ND	ND	ND	ND
	W-T-1B	T-1	ND	ND	ND	ND	ND
	W-T-2	Well	ND	ND	ND	ND	ND
	W-T-3	Travel Blank	ND	ND	ND	ND	ND
Analytical Detection Levels			0.5	0.5	0.5	0.5	1

ND = Non detect above laboratory limits of detection.
NT = Compounds not tested for in specific sampling round.
(1) See Plate 3 for sample collection locations.
(2) Analysis performed by Clayton Environmental. All other analyses by Med-Tox Associates Laboratory
(3) All samples collected at end of specified purge period except W-T-1A.

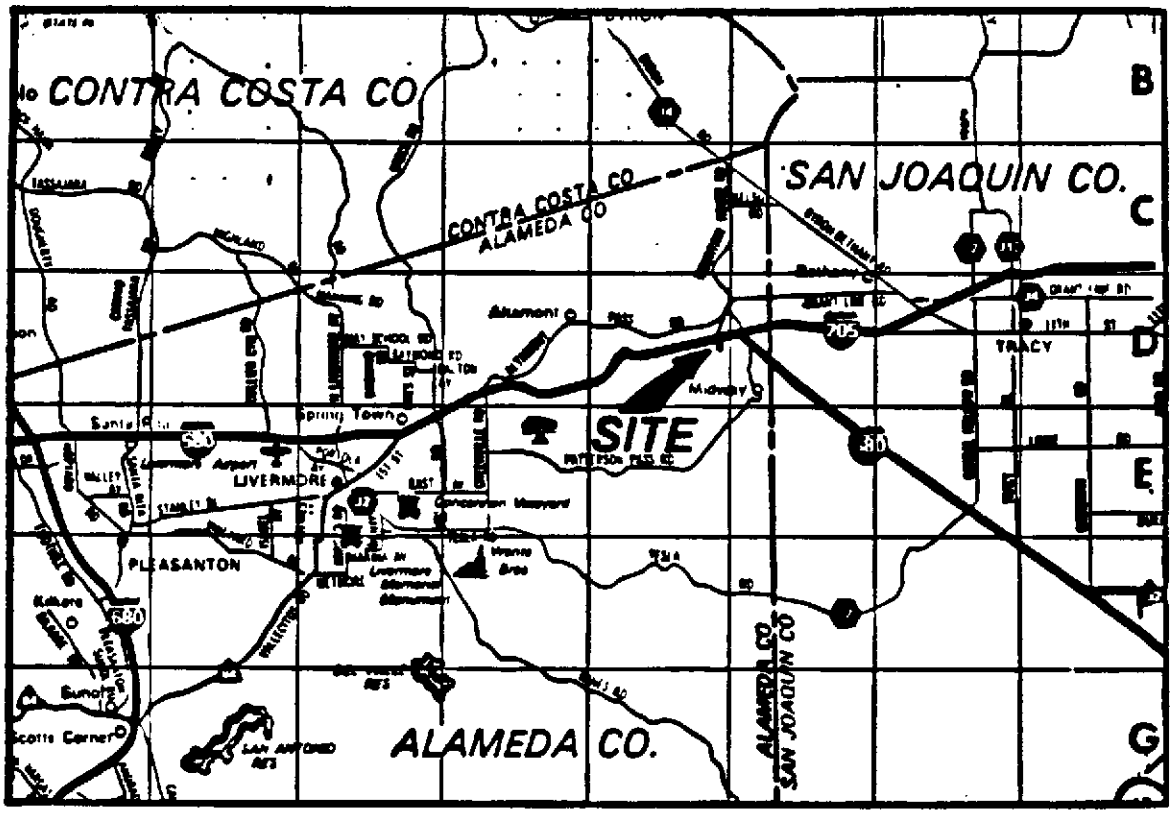
4 LIMITATIONS

This report was prepared in general accordance with the accepted standard of practice which exists in Northern California at the time the investigation was performed. It should be recognized that definition and evaluation of environmental conditions is a difficult and inexact art. Judgments leading to conclusions and recommendations are generally made with an incomplete knowledge of the conditions present. More extensive studies, including additional environmental investigations, can tend to reduce the inherent uncertainties associated with such studies. If the client wishes to reduce the uncertainty beyond the level associated with this study, Kleinfelder should be notified for additional consultation.

