Confunction SS was not the Character of the Manual of the bas on-going 600 months of the bas on-going at 2.2 ppm. The Cher

June 30, 1997

Mr. Robert Weston Senior Hazardous Materials Specialist Alameda County Health Care Services Department of Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 Chevron Products Company 6001 Bollinger Canyon Road Building L San Ramon, CA 94583 P.O. Box 6004 San Ramon, CA 94583-0904

Marketing - Sales West Phone 510 842 9500

Re:

Chevron Service Station #9-1924 4904 South Front Street

Livermore, California

Dear Mr. Weston:

Enclosed is the Product Piping Removal Soil Sampling Report that was prepared by our consultant Touchstone Developments for the above noted facility. An environmental investigation was conducted at this site during the course of upgrading the dispenser islands. The investigation included collecting soil samples beneath and in the vicinity of the dispenser islands to determine the impact, if any from the service station operations.

Soil samples were collected beneath the dispenser islands and analyzed fro TPH-g, BTEX, MtBE, and Lead constituents. No benzene constituents were detected in any of the soil samples. The highest TPH-g concentration detected was 2.1 ppm in sample P2, while the highest MtBE concentration was in P3 at 2.2 ppm.

Additional soil was excavated from beneath the dispenser represented by sample P3 due to the MtBE detected here. The excavated area was limited to approximately 5 feet in depth so as to protect the integrity of the canopy column footings. No additional sampling was requested. All of the excavated soils were transported by Allwaste Transportation and Remediation, Inc. to Browning-Ferris Industries (BFI) Landfill in Livermore for disposal.

It appears that there has been minimal impact from petroleum hydrocarbons at this site and no further action is proposed. If you have any questions or comments call me at (510) 842-9136.

Sincerely,

CHEVRON PRODUCTS COMPANY

Philip R. Briggs

Site Assessment and Remediation Project Manager

Enclosure

June 30, 1997 Mr. Robert Weston Chevron Service Station # 9-1924 Page 2

cc. Mr. Bill Scudder, Chevron

Ms. Eva Chu Alameda County Health Care Services Department of Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

#### INVOICE

ALLWASTE TRANSPORTATION

P.O. BOX 150

12475 LLAGAS AVENUE

SAN MARTIN

800-321-1030

CA 95046

(01)

SAN MARTIN TRANSPORTATION

RILL TO: CHEVRON USA

(00169)

ATTN: PHIL BRIGGS

6001 BOLLINGER CANYON ROAD \$L SAN RAHON

CA 94583-0804

SHIP DATE: 06/16/97 DELIVERY DATE: 06/16/97

CONT/TRAILER #:

INV NO: 016412-00

CUSTOMER REF #: PHIL BRIGGS

DATE: 06/24/97

PO #: 9072072

SHIPPER: CHEVRON-91924-BWY 84-LIVERMORE (91924)

1ST ST AND PRONT

LIVERMORE

CA

CONSIGNEE: BFI VASCO RD.

4001 N. VASCO RD. -

VASCO ROAD

LIVERHORE

CA

(BPI )

	QUANTITY	DESCRIPTION	ACTUAL WT	BILL UNITS	BILL RATE	BILL AMOUNT
01) 02) 03) 04) 05) 06)	LOAD AT: 91924 DROP AT: BRI	S/O #9072072 (ATTN: PHIL BRIGGS) ZZOZ CHEVRON-91924-HWY 84-LIVERMORE LIVERMORE BFI VASCO RD. LIVERMORE PLEASE REFER TO ATTACHMENTS FOR COMPLETE ITEMIZATION OF CHARGES BILLED ON TONNAGE ALLWASTE THANKS YOU FOR YOUR BUSINESS	2810	200.32	5.68	/Ton 1,137.82

PLEASE REMIT PAYMENT TO LOCK BOX FILE NUMBER 54079 LOS ANGELES, CA 90074-4079

> DM5 100091924 75100 100

> > APPROVED BY P. R. BRIGGS

# All Environmental Services A Hazardous Waste Transportation A Hazardous Materials Management General Engineering Construction

SIGNATURE:

### Auwaste Transportation & Kemealation, Inc.

- Formerly known as STAMCO, Inc.
P.O. Box 150 • San Martin, CA 95046
408 / 683-0447

