Chevron

June 17, 1994

Chevron U.S.A. Products Company
2410 Camino Ramon
San Ramon, CA 94583
P.O. Box 5004
San Ramon, CA 94583-0804

Marketing Department
Phone 510 842 9500

Ms. Juliet Shin
Alameda County Health Care Services
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Re: Chevron Service Station #9-0504
15900 Hesperian Boulevard, San Lorenzo, CA

Dear Ms. Shin:

Enclosed is the Underground Storage Tank Removal Report dated April 14, 1994, prepared by our consultant Touchstone Developments for the above referenced site. On March 29, 1994, a 1,000 gallon single wall fiberglass waste oil tank was removed. Laboratory reports indicate final overexcavation samples contained concentrations of waste oil parameters below detection limits. Approximately 50 cubic yards of soil generated from the tank removal and overexcavation activities was transported to Forward Landfill in Stockton, CA.

Based on field observations and analytic results it appears no further soils work is warranted. We will continue to operate and evaluate the effectiveness of the ground water extraction system

If you have any questions or comments, please do not hesitate to contact me at (510) 842-8134.

Sincerely,
CHEVRON U.S.A. PRODUCTS COMPANY

Mark A. Miller
Site Assessment and Remediation Engineer

cc: Mr. Kevin Graves, RWQCB - Bay Area
Mr. S.A. Willer

Mr. Bruce E. Prigoff, Esq.
Steefel, Levitt & Weiss
One Embarcadero Center, 29th Floor
San Francisco, CA 94111

File: 9-0504 TR RPT1

Touchstone Developments
Environmental Management

UNDERGROUND STORAGE TANK REMOVAL REPORT

for

Chevron Station No. 9-0504
15900 Hesperian Boulevard
San Lorenzo, California

Prepared for

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

by

Touchstone Developments

April 14, 1994

P.O. Box 2554 • Santa Rosa, CA 95405 • Office: (707) 538-8818 • Fax: (707) 538-8812 • Mobile/Fax: (707) 484-5112

Touchstone Developments
Environmental Management

April 14, 1994

Chevron U.S.A.
2410 Camino Ramon
San Ramon, California 94583

Attention: Mark Miller

Reference: Chevron Service Station No. 9-0504
15900 Hesperian Boulevard
San Lorenzo, California

Gentlemen:

INTRODUCTION

This report summarizes the field activities performed at the above referenced site (Figure 1) during the recent removal of a 1000 gallon waste oil tank. Excavation activities were performed by Fillner Construction, Inc. of Sacramento, California. A Touchstone Developments (TD) representative was present on-site to observe the tank removal and to obtain soil samples from the tank excavation and associated stockpile. The soil sampling described in this report was performed March 29 and 31, 1994 to comply with current State of California Regional Water Quality Control Board and Alameda County guidelines.

SITE DESCRIPTION

The site is currently operating as a Chevron Service Station on Hesperian Boulevard south of Grant Avenue in San Lorenzo. The waste oil tank was located next to the northeast corner wall of the service station building (Figure 1).

FIELD EXCAVATION ACTIVITIES

The waste oil tank was removed March 29, 1994. Tank removal and sampling was witnessed by Nick Chimento, a representative of the Alameda County Fire District and Madhulla Logan of Alameda County Health Agency, Department of Environmental Health. Also present were Belinda Erdeldt and Mark Miller representing Chevron U.S.A. The excavation was approximately 6 feet wide by 14 feet long by 8 feet deep. An estimated total of 30 cubic yards of soil was removed and placed in two stockpiles (Figure 2). The tank was a 1000 gallon, single wall fiberglass tank with no obvious holes or leaks.

P.O. Box 2554 • Santa Rosa, CA 95405 • Office: (707) 538-8818 • Fax: (707) 538-8812 • Mobile/Fax: (707) 484-5112

SOIL SAMPLING

Soil samples were collected from the backhoe bucket by removing the top few inches of soil and pushing a clean six-inch-long brass tube (2 inches in diameter) into the soil until completely full. The ends of each tube were covered with aluminium foil and sealed with plastic end caps. The sample was then labeled, placed in a cooler on ice, entered on a Chain-of-Custody form and transported to Superior Precision Analytical laboratory, a State-certified analytical laboratory located in San Francisco, California.

Excavation Sampling

Two excavation samples (WO-E and WO-W) were collected from beneath the ends of the waste oil tank after tank removal at a depth of approximately 9 feet below grade (Figure 2) and as directed by Madhulla Logan. The sample was collected by removing the top few inches of soil from the backhoe bucket then pushing the sampling tube into the soil. Both samples from the bottom of the excavation and soil stockpile were analyzed for Total Petroleum Hydrocarbons calculated as gasoline (TPH-gas) and Diesel (TPH-diesel) according to EPA Method 8015 (modified), Benzene, Toluene, Ethylbenzene and Xylenes (BTEX) according to EPA Method 8020, Halogenated Volatile Organics (VOCs) according to EPA Method 8010, Total Oil and Grease (TOG) according to EPA Method 5520F, ICAP Metals by atomic absorption (EPA Method 6010) and Semi-Volatile Organic Priority Pollutants according to EPA Method 8270 as recommended by the Tri-Regional Board Staff Guidelines.

Stockpile Sampling

Four stockpile samples designated WSP-1a&b and WSP-2a&b were collected from the stockpiles of soil generated (Figure 2) during tank removal activities. These soil samples were collected by removing the top 8 to 12 inches of soil and pushing a clean six-inch long brass tube (2" in diameter) into the soil until completely full. The soil samples were then handled as described above. The four samples were composited in the laboratory and analyzed as one sample.