Our firm has prepared this report for the client's exclusive use for this particular project and in accordance with generally accepted engineering practices within the area at the time of our investigation. No other warranties, expressed or implied, as to the professional advice provided are made.

DRAFT

PLATES



N

0 5 10 miles

approximate scale

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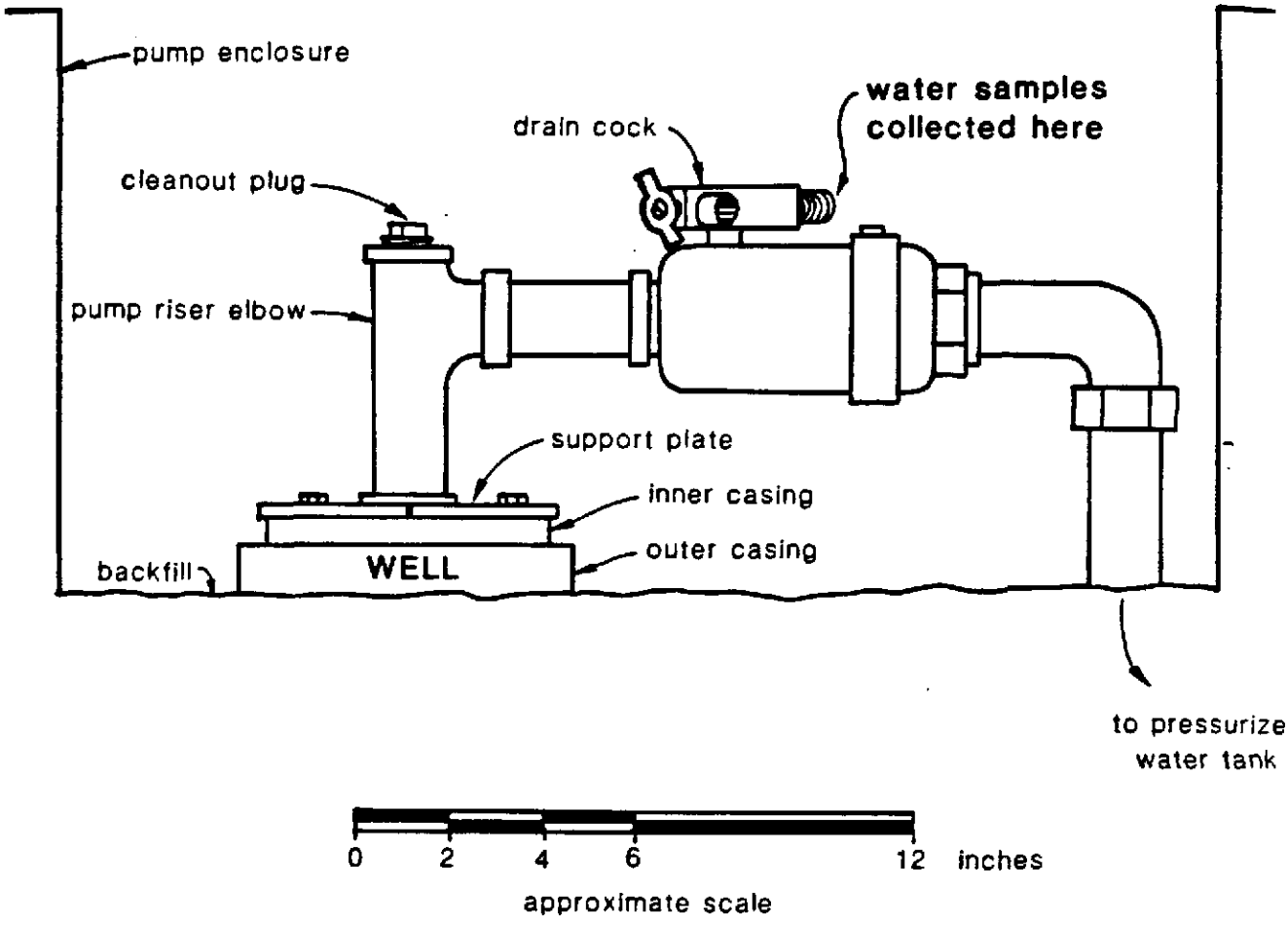
PROJECT NO. 10-1782-01