	40000
J.R. NO.:	016412-00
DATE:	6-16-47

CITY_	ER _ ESS _ ACT _ PHON	Liver	ron + Front St nore Calf		CONSIGNEE ADDRESS _ CITY CONTACT _ CUST. PHOI	4001N. V.	verme	el Cali	/		
		EQUIP. CTIONS:	(FORKLI)	FT, PLACARDS, A	DO'L STOPS, ETC.)	MANIFEST NO.					
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NAME BEGIN JOADI			7 1.A · 6-13-47 		1	NG TIME: (S	•	3 PM	Ç. /L4 (STOI	7 P)	M

ERMS: Net 30 days. Consignee to pay any legal fees for collection of delinquent accounts, plus the legal rate of interest of 1½ % per month or 18 % per year will be charged for all past due accounts. We make all deliveries inside curb and on lot at customer's risk only and accept no responsibility for damages resulting from such deliveries.

Claims for short or damage or overcharge must be filled with this receipt within 10 days.

RECEIVED BY:



## Product Piping Removal Soil Sampling Report

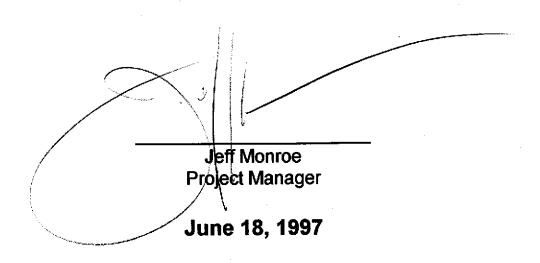
Service Station Number 9-1924 4904 Southfront Street Livermore, California

prepared for

Chevron Products Company 6001 Bollinger Canyon Road San Ramon, California

prepared by

**Touchstone Developments** 



#### INTRODUCTION

This report prepared by Touchstone Developments (Touchstone) documents the removal of product dispensers with associated piping and compliance sampling at Chevron Station number 9-1924 located on 4904 Southfront Street, Livermore, California (Figure 1). In addition, this report documents the disposal of soil generated at this location during product dispenser and piping replacement activities. Soil samples collected from beneath the dispensers and soil stockpiles was performed on June 5, 1997.

#### SITE CONDITIONS

The site is located at the junction of Southfront and First Street in Livermore, California. The site is surrounded by commercial properties. Facilities at this service station site consist of three 10,000-gallon double wall fiberglass gasoline underground storage tanks (USTs), associated product piping, two dispenser islands, and a station building.

Groundwater was not encountered in the piping trench excavations.

#### SERVICE STATION FIELD ACTIVITIES

Product piping/dispenser removal and replacement, excavation, and backfill were performed by Armer/Norman and Associates of Walnut Creek, California. A Touchstone representative was on-site to collect soil samples from the trench excavations and soil stockpiles. Trench sampling was observed and directed by Robert Weston, a representative of Alameda County Health Agency, Division of Environmental Protection. Phil Briggs representing Chevron Products Company was also on-site to observe sampling. Transportation and disposal of product piping was accomplished by Erickson, Inc. of Richmond, California.

#### **Product Piping Sampling**

After single walled fiberglass piping and product dispensers were removed, soil samples were then collected. Soil samples designated P1 through P4 were collected on June 5, 1997 from beneath the dispensers at depths of approximately 3 to 3.5 feet below grade surface (bgs).

On June 9, 1997 additional soil was excavated from beneath the dispenser initially represented by sample P3. Excavation measured approximately 4 feet by 4 feet by 5 feet in depth. This was performed at the request of Alameda County's representative Eva Chu. No additional sampling was requested. Soil sample locations are shown on Figure 2. Soil sample depths and analytical results are summarized in Table A.

#### STOCKPILE SAMPLING AND DISPOSAL

Soil stockpile samples PSP-1(a-d) represent approximately 80 cubic yards (cy) of soil and peagravel excavated to remove product piping and dispensers on-site. A soil sample was collected for approximately every 20 cy of excavated material. Four samples were then composited in the laboratory and analyzed as one to represent the stockpile of approximately 80 cy. The stockpiles were transported by Allwaste Transportation and Remediation, Inc. (Allwaste) during June 1997 to Browning-Ferris Industries' (BFI) Landfill located in Livermore, California. Soil stockpile location and samples are shown on Figure 2 and soil stockpile sample analytical results are summarized in Table A.