Overexcavation/Remediation Activities

Receipt of initial analytical sample results indicated the presence of oil and grease at 110 parts per million (ppm) and 6 parts per billion (ppb) for Dichloromethane from the sample WO-E collected from beneath the eastern end of the former waste oil tank.

On March 31, 1994 Fillner Construction, Inc. performed over-excavation activities to remove hydrocarbon impacted soils in this eastern half of the waste oil tank excavation. The existing excavation was cleaned out and overexcavated to approximately 11 feet below grade. Groundwater was not encountered during excavation activities.

One soil sample was collected at approximately 11 feet below grade in the bottom, center of the overexcavated area and designated XWO-E. The overexcavation soil sample was analyzed for TOG and 8010 (VOCs). Approximately 30 cubic yards were generated during the waste oil tank removal and another estimated 15 cubic yards were generated during the overexcavation activities.

ANALYTICAL RESULTS

Excavation Results

Analytical laboratory results for overexcavation verification samples were not detected (ND) at or above the laboratory detection limits for TOG and VOCs (8010). Chemical analytical data for both excavation and stockpile samples are summarized in Table A.

SOIL DISPOSTION

Approximately 45 to 50 cubic yards of soil generated from the tank removal and overexcavation activities are represented by composited samples WSP-1a&b and WSP-2a&b. These stockpiles were approved for disposal at Forward Landfill located in Stockton, California. Allwaste, Inc. transported soils to Forward on April 5, 1994.

If you have any questions, please call me at (707) 538-8818.

Touchstone Developments by,

Jeff L. Monroe
Project Manager

JLM/jlm

Table A: Chemical Analytical Summary
Figure 1: Site Plan
Figure 2: Waste Oil Tank Removal Sample Locations
Figure 3: Overexcavation Sample Location
Appendix A: Analytical Laboratory Report and
Chain-of-Custody form

TABLE A

ANALYTICAL SUMMARY

Results in mg/kg (parts per million - ppm)

WASTE-OIL TANK SAMPLING RESULTS

SAMPLE ID	DEPTH (FT.)	LAB	DATE	TPH - Gasoline	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TPH - Diesel	TOG	8010	8270	METALS
WO-E	9	Superior	29-Mar-94	ND	ND	ND	ND	ND	ND	110	0.006 (dcm)	ND	*
WO-W	9	Superior	29-Mar-94	ND	ND	ND	ND	ND	ND	ND	ND	ND	*