SITE LOCATION MAP
CHEVRON, USA STATION 7127
GRANT LINE ROAD
TRACY, CALIFORNIA

PLATE
1



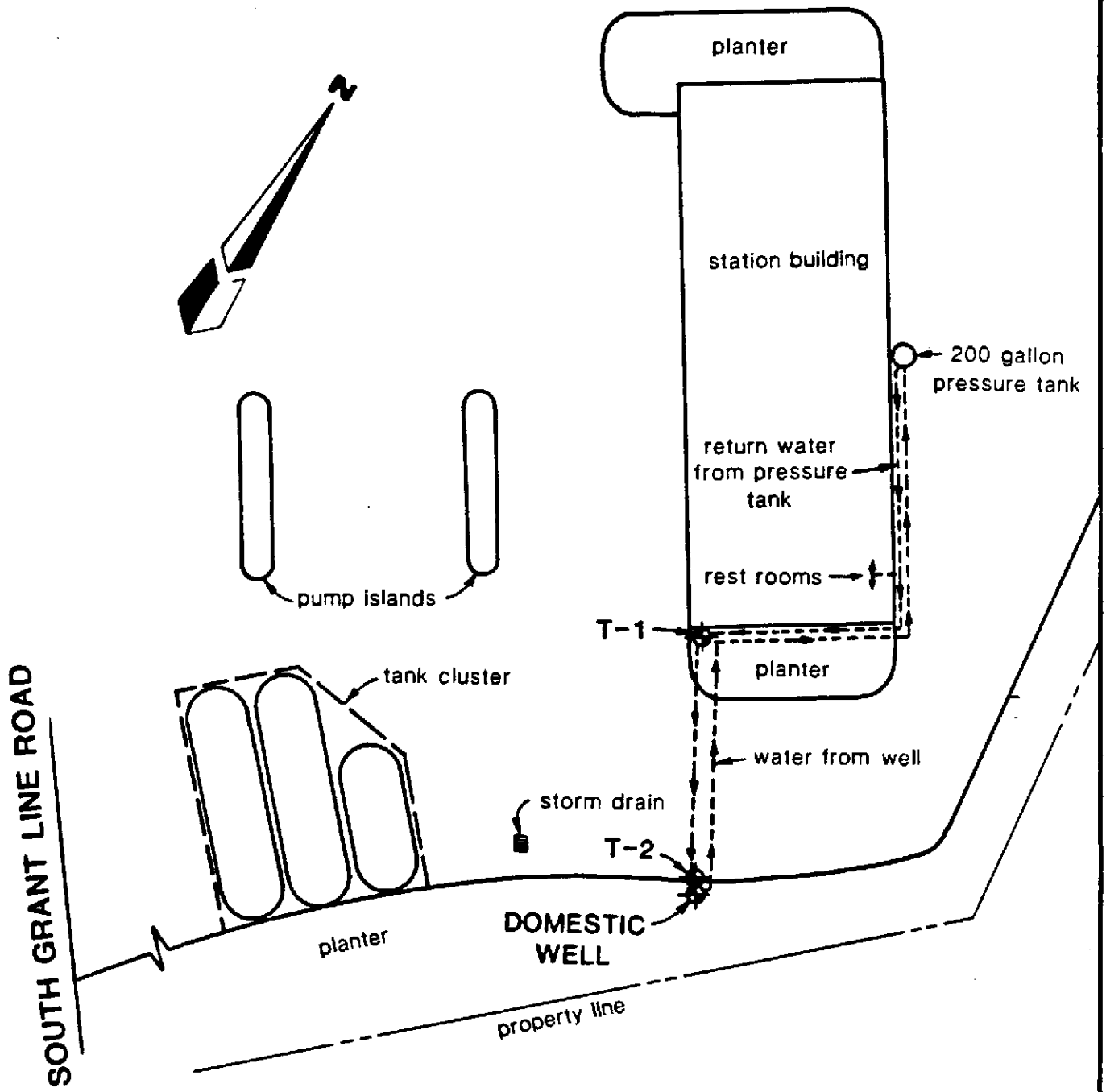
approximate scale

KLEINFELDER

PROJECT NO. 10-1782-01

WELLHEAD DETAIL
CHEVRON USA STATION 7127
GRANT LINE ROAD
TRACY, CALIFORNIA

PLATE
2



LEGEND

T-2 ⊕ water sampling location

0 10 20 30 feet

approximate scale

NOTE: Plumbing system is diagrammatic only. Actual plumbing system layout was not available during this report preparation.