#### SAMPLING PROTOCOL

Soil samples were collected by pushing a clean, laboratory supplied, 4 ounce sampling jar into the soil until completely full. The end of the sample jars were sealed with teflon lined caps. The samples were then labeled, placed in a cooler with ice, entered on a Chain-of-Custody form and transported to Sequoia Analytical, a State-certified environmental laboratory located in Walnut Creek, California.

#### Stockpile Sampling

Soil samples were collected for approximately every 20 cy of material generated at the site. The stockpile sample was collected by removing the top 6 to 12 inches of soil, then pushing a sample tube into the soil until completely full. The sample was sealed, labeled and handled as described above.

#### SAMPLE ANALYSIS

Soil samples collected from the product piping trenches and associated stockpiles were analyzed for Total Petroleum Hydrocarbons (TPH) calculated as gasoline according to EPA Method 8015 (Modified), Benzene, Toluene, Ethylbenzene and Xylenes (BTEX) and Methyl t-Butyl Ether (MTBE) according to EPA Method 8020, Total Lead according to EPA SW-846 6010. The stockpile sample was additionally analyzed for Volatile Organic Compounds according to EPA Method 8010 and STLC for Lead. Copies of the analytical laboratory reports and Chain-of-Custody forms are presented in Appendix A.

#### List of Attachments

Table A: Sample Analytical Data Summary

Figure 1: Site Plan

Figure 2: Site Plan with Sample Locations

Appendix A: Certified Analytical Reports and Chain-of-Custody forms

## TABLE A Sample Analytical Summary Results in mg/Kg (ppm) unless noted

## PRODUCT TRENCH SAMPLES

Sample ID	Date Sampled	Depth (ft.)	TPH-Gas	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Lead
P1	6-5-97	3	ND	ND	ND	· ND	0.0057	0.35	72
P2	6 <b>-</b> 5-97	3.5	2.1	ND	0.021	0.023	0.19	. 0.27	64
P3	6-5-97	3	ND	ND	ND	ND	ND	2.2	61
P4	6-5-97	3	1.5	ND	ND	0.016	0.047	0.38	79

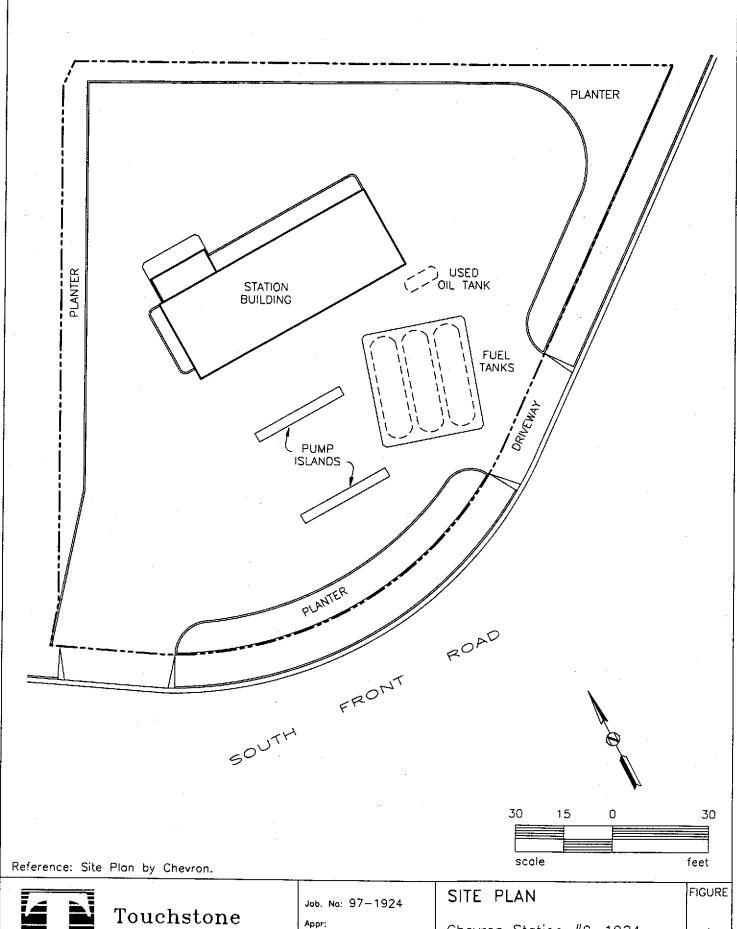
#### PIPING SAMPLES

Sample ID	Date Sampled	TPH-Gas	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	8010	Lead	STLC Lead
PSP-1 (a-d)	6-5-97	64	ND	ND	0.55	2.8	ND	ND	58	0.22