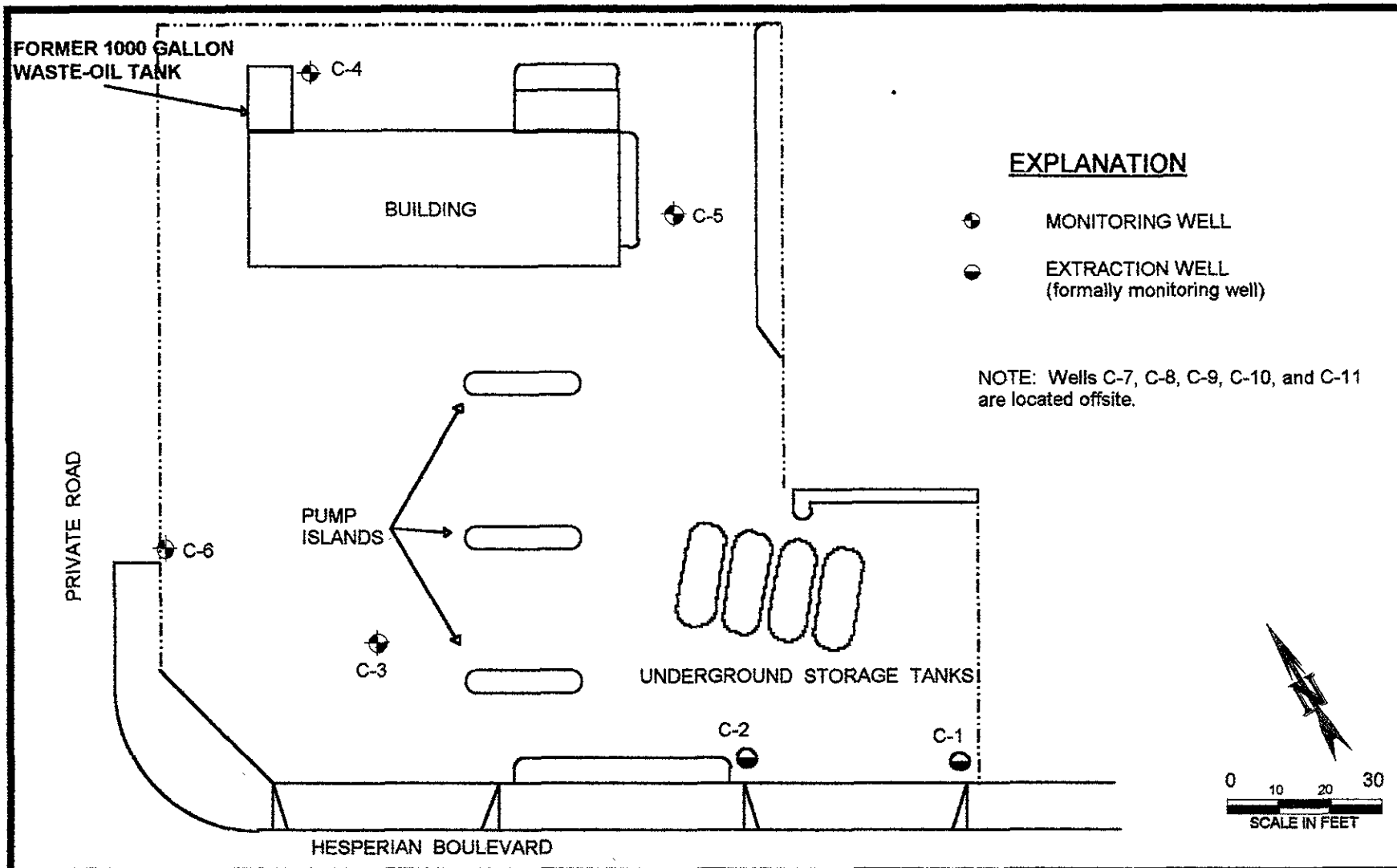
OVEREXCAVATION SAMPLING RESULTS

SAMPLE ID	DEPTH (FT.)	LAB	DATE	TPH - Gasoline	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TPH - Diesel	TOG	8010	8270	METALS
XWO-E	11	Superior	31-Mar-94	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA

STOCKPILE SAMPLING RESULTS

SAMPLE ID	LAB	DATE	TPH - Gasoline	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	TPH - Diesel	TOG	8010	8270	METALS
WSP-1a&b (&)	Superior	29-Mar-94	ND	ND	ND	ND	ND	240	60**	ND	ND	*
WSP-2a&b (&)	Superior	29-Mar-94	ND	ND	ND	ND	ND	240	60**	ND	ND	*

* = See Certified Analytical Report for results.
** = WSP-2a&b reported 1,100 ppm TOG before laboratory compositing.
& = laboratory composited into one sample.
ND = Not Detected at or above laboratory detection limits.
TPH-Gasoline = Total Petroleum Hydrocarbons calculated as Gasoline.
TPH-Diesel = Total Petroleum Hydrocarbons calculated as Diesel
TOG = Total Oil & Grease
NA = Not Analyzed



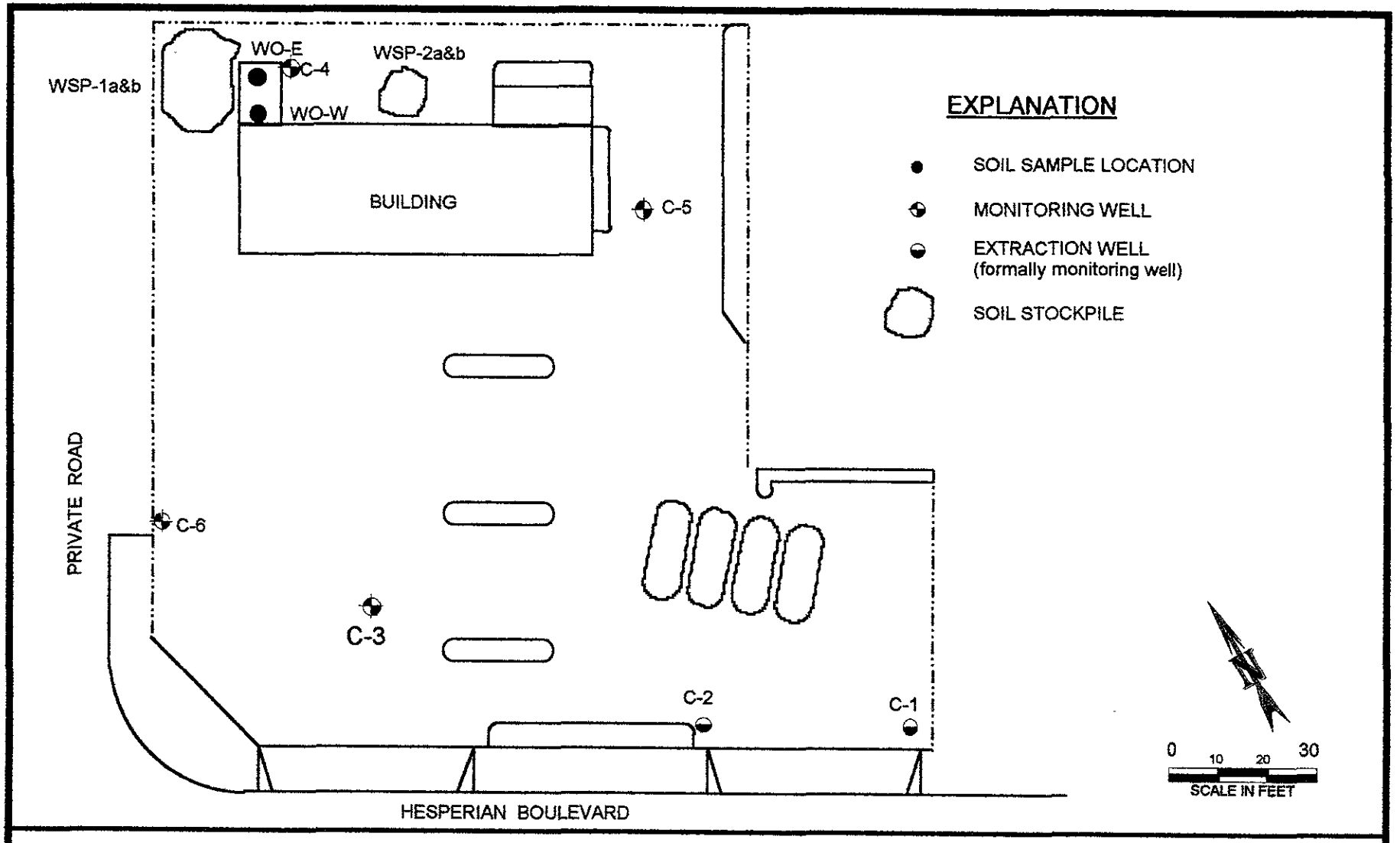
Touchstone Developments
Environmental Management