KLEINFELDER

PROJECT NO. 10-1782-01

SAMPLING LOCATIONS
CHEVRON U.S.A. STATION # 7127
GRANT LINE ROAD
TRACY, CALIFORNIA

PLATE 3

APPENDIX A

WORKING COPY

MED-TOX ASSOCIATES, INC.

ENVIRONMENTAL & OCCUPATIONAL HEALTH SERVICES
3440 Vincent Road • Pleasant Hill, CA 94523 • (415) 930-9090

LABORATORY ANALYSIS REPORT

J.H. Kleinfelder & Assoc.
2121 N. California Blvd.
Suite 570
Walnut Creek, CA 94596
ATTN: Mark Klaver

REPORT DATE: 12/31/87
DATE RECEIVED: 12/21/87
DATE SAMPLED: 12/21/87

CLIENT PROJECT NO.: 10-1782-01

MED-TOX JOB NO.: 8712114

ANALYSIS OF: ONE WATER SAMPLE FOR PURGEABLE AROMATICS

See attached for results.

Michael J. Jaeger
Organic Group Leader

MED-TOX ASSOCIATES INC.

J.H. Kleinfelder & Assoc.

CLIENT ID: W-T-1A
CLIENT JOB NO.: 10-1782-01

MED-TOX LAB NO.: 8712114-01A
MED-TOX JOB NO.: 8712114

DATE SAMPLED: 12/21/87
DATE RECEIVED: 12/21/87

DATE ANALYZED: 12/23/87
REPORT DATE: 12/31/87

EPA METHOD 602

PURGEABLE AROMATICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	2	0.5
Chlorobenzene	108-90-7	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Toluene	108-88-3	ND	0.5
Xylenes, Total	-------	ND	2

ND = Not Detected

MED-TOX ASSOCIATES, INC.

ENVIRONMENTAL & OCCUPATIONAL HEALTH SERVICES

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LABORATORY ANALYSIS REPORT

J.H. Kleinfelder & Assoc.
2121 N. California Blvd.
Suite 570
Walnut Creek, CA 94596
ATTN: Mark Klaver

REPORT DATE: 01/07/88

DATE RECEIVED: 01/05/88

DATE SAMPLED: 01/05/87

CLIENT PROJECT NO.: 10-1782-01

MED-TOX JOB NO.: 8801010

ANALYSIS OF: ONE WATER SAMPLE FOR PURGEABLE AROMATICS

See attached for results.

Michael J. Jaeger
Organic Group Leader

Results reported verbally to Mark Klaver 1/6/88

J.H. Kleinfelder & Assoc.

CLIENT ID: W-T-2A
CLIENT JOB NO.: 10-1782-01

MED-TOX LAB NO.: 8801010-01A
MED-TOX JOB NO.: 8801010

DATE SAMPLED: 01/05/88
DATE RECEIVED: 01/05/88

DATE ANALYZED: 01/06/88
REPORT DATE: 01/07/88

EPA METHOD 602

PURGEABLE AROMATICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	4 *	0.5
Chlorobenzene	108-90-7	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Toluene	108-88-3	ND	0.5
Xylenes, Total	-------	ND	2

ND = Not Detected

* Confirmed by GC/MS

MED-TOX ASSOCIATES, INC.

ENVIRONMENTAL & OCCUPATIONAL HEALTH SERVICES

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LABORATORY ANALYSIS REPORT

J.H. Kleinfelder & Assoc.
2121 N. California Blvd.
Suite 570
Walnut Creek, CA 94596
ATTN: Mark Klaver

REPORT DATE: 01/12/88

DATE RECEIVED: 01/08/88

DATE SAMPLED: 01/08/88

CLIENT PROJECT ID: 10-1782-01

MED-TOX JOB NO.: 8801031

ANALYSIS OF: ONE WATER SAMPLE FOR PURGEABLE AROMATICS

See attached for results.