Not Detected at or above lab detection limits Methyl-Tert-Butyl-Ether Total Petroleum Hydrocarbons parts per million

ND = MTBE = TPH =

ppm =

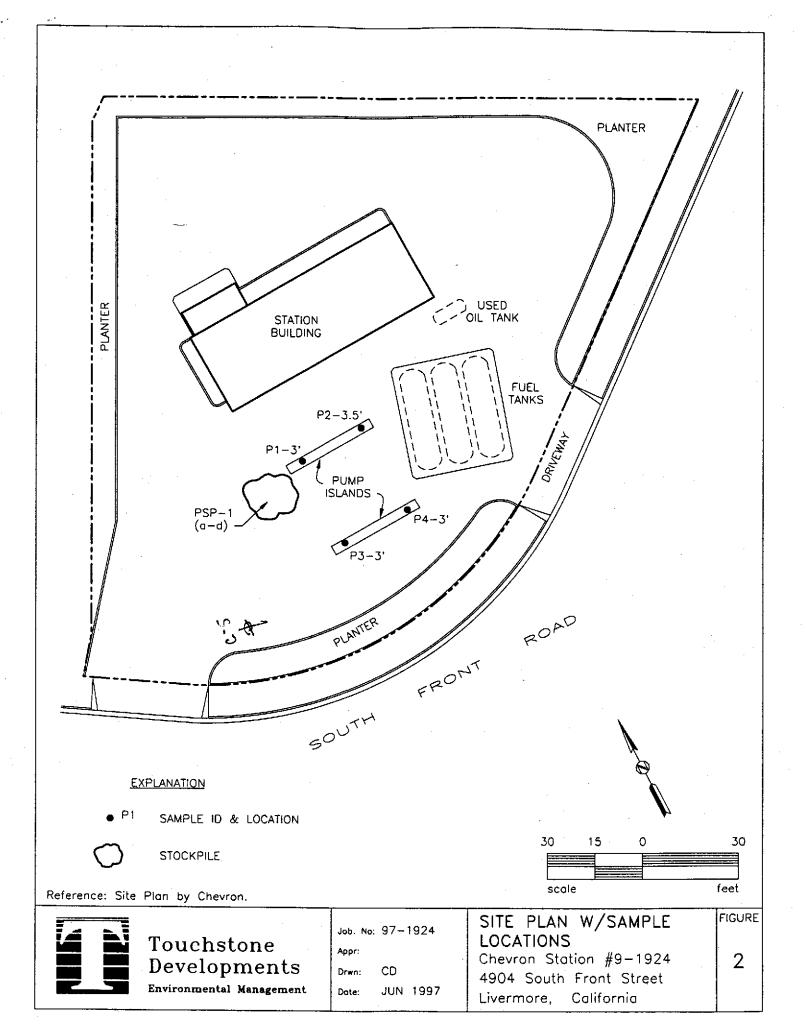


Developments Environmental Management

CD Drwn:

Date: JUN 1997 Chevron Station #9-1924 4904 South Front Street Livermore, California

1





Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Touchstone Development Snta Rsa Client Project ID: P.O. Box 2554

Sample Matrix:

Chevron #9-1924 Soil

Sampled: Received:

Jun 5, 1997 Jun 5, 1997

Santa Rosa, CA 95405 Attention: Jeff Monroe Analysis Method: First Sample #:

EPA 5030/8015 Mod./8020 706-0298

Reported:

Jun 6, 1997

QC Batch Number:

SP060597

SP060597 SP060597

SP060597

SP060597

8020EXA 8020EXA 8020EXA 8020EXA 8020EXA TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 706-0298 P1-3	Sample I.D. 706-0299 P2-3.5	Sample I.D. 706-0300 P3-3	Sample I.D. 706-0301 P4-3	Sample I.D. 706-0302 PSP-1 (a-d) *	
Purgeable Hydrocarbons	1.0	N.D.	2.1	N.D.	1.5	64	
Benzene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	
Toluene	0.0050	N.D.	0.021	N.D.	N.D.	N.D.	
Ethyl Benzene	0.0050	N.D.	0.023	N.D.	0.016	0.55	
Total Xylenes	0.0050	0.0057	0.19	N.D.	0.047	2.8	
MTBE	0.050	0.35	0.27	2.2	0.38	N.D.	
Chromatogram Pattern:  Quality Control Data			Gasoline & Discrete Peaks		Gasoline & Discrete Peaks H	Gasoline & Unidentified ydrocarbons > C8	
Report Limit Multip	lication Factor:	1.0	1.0	1.0	1.0	50	
Date Analyzed:		6/5/97	6/5/97	6/5/97	6/5/97	6/6/97	
Instrument Identification:		HP-4	HP-4	HP-4	HP-4	HP-4	
Surrogate Recover (QC Limits = 70-13		86	89	85	78	300	

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard. Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271 -

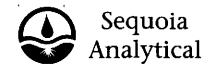
Please Note:

\* Surrogate recovery is above the upper control limits due to sample coelution.

Melissa A. Brewer

Client Services Representative

7060298.TQU <1>



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 (415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Touchstone Development Snta Rsa Client Project ID: Jun 5, 1997 Chevron #9-1924 Sampled: P.O. Box 2554 Sample Descript: Soil, PSP-1 (a-d) Received: Jun 5, 1997 Santa Rosa, CA 95405 Analysis Method: EPA 5030/8010 Analyzed: Jun 5, 1997 Attention: Jeff Monroe Lab Number: 706-0302 Reported: Jun 9, 1997

QC Batch Number:

SP0612978010EXA

Instrument ID:

HP-7

## **HALOGENATED VOLATILE ORGANICS (EPA 8010)**

Analyte	Detection Limit µg/kg		Sample Results
Bromodichloromethane	10	***************************************	N.D.
Bromoform	10		N.D.
Bromomethane	20	· · · · · · · · · · · · · · · · · · ·	N.D.
Carbon tetrachloride	10	***************************************	N.D.
Chlorobenzene	10	***************************************	N.D.
Chloroethane	20	***************************************	N.D.
2-Chloroethylvinyl ether	20	***************************************	N.D.
Chloroform	10	***************************************	N.D.
Chloromethane	20	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	N.D.
Dibromochloromethane	10	***********	N.D.
1,2-Dichlorobenzene	10	***************************************	N.D.
1,3-Dichlorobenzene	10		N.D.
1,4-Dichlorobenzene	10	********************************	N.D.
1,1-Dichloroethane	10	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	N.D.
1,2-Dichloroethane	10	***************************************	N.D.
1,1-Dichloroethene	10		N.D.
cis-1,2-Dichloroethene	10	***************************************	N.D.
trans-1,2-Dichloroethene	10	***************************************	N.D.
1,2-Dichloropropane	10	***************************************	N.D.
cis-1,3-Dichloropropene	10	4818164614814814814614614614614614614	N.D.
trans-1,3-Dichloropropene	10	***************************************	N.D.
Methylene chloride	100	***************************************	N.D.
1,1,2,2-Tetrachloroethane	10	***************************************	N.D.
Tetrachloroethene	10	***************************************	N.D.
1,1,1-Trichloroethane	10	***************************************	N.D.
1,1,2-Trichloroethane	10		N.D.
Trichloroethene	10	***************************************	N.D.
Trichlorofluoromethane	10		N.D.
Vinyl chloride	20	***************************************	N.D.
Surrogates	Control Limit %	, 3	% Recovery
Dibromodifluoromethane	50 15	50	88
4-Bromofluorobenzene	50 15	50	103

Analytes reported as N.D. were not present above the stated limit of detection.