SITE PLAN

CHEVRON SERVICE STATION NO. 9-0504
15900 Hesperian Boulevard
San Lorenzo, California

FIGURE
1

PROJECT:	DATE	DRAWN BY:	BASE MAP:
0504-1	4/94	WTJ	WEISS ASSOCIATES



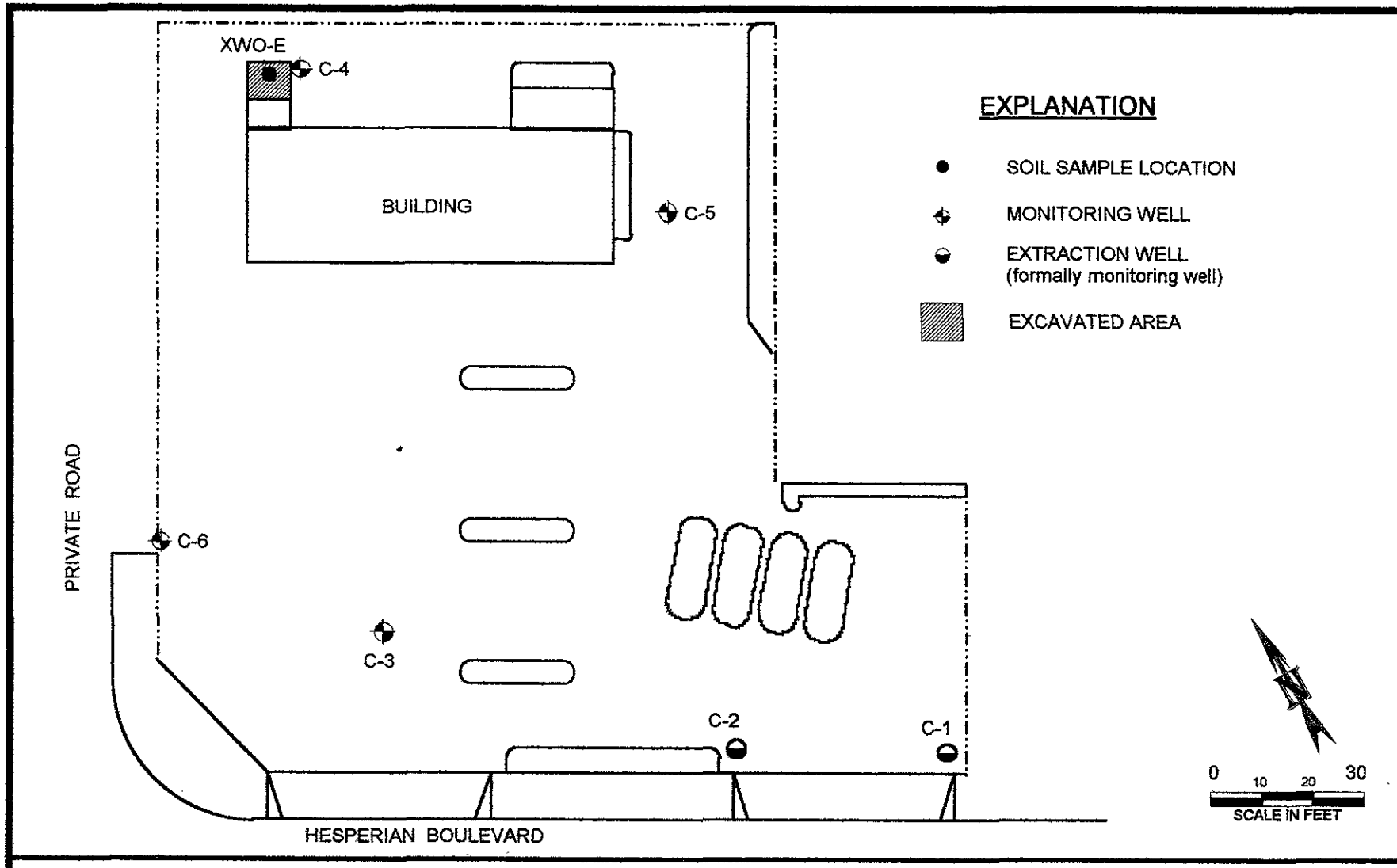
Touchstone Developments
Environmental Management

SOIL SAMPLE LOCATION MAP

CHEVRON SERVICE STATION NO. 9-0504
15900 Hesperian Boulevard
San Lorenzo, California

FIGURE
2

PROJECT:	DATE	DRAWN BY:	BASE MAP:
0504-1	4/94	WTJ	WEISS ASSOCIATES



Touchstone Developments
Environmental Management

OVEREXCAVATION AND SOIL SAMPLE LOCATION MAP

CHEVRON SERVICE STATION NO. 9-0504
15900 Hesperian Boulevard
San Lorenzo, California