Michael J. Jaeger
Organic Group Leader

Results reported verbally to Jim Falls 01/11/88.

MED-TOX ASSOCIATES INC

J.H. Kleinfelder & Assoc.

CLIENT ID: W-T-3C
CLIENT JOB NO.: 10-1782-01

MED-TOX LAB NO.: 8801031-01A
MED-TOX JOB NO.: 8801031

DATE SAMPLED: 01/08/88
DATE RECEIVED: 01/08/88

DATE ANALYZED: 01/08/88
REPORT DATE: 01/12/88

EPA METHOD 602

PURGEABLE AROMATICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	1	0.5
Chlorobenzene	108-90-7	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Toluene	108-88-3	ND	0.5
Xylenes, Total	-------	ND	2

ND = Not Detected

Clayton Environmental Consultants, Inc.

P.O. Box 9019 • 1252 Quarry Lane • Pleasanton, CA 94566 • (415) 426-2600

January 11, 1988

Laboratory Client Code No. 0064

Mr. Mark Klaver
J. H. Kleinfelder & Associates
1901 Olympic Blvd., Suite 300
Walnut Creek, CA 94596

Dear Mr. Klaver:

Attached are the results of the following samples. The sample and analysis information is as follows:

Date Sample Received	Clayton Lab Batch No.	Client Sample I.D.	Matrix	Analysis/ Method No.
01/08/88	880126	W-T-3A W-T-3B	Water	Purgeable Aromatics, EPA 602

A copy of the Chain of Custody form is attached for your information.

If you have any questions regarding this information, please do not hesitate to call.

Sincerely,

Hon-Tsing Su
Laboratory Manager

HTS/tb
Attachment/Enclosure
L1987.REP

Approved by: Mary D. Beck
Mary D. Beck
Quality Assurance Manager

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

EPA METHOD 602
PURGEABLE AROMATICS

Sample I.D.: W-T-3A Lab No. 880126-01

Samples Received: 01/08/88

Samples Analyzed: 01/08/88

Sample Matrix: Water Detection Limit Factor = 1

Compound	Concentration µg/L (ppb)
Benzene	1.1
Chlorobenzene	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
Ethylbenzene	ND
Toluene	ND
Xylenes	ND

ND = Not Detected

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

EPA METHOD 602
PURGEABLE AROMATICS

Sample I.D.: W-T-3B Lab No. 880126-02

Samples Received: 01/08/88

Samples Analyzed: 01/08/88

Sample Matrix: Water Detection Limit Factor = 1

Compound	Concentration µg/L (ppb)
Benzene	1.1
Chlorobenzene	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
Ethylbenzene	ND
Toluene	ND
Xylenes	ND

ND = Not Detected

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

EPA METHOD 602
PURGEABLE AROMATICS

DETECTION LIMITS

DETECTION LIMITS = Detection Limit Factor X Concentration

5 mL Sample

Compound	Concentration µg/L (ppb)
Benzene	0.4
Chlorobenzene	0.3
1,2-Dichlorobenzene	0.5
1,3-Dichlorobenzene	0.3
1,4-Dichlorobenzene	0.5
Ethylbenzene	0.3
Toluene	0.3
Xylenes	0.4

ND = Not Detected

#0064

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

QUALITY ASSURANCE DATA
EPA METHOD 602

Duplicate Analysis

Lab Batch No.: 880126-01 & 02

Sample I.D.: WT3A, WT3B Matrix: Water

Units of Concentration = µg/L

Parameter	Sample Result	Duplicate Sample Result	% RPD
Benzene	1.1	1.1	0

ND = Not Detected

Spike Analysis

Lab Batch No.: 880126-01

Sample I.D.: WT3A Matrix: Water

Units of Concentration = µg/L

Parameter	Sample Result	Spike Added	Spike Sample Result	% Recovery
Benzene	1.1	20	17.3	81
Toluene	ND	20	21.4	110
Chlorobenzene	ND	20	21.7	110

ND = Not Detected

L1987.REP

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MED-TOX ASSOCIATES, INC.