**SEQUOIA ANALYTICAL, #1271** 

Melissa A. Brewer

Client Services Representative





Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 (415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Touchstone Development Snta Rsa Client Project ID:

P.O. Box 2554

Santa Rosa, CA 95405 Attention: Jeff Monroe Sample Descript:
Analysis for:

First Sample #:

Chevron #9-1924 Soil Lead 706-0298 Sampled: Received: Digested:

Jun 5, 1997 Jun 5, 1997 Jun 6, 1997

Analyzed: Reported: Jun 6, 1997 Jun 6, 1997

**LABORATORY ANALYSIS FOR:** 

Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg	QC Batch Number	Instrument ID
706-0298	P1-3	1.0	72	ME0606976010MDA	MV-4
706-0299	P2-3.5	1.0	64	ME0606976010MDA	MV-4
706-0300	P3-3	1.0	61	ME0606976010MDA	MV-4
706-0301	P4-3	1.0	79	ME0606976010MDA	MV-4
706-0302	PSP-1 (a-d)	1.0	58	ME0606976010MDA	MV-4

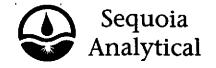
Analytes reported as N.D. were not present above the stated limit of detection.

lissa a. Brewer

**SEQUOIA ANALYTICAL, #1271** 

Melissa A. Brewer

Client Services Representative



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Touchstone Development Snta Rsa Client Project ID:

P.O. Box 2554

Matrix:

Chevron #9-1924

Solid

Santa Rosa, CA 95405

Attention: Jeff Monroe

QC Sample Group: 7060298-302

Reported:

Jun 18, 1997

#### **QUALITY CONTROL DATA REPORT**

A		<del></del>			
Analyte:	Benzene	Toluene	Ethyl	Xylenes	
			Benzene		
QC Batch#:	SP060597	SP060597	SP060597	SP060597	
•	8020EXA	8020EXA	8020EXA	8020EXA	
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill	
MS/MSD #:	7060248	7060248	7060248	7060248	
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	
Prepared Date:	6/5/97	6/5/97	6/5/97	6/5/97	
Analyzed Date:	6/6/97	6/6/97	6/6/97	6/6/97	
nstrument I.D.#:	HP-4	HP-4	HP-4	HP-4	
Conc. Spiked:	0.40 mg/kg	0.40 mg/kg	0.40 mg/kg	1.2 mg/kg	
Result:	0.59	0.61	0.60	1.9	
MS % Recovery:	148	153	150	158	
Dup. Result:	0.59	0.62	0.61	1.9	
MSD % Recov.:	148	155	153	158	
RPD:	0.0	1.6	1.7	0.0	
RPD Limit:	0-25	0-25	0-25	0-25	

LCS #:	4LCS060697	4LCS060697	4LCS060697	4LCS060697
Prepared Date:	6/6/97	6/6/97	6/6/97	6/6/97
Analyzed Date:	6/6/97	6/6/97	6/6/97	6/6/97
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 μg/L	20 μg/L	20 μg/L	60 μg/L
LCS Result:	19	19	19	59
LCS % Recov.:	95	95	95	98

	- HOWEN						
	MS/MSD						
- 1	LCS	60-140	60-140	60-140	60-140		į
	<b>Control Limits</b>	<del>_</del>	55 146	55-140	00 140		

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer Client Services Representative Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference





Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 (415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Touchstone Development Snta Rsa Client Project ID:

P.O. Box 2554

Matrix:

Chevron #9-1924

Solid

Santa Rosa, CA 95405 Attention: Jeff Monroe

QC Sample Group: 7060298-302

Reported:

Jun 18, 1997

#### **QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl	Xylenes	<del>-</del>
, mary to,	Delizono	roluerie	=	Ayleries	
AC Patab#	0000000		Benzene		
QC Batch#:	SP060597	SP060597	SP060597	SP060597	
	8020EXA	8020EXA	8020EXA	8020EXA	
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill	
MS/MSD #:	7060248	7060248	7060248	7060248	·
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	
Prepared Date:	-	-	-	_	
Analyzed Date:	-	· <u>-</u>	-	-	
nstrument I.D.#:	HP-4	HP-4	HP-4	HP-4	
Conc. Spiked:	-	<b>-</b> ·	•	-	
Result:	-	-	4	_	
MS % Recovery:	-	-	-	-	
Dup. Result:		_	_		
MSD % Recov.:	-	-	-	-	•
RPD:		_	_		
RPD Limit:	0-25	0-25	0-25	0-25	