FIGURE
3

PROJECT:	DATE	DRAWN BY:	BASE MAP:
0504-1	4/94	WTJ	WEISS ASSOCIATES

APPENDIX A:

Certified Analytical Reports and Chain-of-Custody forms

Superior Precision Analytical, Inc.
[illegible] • Martinez California 94553 • (510) 229-1590 / fax (510) 229-0[illegible]

TOUCHSTONE DEVELOPMENTS
Attn: JEFF MONROE

Project 0504-1
Reported 04/01/94

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
30385- 1	WO-E	03/29/94	03/30/94	Soil
30385- 2	WO-W	03/29/94	03/30/94	Soil
30385- 3	WSP-1A&B & 2A&B	03/29/94	03/30/94	Soil

RESULTS OF ANALYSIS

Laboratory Number:	30385- 1	30385- 2	30385- 3
Gasoline:	ND<1	ND<1	ND<1
Benzene:	ND<.005	ND<.005	ND<.005
Toluene:	ND<.005	ND<.005	ND<.005
Ethyl Benzene:	ND<.005	ND<.005	ND<.005
Total Xylenes:	ND<.005	ND<.005	ND<.005
Diesel Range:	ND<1	ND<1	240
Oil and Grease:	110	ND<50	60
Concentration:	mg/Kg	mg/Kg	mg/Kg

Superior Precision Analytical, Inc.
PO Box [illegible] • Martinez California 94553 • (510) 229-1590 / Fax (510) 229-0916

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

QA/QC INFORMATION
SET: 30385

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	71/72	1%	70-130
Benzene:	109/106	3%	70-130
Toluene:	97/101	4%	70-130
Ethyl Benzene:	97/99	2%	70-130
Total Xylenes:	107/107	0%	70-130
Diesel Range:	105/103	2%	70-130
Oil and Grease:	87/93	7%	56-106

Michael R. Vann
Senior Chemist

Superior Precision Analytical, Inc.
[illegible] • Martinez California 94553 • (510) 229-1590 / fax 510 [illegible]

TOUCHSTONE DEVELOPMENTS
Attn: JEFF MONROE

Project 0504-1
Reported 01-April-1994

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.

Chronology

Laboratory Number 30385

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
WO-E	03/29/94	03/29/94	/ /	03/29/94		1
WO-W	03/29/94	03/29/94	/ /	03/29/94		2
WSP-1&2(A&B)	03/29/94	03/29/94	/ /	03/29/94		3

Superior Precision Analytical, Inc.

TOUCHSTONE DEVELOPMENTS
Attn: JEFF MONROE

Project 0504-1
Reported 01-April-1994

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.

Laboratory Number	Sample Identification	Matrix
30385- 1	WO-E	Soil
30385- 2	WO-W	Soil
30385- 3	WSP-1&2 (A&B)	Soil

RESULTS OF ANALYSIS

Laboratory Number:	30385- 1	30385- 2	30385- 3
Chloromethane:	ND<5	ND<5	ND<5
Vinyl Chloride:	ND<5	ND<5	ND<5
Bromomethane:	ND<5	ND<5	ND<5
Chloroethane:	ND<5	ND<5	ND<5
Trichlorofluoromethane:	ND<5	ND<5	ND<5
1,1-Dichloroethene:	ND<5	ND<5	ND<5
Dichloromethane:	6	ND<5	ND<5
t-1,2-Dichloroethene:	ND<5	ND<5	ND<5
1,1-Dichloroethane:	ND<5	ND<5	ND<5
c-1,2-Dichloroethene:	ND<5	ND<5	ND<5
Chloroform:	ND<5	ND<5	ND<5
1,1,1-Trichloroethane:	ND<5	ND<5	ND<5
Carbon tetrachloride:	ND<5	ND<5	ND<5
1,2-Dichloroethane:	ND<5	ND<5	ND<5
Trichloroethene:	ND<5	ND<5	ND<5
c-1,3-Dichloropropene:	ND<5	ND<5	ND<5
1,2-Dichloropropane:	ND<5	ND<5	ND<5
t-1,3-Dichloropropene:	ND<5	ND<5	ND<5
Bromodichloromethane:	ND<5	ND<5	ND<5
1,1,2-Trichloroethane:	ND<5	ND<5	ND<5
Tetrachloroethene:	ND<5	ND<5	ND<5
Dibromochloromethane:	ND<5	ND<5	ND<5
Chlorobenzene:	ND<5	ND<5	ND<5
Bromoform:	ND<5	ND<5	ND<5
1,1,2,2-Tetrachloroeth:	ND<5	ND<5	ND<5
1,3-Dichlorobenzene:	ND<5	ND<5	ND<5
1,2-Dichlorobenzene:	ND<5	ND<5	ND<5
1,4-Dichlorobenzene:	ND<5	ND<5	ND<5
Concentration:	ug/Kg	ug/Kg	ug/Kg

Superior Precision Analytical, Inc.
PO Box [illegible] • Martinez California 94553 • 510 229 1590 Fax 510 229 0915

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.
Quality Assurance and Control Data - Soil