ENVIRONMENTAL & OCCUPATIONAL HEALTH SERVICES

3440 Vincent Road • Pleasant Hill, CA 94523 • (415) 930-9090

LABORATORY ANALYSIS REPORT

J.H. Kleinfelder & Assoc.
2121 N. California Blvd.
Suite 570
Walnut Creek, CA 94596
ATTN: Jim Falls

REPORT DATE: 02/05/88

DATE RECEIVED: 01/21/88

DATE SAMPLED: 01/21/88

CLIENT PROJECT ID: 10-1782-01

MED-TOX JOB NO.: 8801088

ANALYSIS OF: ONE WATER SAMPLE FOR PURGEABLE AROMATICS

See attached for results.

Michael J. Jaeger
Organic Group Leader

Results reported verbally to Jim Falls 02/03/88.

MED-TOX ASSOCIATES, INC.

J.H. Kleinfelder & Assoc.

CLIENT ID: W-W-4A
CLIENT JOB NO.: 10-1782-01

MED-TOX LAB NO.: 8801088-01A
MED-TOX JOB NO.: 8801088

DATE SAMPLED: 01/21/88
DATE RECEIVED: 01/21/88

DATE ANALYZED: 02/01/88
REPORT DATE: 02/05/88

EPA METHOD 602

PURGEABLE AROMATICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Toluene	108-88-3	ND	0.5
Xylenes, Total	-------	ND	2

ND = Not Detected

MED-TOX ASSOCIATES, INC

ENVIRONMENTAL & OCCUPATIONAL HEALTH SERVICES

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LABORATORY ANALYSIS REPORT

J.H. KLEINFELDER & ASSOC.
2121 N. CALIFORNIA BLVD.
WALNUT CREEK, CA 94596
ATTN: JIM FALLS

MED-TOX JOB NO: 8802103

CLIENT ID: 10-1782-01

REPORT DATE: 03/03/88

DATE SAMPLED: 02/19/88

DATE RECEIVED: 02/19/88

DATE ANALYZED: 02/23/88
03/01/88

ANALYSIS OF: FOUR SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AND PURGEABLE AROMATICS

METHOD: EPA 8015 (PURGE & TRAP)

Sample Identification Client	Lab No.	Total Petroleum Hydrocarbons As Gasoline (mg/L)
W-T-1A	01A	ND
W-T-1B	02A	ND
W-T-2	03A	ND
W-T-3	04A	ND
Detection Limit		1

Michael J. Jaeger, Manager
Organic Laboratory

Results reported verbally to Mark Klaver 03/03/88.

J.H. Kleinfelder & Assoc.

CLIENT ID: W-T-1A
CLIENT JOB NO.: 10-1782-01

MED-TOX LAB NO.: 8802103-01A
MED-TOX JOB NO.: 8802103

DATE SAMPLED: 02/19/88
DATE RECEIVED: 02/19/88

DATE ANALYZED: 02/23/88
REPORT DATE: 03/03/88

EPA METHOD 602

PURGEABLE AROMATICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Toluene	108-88-3	ND	0.5
Xylenes, Total	-------	ND	0.5

ND = Not Detected

J.H. Kleinfelder & Assoc.

CLIENT ID: W-T-1B
CLIENT JOB NO.: 10-1782-01

MED-TOX LAB NO.: B802103-02A
MED-TOX JOB NO.: B802103

DATE SAMPLED: 02/19/88
DATE RECEIVED: 02/19/88

DATE ANALYZED: 03/01/88
REPORT DATE: 03/03/88

EPA METHOD 602

PURGEABLE AROMATICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Toluene	108-88-3	ND	0.5
Xylenes, Total	-------	ND	0.5

ND = Not Detected

J.H. Kleinfelder & Assoc.

CLIENT ID: W-T-2
CLIENT JOB NO.: 10-1782-01

MED-TOX LAB NO.: 8802103-03A
MED-TOX JOB NO.: 8802103

DATE SAMPLED: 02/19/88
DATE RECEIVED: 02/19/88

DATE ANALYZED: 02/23/88
REPORT DATE: 03/03/88

EPA METHOD 602

PURGEABLE AROMATICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Toluene	108-88-3	ND	0.5
Xylenes, Total	-------	ND	0.5

ND = Not Detected

J.H. Kleinfelder & Assoc.