LCS #:	4LCS060597	4LCS060597	4LCS060597	4LCS060597
Prepared Date:	6/5/97	6/5/97	6/5/97	6/5/97
Analyzed Date:	6/5/97	6/5/97	6/5/97	6/5/97
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 μg/L	20 μg/L	20 μg/L	60 μg/L
LCS Result:	16	17	16	51
LCS % Recov.:	80	85	80	85

MS/MSD					
LCS	60-140	60-140	60-140	60-140	
Control Limits				,	

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer Client Services Representative Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix

interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Touchstone Development Snta Rsa Client Project ID:

P.O. Box 2554

Matrix:

Chevron #9-1924

rix:

Santa Rosa, CA 95405 Attention: Jeff Monroe

QC Sample Group: 7060298-302

Reported:

Jun 19, 1997

### **QUALITY CONTROL DATA REPORT**

Solid

Analyte:	1,1-Dichloro-	Trichloro-	Chloro-	Lead	
	ethene '	ethene	benzene		
QC Batch#:	SP061297	SP061297	SP061297	ME060697	
•	8010EXA	8010EXA	8010EXA	6010MDA	
Analy. Method:	EPA 8010	EPA 8010	EPA 8010	EPA 6010	
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 3050	
Analyst:	K. Nill	K. Nill	K. Nill	J. Kelly	
MS/MSD #:	7060302	7060302	7060302	7060298	
Sample Conc.:	N.D.	N.D.	N.D.	72 mg/kg	
Prepared Date:	6/5/97	6/5/97	6/5/97	6/6/97	
Analyzed Date:	6/12/97	6/12/97	6/12/97	6/6/97	
nstrument I.D.#:	HP-7	HP-7	HP-7	MV-4	
Conc. Spiked:	200 µg/Kg	200 μg/Kg	200 μg/Kg	50 mg/kg	
Result:	120	190	170	100	
MS % Recovery:	60	95	85	56	
Dup. Result:	140	240	190	110	
MSD % Recov.:	70	120	95	76	
RPD:	15	23	11	9.5	
RPD Limit:	0-25	0-25	0-25	0-20	

LCS #:	LCS060597	LCS060597	LCS060597	LCS060697
Prepared Date:	6/5/97	6/5/97	6/5/97	6/6/97
Analyzed Date:	6/5/97	6/5/97	6/5/97	6/6/97
Instrument I.D.#:	HP-7	HP-7	HP-7	MV-4
Conc. Spiked:	10 μg/L	10 μg/L	10 µg/L	50 mg/kg
LCS Result:	7.4	10	8.8	47
LCS % Recov.:	74	100	88	94

LIE /USB					
MS/MSD				· · · · · · · · · · · · · · · · · · ·	•
LCS	65-135	70-130	70-130	80-120	
Control Limits				00 120	

SEQUOIA ANALYTICAL, #1271

melicial Brewe

Melissa A. Brewer Client Services Representative Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

\*\* MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Cl evro P D. E San Rar	n U 3OX non,	J.S.A. inc.	Cone	Facilitant Provident Nuclearly N	lity Addre	mber_	904 S 1924 34 San Ver		My Deri	on J	S ,   N   N   N   N   N   N   N   N   N   N	ct: i		Chevron  Chevron  Loborato  Loborato  Samples  Collection	ry Name ry Relection Collection	(Name) (Phone) ——— Dee Num	57	10 50	n-1	12/	195	79	r-Recor	rd -
Sample Number		Lab Sample Number	Number of Containers	Matrix S = Soll A = Ar W = Woter C = Charcool	Type G = Greb C = Composite D = Discrete	Ifme	Somple Preservation	load (Yes or No.)	BIEX + TPH GAS ( 1902) = (8020 + 8015) ( 1902)	3	Off and Grease (5520)	Purperble Holocarbons (8010)	Aromotice			Metals CACY-PLZn,Ni (ICAP or Ak)	FOR						Pamartia	
PJ-3 F3- I4-3	3 7,5 3	4	/ / / 4	\$ \ \ \	P B C	1:20	7	Jes V	X V			X	<b>&gt;</b>					7 7	060 060 060	298 299 300 301			Remarke	-
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plinquished	В	(Signature)		Organ	nization nization nization	6	te/Time	Rece	Ned By	(Signat	uro)	2) Asignati	0	rganizati rganizati		Date,	/Time /Time /Time /			Turn Aro	24 48 5 (	Hrs. Hrs. Jays Days Straoted	Cholos)	