Laboratory Number 30385

Compound	Method Blank (ug/Kg)	RL (ug/Kg)	Spike Recovery (%)	Limits (%)	RPD (%)
Chloromethane:	ND<5	5			
Vinyl Chloride:	ND<5	5			
Bromomethane:	ND<5	5			
Chloroethane:	ND<5	5			
Trichlorofluoromethane:	ND<5	5			
1,1-Dichloroethene:	ND<5	5	95/108	48-180	13%
Dichloromethane:	ND<5	5			
t-1,2-Dichloroethene:	ND<5	5			
1,1-Dichloroethane:	ND<5	5			
c-1,2-Dichloroethene:	ND<5	5			
Chloroform:	ND<5	5			
1,1,1-Trichloroethane:	ND<5	5			
Carbon tetrachloride:	ND<5	5			
1,2-Dichloroethane:	ND<5	5			
Trichloroethene:	ND<5	5	87/106	71-138	20%
c-1,3-Dichloropropene:	ND<5	5			
1,2-Dichloropropane:	ND<5	5			
t-1,3-Dichloropropene:	ND<5	5			
Bromodichloromethane:	ND<5	5			
1,1,2-Trichloroethane:	ND<5	5			
Tetrachloroethene:	ND<5	5			
Dibromochloromethane:	ND<5	5			
Chlorobenzene:	ND<5	5	88/90	79-134	2%
Bromoform:	ND<5	5			
1,1,2,2-Tetrachloroeth:	ND<5	5			
1,3-Dichlorobenzene:	ND<5	5			
1,2-Dichlorobenzene:	ND<5	5			
1,4-Dichlorobenzene:	ND<5	5			

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
ug/Kg = Parts per billion (ppb)
QC File No. 30385

Michael R. Veroni
Senior Chemist
Account Manager

Superior Precision Analytical, Inc.
[illegible] • San Francisco California 94124 • (415) 647-2081 Fax 415 821 [illegible]23

TOUCHSTONE DEVELOPMENTS
Attn: JEFF MONROE

Project 0504-1
Reported 31-March-1994

ANALYSIS FOR CAM 17 METALS
California Administration Code Title 22, Paragraph 66700 & EPA Methods
SW-846 6010 & 7000 series.

Chronology

Laboratory Number 30385

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
WSP-2A&B	03/29/94	03/29/94	03/29/94	03/31/94		4

Superior Precision Analytical, Inc.
1534 Burke ... • San Francisco, California 94124 • (415) 647-2081 / fax (415) 321-...

TOUCHSTONE DEVELOPMENTS
Attn: JEFF MONROE

Project 0504-1
Reported 31-March-1994

ANALYSIS FOR CAM 17 METALS

Laboratory Number	Sample Identification	Matrix
30385- 4	WSP-2A&B	Soil

RESULTS OF ANALYSIS

Laboratory Number: 30385- 4

Antimony	(Sb):	ND<5
Arsenic	(As):	3
Barium	(Ba):	99
Beryllium	(Be):	ND<0.5
Cadmium	(Cd):	ND<0.5
Chromium	(Cr):	26
Cobalt	(Co):	8
Copper	(Cu):	16
Lead	(Pb):	5
Mercury	(Hg):	ND<0.05
Molybdenum	(Mo):	ND<5
Nickel	(Ni):	35
Selenium	(Se):	ND<1
Silver	(Ag):	ND<5
Thallium	(Tl):	ND<5
Vanadium	(V):	24
Zinc	(Zn):	42

Concentration: mg/Kg

Superior Precision Analytical, Inc.
[illegible] Inc. • San Francisco, California 94124 • 415-647-2081 fax 415-821-7123

ANALYSIS FOR CAM 17 METALS
Quality Assurance and Control Data - Soil

Laboratory Number 30385

Compound		Method Blank (mg/Kg)	RL (mg/Kg)	Spike Recovery (%)	Limits (%)	RPD (%)
Antimony	(Sb):	ND<5	5	91/88	75-125	3%
Arsenic	(As):	ND<1	1	87/92	75-125	6%
Barium	(Ba):	ND<5	5	100/101	75-125	1%
Beryllium	(Be):	ND<0.5	0.5	97/95	75-125	2%
Cadmium	(Cd):	ND<0.5	0.5	98/97	75-125	1%
Chromium	(Cr):	ND<5	5	91/87	75-125	4%
Cobalt	(Co):	ND<5	5	98/98	75-125	0%
Copper	(Cu):	ND<5	5	104/103	75-125	1%
Lead	(Pb):	ND<5	5	96/95	75-125	1%
Mercury	(Hg):	ND<0.05	0.05	95/89	75-125	7%
Molybdenum	(Mo):	ND<5	5	103/96	75-125	7%
Nickel	(Ni):	ND<5	5	99/97	75-125	2%
Selenium	(Se):	ND<1	1	92/100	75-125	8%
Silver	(Ag):	ND<5	5	102/98	75-125	4%
Thallium	(Tl):	ND<5	5	104/103	75-125	1%
Vanadium	(V):	ND<5	5	93/92	75-125	1%
Zinc	(Zn):	ND<5	5	100/98	75-125	2%

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
mg/Kg = Parts per million (ppm)
QC File No. 30385

Senior Chemist
Account Manager

Superior Precision Analytical, Inc.
[illegible] ▪ [illegible] California 94121 ▪ (415) 647-2081, fax 41[illegible]

TOUCHSTONE DEVELOPMENTS
Attn: JEFF MONROE

Project 0504-1
Reported 31-March-1994

ANALYSIS FOR CADMIUM, CHROMIUM, LEAD, NICKEL, & ZINC
by EPA Method SW-846 6010

Chronology

Laboratory Number 30385

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
WO-E	03/29/94	03/29/94	03/29/94	03/30/94		1
WO-W	03/29/94	03/29/94	03/29/94	03/30/94		2
WSP-1A&B	03/29/94	03/29/94	03/29/94	03/30/94		3