CLIENT ID: W-T-3
CLIENT JOB NO.: 10-1782-01

MED-TOX LAB NO.: 8802103-04A
MED-TOX JOB NO.: 8802103

DATE SAMPLED: 02/19/88
DATE RECEIVED: 02/19/88

DATE ANALYZED: 02/23/88
REPORT DATE: 03/03/88

EPA METHOD 602

PURGEABLE AROMATICS

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Chlorobenzene	108-90-7	ND	0.5
1,2-Dichlorobenzene	95-50-1	ND	0.5
1,3-Dichlorobenzene	541-73-1	ND	0.5
1,4-Dichlorobenzene	106-46-7	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Toluene	108-88-3	ND	0.5
Xylenes, Total	-------	ND	0.5

ND = Not Detected

CHAIN OF CUSTODY RECORD

SAMPLERS: *(Signature)* Megan Alexander

Phone: (415) 958-5610

SHIP TO: MEDTOX

ATTENTION:

Phone No.

SHIPPING INFORMATION

Shipper

Address

Date Shipped

Shipment Service

Airbill No.

Cooler No.

Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Megan Alexander		
Relinquished by: *(Signature)*	Received by: *(Signature)* Out 1-6-88 JF 12-29	Date/Time
Relinquished by: *(Signature)*	Received by: *(Signature)*	Date/Time
Relinquished by: *(Signature)*	Receive for laboratory by*: *(Signature)* Julianne Stuart	Date/Time 12-21 1220

* Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return top copy to J. H. KLEINFELDER & ASSOCIATES, 1901 Olympic Blvd., Suite 300, Walnut Creek, California 94596

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
W-T-1A	10-1382-01	12-21-87	EPA 602	GOOD
W-T-1B	10-1382-01	12-21-87	EPA 602 (HOLD)	"

Lowermost detection limit possible @ 0.05 ppb

Results by January 6, 1988 written + verbal results to Mark Kleven (position)

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated
(4)
(5)

White - Sampler Canary - J. H. Kleinfelder & Associates Pink - Lab Courtesy Copy

JHK&A Form M-60

MED-TOX ASSO. .TES, INC.
ANALYTICAL REQUEST/CHAIN OF CUSTODY FORM
(Complete Information on Opposite Side)

Date: 1/5/88
SAMPLER(S): Mark A Klaus

CLIENT: KLEINFELDER
CLIENT JOB REF.: 10-1782-01
LAB PROJECT NO: ______
(lab use only)

CLIENT SAMPLE IDENTIFICATION	DATE	LAB NUMER (lab use only)	AIR VOLUME (Liters)	NO. CONT.	SAMPLE TYPE *	ANALYSES: EDB low	" "									COMMENTS/ INTERFERENCES
W-T-2A	1/5/88			1	W	✓										
W-T-2B	1/5/88			1	W		Hold									Hold (wait ...)

Please Rush 24 hr w/ verbal to M. Klaus ASAP.

Relinquished by: (Signature) Mark A Klaus	Date 1/5/88	Time 10:40	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Dispatched by: (Signature)	Date	Time	Received for lab by: (Signature) [signature]	Date 1-5-88	Time 1045
Method of Shipment:			Lab Comments:		

*SAMPLE TYPE (SPECIFY): (1) 37 mm 0.8 um MCEF;2) 25 mm 0.8 um MCEF; (3) 25 mm 0.4 um polycarb. filter; (4) PVC filter, diam. _____ pore size _____; (5) Charcoal tube; (6) Silica gel tube (7) Water; (8) Soil; (9) Bulk Sample; (11) Other

Clayton Environmental Consultants

SAMPLERS: (Signature) Mark Klaus

Phone 938-5610

SHIP TO Clayton Env

ATTENTION: Mary Beck

Phone No 426-2600

E80126

SHIPPING INFORMATION:

Shipper Kevin Feldman

Address 2121 N. Calif Blvd #570 Walnut Creek 94596

Date Shipped 1-8-88

Shipment Service hand delivered

Airbill No. _____ Cooler No. _____

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Mark Klaus	[illegible]	1/8/88	10:00 A
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Received for laboratory by*: (Signature)	Date	Time

*Analysis laboratory should complete "Sample Condition Upon Receipt", section below, sign and return top copy to Clayton Environmental Consultants, Inc., P.O. Box 9019, Pleasanton, California 94566

Sample Number	Site/Sample Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
-01 IV-T-3A	IV-1782-01	1/8/88	EPA 602	Iced 8°C
-01 IV-T-3B	"	"	Hold	"

* RUSH TURNAROUND (MON) 1/11/88 verbal results to M. Klaus ACCOMPANYING QA/QC Report w/ hard copy of Lab report.