Santa Rosa, CA 95405

Attention: Jeff Monroe

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8

Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

Lead

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Touchstone Development Snta Rsa Client Project ID: P.O. Box 2554

Sample Descript: Analysis for: First Sample #:

Chevron #9-1924 STLC extract of Soil

Lead 706-0302

: Jun 5, 1997 Sampled: Relogged: Digested:

Jun 6, 1997 Jun 9, 1997

Analyzed: Jun 11, 1997 Jun 11, 1997 Reported:

LABORATORY ANALYSIS FOR:

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L	QC Batch Number	Instrument ID
706-0302	PSP-1 a-d	0.020	0.22	ME060997STLCMDA	MV-3

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer

Client Services Representative



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Touchstone Development Snta Rsa Client Project ID:

P.O. Box 2554

Matrix:

Chevron #9-1924 STLC extract

Santa Rosa, CA 95405 Attention: Jeff Monroe

QC Sample Group: 7060302

Reported:

Jun 11, 1997

#### **QUALITY CONTROL DATA REPORT**

Analyte:

Lead

QC Batch#:

ME060997

STLCMDA

Analy. Method:

EPA 200.7

Prep. Method:

EPA 200.7

Analyst: MS/MSD #:

J. Kelly 7060407

Sample Conc.:

0.22 mg/L

Prepared Date:

6/9/97

Analyzed Date:

0/3/31 18/6/0

Instrument I.D.#:

6/10/97 MV-3

Conc. Spiked:

2.0 mg/L

Result:

2.2

MS % Recovery:

99

Dup. Result:

2.2

MSD % Recov.:

99

RPD:

0.0

**RPD Limit**;

0-20

LCS #:

LCS060997

Prepared Date:

6/9/97

Analyzed Date:

6/10/97

Instrument I.D.#:

МV-з

Conc. Spiked:

1.0 mg/L

LCS Result:

1.1

LCS % Recov.:

110

MS/MSD

LCS

80-120

Control Limits

80-

SEQUOIA ANALYTICAL, #1271

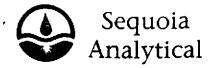
Melissa a Brewe

Melissa A. Brewer Client Services Representative Please Note:

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## **REQUEST TO RELOG SAMPLES**

		ase submit to sample control with	a copy of the COC)
CLIENT: 10uch	stone Dev.	MATRIX: SOI	
PREVIOUSLY LOGGE	D SAMPLES		
TAT Change sta		LW) me: 1700	
CHANGE ANALYSES	<u> </u>	1700	
Add Analyses	$\boxtimes$	Cancel Analyses	
Sequoia Project ID:	9706086		
Sample Number 7060302	Analyses  STLC LLG	rd	7060407 A
SAMPLES ON HOLD			
Sample Description	Analyses		
			<del></del>
		1	<del>- · · · · · · · · · · · · · · · · · · ·</del>
ent Authorization (Person	/Date/Time):	Monwel 4/4/9	47/1700
oject Manager:	Melistal	Bruner	<u> </u>

Clevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Consultant Project Hurr Consultant Harry Address Project Contact (Na	4907 4907 4467 2554 San	Sullif Duri Kan Bru	1) 51885	Laborator Laborator Samplee Collection	(Phone)  y Name  y Release Number  Collected by (Name)	500/842/9	stody-Record
Sample Number	Matrix S = Soil A = 17Pe G = Greb O = Cong	Sample Preservation		(3015) Oil and Green (5520)	Purgeable Aromatics (8240) Purgeable Organics (8240)	Extractable Organica (8270) Metals C4.Cz.Pt.Zn.M (ICAP or M)		Remarke
12-3.5 13-3 14-3	A B	1.20 1.20 1.30 1.30					7060298 7060299 7060300 7060301	D
								=
elinquished By (Signature)  A (Signature)  Plinquished By (Signature)	Organization Organization Organization	Date/Time, Date/Time	Received By Received For	(Signature)	Organization Organization		46 6 5 53.5	Hre. Hre. Days Doys ontraoted