Superior Precision Analytical, Inc.
1555 Burke Street • San Francisco, California 94124 • (415) 647-2081 Fax (415) 821-7123

TOUCHSTONE DEVELOPMENTS
Attn: JEFF MONROE

Project 0504-1
Reported 31-March-1994

ANALYSIS FOR CADMIUM, CHROMIUM, LEAD, NICKEL, & ZINC

Laboratory Number	Sample Identification	Matrix
30385- 1	WO-E	Soil
30385- 2	WO-W	Soil
30385- 3	WSP-1A&B	Soil

RESULTS OF ANALYSIS

Laboratory Number:		30385- 1	30385- 2	30385- 3
Cadmium	(Cd):	ND<0.5	ND<0.5	ND<0.5
Chromium	(Cr):	30	37	18
Lead	(Pb):	ND<5	ND<5	ND<5
Nickel	(Ni):	34	39	50
Zinc	(Zn):	35	48	32
Concentration:		mg/Kg	mg/Kg	mg/Kg

Superior Precision Analytical, Inc.
1563 Burke Unit E • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821 7123

ANALYSIS FOR CADMIUM, CHROMIUM, LEAD, NICKEL, & ZINC
Quality Assurance and Control Data - Soil

Laboratory Number 30385

Compound		Method Blank (mg/Kg)	RL (mg/Kg)	Spike Recovery (%)	Limits (%)	RPD (%)
Cadmium	(Cd):	ND<0.5	0.5	98/97	75-125	1%
Chromium	(Cr):	ND<5	5	91/87	75-125	4%
Lead	(Pb):	ND<5	5	96/95	75-125	1%
Nickel	(Ni):	ND<5	5	99/97	75-125	2%
Zinc	(Zn):	ND<5	5	100/98	75-125	2%

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
mg/Kg = Parts per million (ppm)
QC File No. 30385

Michael R. Ver

Senior Chemist
Account Manager

Certified Laboratories

Superior Precision Analytical, Inc.
1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

TOUCHSTONE DEVELOPMENTS (SR)
Attn: JEFF MONROE

Project 0504-1
Reported 04-April-1994

EPA SW-846 METHOD 8270 SEMIVOLATILE ORGANICS BY GC/MS

Chronology

Laboratory Number 30385

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
WO-E	03/29/94	03/30/94	04/01/94	04/01/94		1
WO-W	03/29/94	03/30/94	04/01/94	04/02/94		2
WOSP-1a&b,WOSP-2a&b	03/29/94	03/30/94	04/01/94	04/02/94		3

Superior Precision Analytical, Inc.
1555 Burke Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

TOUCHSTONE DEVELOPMENTS (SR)
Attn: JEFF MONROE

Project 0504-1
Reported 04-April-1994

EPA SW-846 METHOD 8270 SEMIVOLATILE ORGANICS BY GC/MS

Laboratory Number	Sample Identification	Matrix
30385- 1	WO-E	Soil
30385- 2	WO-W	Soil
30385- 3	WOSP-1a&b,WOSP-2a&b	Soil

RESULTS OF ANALYSIS

Laboratory Number:	30385- 1	30385- 2	30385- 3
bis(2-chloroethyl)ethe:	ND<330	ND<330	ND<330
aniline:	ND<330	ND<330	ND<330
phenol:	ND<330	ND<330	ND<330
2-chlorophenol:	ND<330	ND<330	ND<330
1,3-dichlorobenzene:	ND<330	ND<330	ND<330
1,4-dichlorobenzene:	ND<330	ND<330	ND<330
1,2-dichlorobenzene:	ND<330	ND<330	ND<330
benzyl alcohol:	ND<330	ND<330	ND<330
bis-(2-chloroisopropyl:	ND<330	ND<330	ND<330
2-methylphenol:	ND<330	ND<330	ND<330
hexachloroethane:	ND<330	ND<330	ND<330
n-nitroso-di-n-propyla:	ND<330	ND<330	ND<330
4-methylphenol:	ND<330	ND<330	ND<330
nitrobenzene:	ND<330	ND<330	ND<330
isophorone:	ND<330	ND<330	ND<330
2-nitrophenol:	ND<330	ND<330	ND<330
2,4-dimethylphenol:	ND<330	ND<330	ND<330
bis(2-chloroethoxy)met:	ND<330	ND<330	ND<330
2,4-dichlorophenol:	ND<330	ND<330	ND<330
1,2,4-trichlorobenzene:	ND<330	ND<330	ND<330
naphthalene:	ND<330	ND<330	ND<330
benzoic acid:	ND<330	ND<330	ND<330
4-chloroaniline:	ND<330	ND<330	ND<330
hexachlorobutadiene:	ND<330	ND<330	ND<330
4-chloro-3-methylpheno:	ND<330	ND<330	ND<330
2-methyl-naphthalene:	ND<330	ND<330	ND<330
hexaclorocyclopentadie:	ND<330	ND<330	ND<330
2,4,6-trichlorophenol:	ND<330	ND<330	ND<330
2,4,5-trichlorophenol:	ND<800	ND<800	ND<800
Concentration:	ug/Kg	ug/Kg	ug/Kg

Superior Precision Analytical, Inc.
1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