WHITE—Sampler CANARY—CLAYTON ENVIRONMENTAL CONSULTANTS PINK—Lab Courtesy Copy

MED-TOX ASSO. .TES, INC.
ANALYTICAL REQUEST/CHAIN OF CUSTODY FORM
(Complete Information on Opposite Side)

Date: 1-8-88
SAMPLER(S): MARK KLAVER

CLIENT Kleinfelder
CLIENT JOB REF.: 10-1782-01
LAB PROJECT NO: ______ (lab use only)

CLIENT SAMPLE IDENTIFICATION	DATE	LAB NUMER (lab use only)	AIR VOLUME (Liters)	NO. CONT.	SAMPLE TYPE *	ANALYSES: EPA 602	HOLD									COMMENTS/ INTERFERENCES
W-T-3C	1/8/88	8801031-01A		1	VOA	X										
W-T-3D	"	↓ 01B		1	VOA		X									

RUSH TURNAROUND
Verbal to M. Klaver 1/11/88 NOON.

Relinquished by: (Signature) Mark M Klaver	Date 1/8/88	Time 11:00am	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Dispatched by: (Signature)	Date	Time	Received for lab by: (Signature) [signature]	Date 1-8-88	Time 1100
Method of Shipment:			Lab Comments:		4°C

*SAMPLE TYPE (SPECIFY): (1) 37 mm 0.8 um MCEF;2) 25 mm 0.8 um MCEF; (3) 25 mm 0.4 um polycarb. filter; (4) PVC filter, pore size : (5) Charcoal tube; (6) Silica gel tube (7) Water; (8) Soil; (9) Bulk Sample;

CHAIN OF CUSTODY RECORD

SAMPLERS: (Signature) [signature]

Phone: 938-5610

SHIP TO: MED-TOX ASSOC. PLEASANT HILL

ATTENTION: MICHAEL JAEGER

Phone No.

SHIPPING INFORMATION

Shipper

Address

Date Shipped

Shipment Service

Airbill No.

Cooler No.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
[signature]		
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Receive for laboratory by*: (Signature) Yvonne St John	Date/Time 1/21/88 1108

* Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return top copy to J. H. KLEINFELDER & ASSOCIATES, 1901 Olympic Blvd., Suite 300, Walnut Creek, California 94596

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
N-W-4A		1-21-88	BTX&E PER EPA METHOD NO. 602	Good
W-W-4B		"	"	"
N-W-4C		"	"	"
W-W-4D		"		

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated
(4)
(5)

White - Sampler Canary - J. H. Kleinfelder & Associates Pink - Lab Courtesy Copy

JHKAA Form M60

CHAIN OF CUSTODY RECORD

SAMPLERS: (Signature) James N. Zelle

Phone: 938-5610

SHIP TO:
MED-TOX ASSOC.
PLEASANT HILL CA

ATTENTION: MIKE JAEGER

Phone No. ~~938-5615~~ 930-9090

SHIPPING INFORMATION

Shipper

Address

Date Shipped

Shipment Service

Airbill No.

Cooler No.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
James N. Zelle		
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Receive for laboratory by*: (Signature) Eckel Idegim	Date/Time 2/19 12:16

* Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return top copy to J. H. KLEINFELDER & ASSOCIATES, 1901 Olympic Blvd., Suite 300, Walnut Creek, California 94596

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
W-T-1A	JOB	2-19-88	EPA 602	
W-T-1B	10-1782-01		(BTX&E)	
W-T-2				1 WEEK TURNAROUND
W-T-3				
W				

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated
(4)
(5)

White - Sampler Canary - J. H. Kleinfelder & Associates Pink - Lab Courtesy Copy