TOUCHSTONE DEVELOPMENTS (SR)
Attn: JEFF MONROE

Project 0504-1
Reported 04-April-1994

EPA SW-846 METHOD 8270 SEMIVOLATILE ORGANICS BY GC/MS

Laboratory Number	Sample Identification	Matrix
30385- 1	WO-E	Soil
30385- 2	WO-W	Soil
30385- 3	WOSP-1a&b,WOSP-2a&b	Soil

RESULTS OF ANALYSIS

Laboratory Number:	30385- 1	30385- 2	30385- 3
2-chloronaphthalene:	ND<330	ND<330	ND<330
2-nitroaniline:	ND<800	ND<800	ND<800
acenaphthylene:	ND<330	ND<330	ND<330
dimethylphthlate:	ND<330	ND<330	770
2,6-dinitrotoluene:	ND<330	ND<330	ND<330
acenaphthene:	ND<330	ND<330	ND<330
3-nitroaniline:	ND<800	ND<800	ND<800
2,4-dinitrophenol:	ND<800	ND<800	ND<800
dibenzofuran:	ND<330	ND<330	ND<330
2,4-dinitrotoluene:	ND<330	ND<330	ND<330
4-nitrophenol:	ND<800	ND<800	ND<800
fluorene:	ND<330	ND<330	ND<330
4-chlorophenyl-phenyle:	ND<330	ND<330	ND<330
diethylphthlate:	ND<330	ND<330	ND<330
4-nitroaniline:	ND<800	ND<800	ND<800
4,6-dinitro-2-methylph:	ND<800	ND<800	ND<800
n-nitrosodiphenylamine:	ND<330	ND<330	ND<330
4-bromo-phenyl-phenyle:	ND<330	ND<330	ND<330
hexachlorobenzene:	ND<330	ND<330	ND<330
pentachlorophenol:	ND<800	ND<800	ND<800
phenanthrene:	ND<330	ND<330	ND<330
anthracene:	ND<330	ND<330	ND<330
di-n-butylphthlate:	ND<330	ND<330	ND<330
fluoranthene:	ND<330	ND<330	ND<330
benzidine:	ND<1700	ND<1700	ND<1700
pyrene:	ND<330	ND<330	ND<330
butylbenzylphthlate:	ND<330	ND<330	ND<330
3.3'-dichlorobenzidine:	ND<660	ND<660	ND<660
benzo[a]anthracene:	ND<330	ND<330	ND<330
Concentration:	ug/Kg	ug/Kg	ug/Kg

Superior Precision Analytical, Inc.
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TOUCHSTONE DEVELOPMENTS (SR)
Attn: JEFF MONROE

Project 0504-1
Reported 04-April-1994

EPA SW-846 METHOD 8270 SEMIVOLATILE ORGANICS BY GC/MS

Laboratory Number	Sample Identification	Matrix
30385- 1	WO-E	Soil
30385- 2	WO-W	Soil
30385- 3	WOSP-1a&b,WOSP-2a&b	Soil

RESULTS OF ANALYSIS

Laboratory Number:	30385- 1	30385- 2	30385- 3
chrysene:	ND<330	ND<330	ND<330
bis(2-ethylhexyl)phtha:	ND<330	ND<330	ND<330
di-n-octylphthalate:	ND<330	ND<330	ND<330
benzo(b,k)fluoranthene:	ND<330	ND<330	ND<330
benzo[a]pyrene:	ND<330	ND<330	ND<330
indeno[1,2,3-cd]pyrene:	ND<330	ND<330	ND<330
dibenzo[a,h]anthracene:	ND<330	ND<330	ND<330
benzo[g,h,i]anthracene:	ND<330	ND<330	ND<330
Concentration:	ug/Kg	ug/Kg	ug/Kg
-- Surrogate % Recoveries --			
2-fluorophenol:	68	76	76
phenol-d6:	76	85	86
nitrobenzene-d5:	77	89	87
2-fluorobiphenyl:	83	96	91
2,4,6-tribromophenol:	78	91	91
terphenyl-d14:	72	88	85

Superior Precision Analytical, Inc.
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EPA SW-846 METHOD 8270 SEMIVOLATILE ORGANICS BY GC/MS
Quality Assurance and Control Data - Soil

Laboratory Number 30385

Compound	Method Blank (ug/Kg)	RL (ug/Kg)	Spike Recovery (%)	Limits (%)	RPD (%)
bis(2-chloroethyl)ethe:	ND<330	330			
aniline:	ND<330	330			
phenol:	ND<330	330	82/86	55-105	5%
2-chlorophenol:	ND<330	330	84/87	60-111	4%
1,3-dichlorobenzene:	ND<330	330			
1,4-dichlorobenzene:	ND<330	330	83/88	52-116	6%
1,2-dichlorobenzene:	ND<330	330			
benzyl alcohol:	ND<330	330			
bis-(2-chloroisopropyl:	ND<330	330			
2-methylphenol:	ND<330	330			
hexachloroethane:	ND<330	330			
n-nitroso-di-n-propyla:	ND<330	330	83/87	59-130	5%
4-methylphenol:	ND<330	330			
nitrobenzene:	ND<330	330			
isophorone:	ND<330	330			
2-nitrophenol:	ND<330	330			
2,4-dimethylphenol:	ND<330	330			
bis(2-chloroethoxy)met:	ND<330	330			
2,4-dichlorophenol:	ND<330	330			
1,2,4-trichlorobenzene:	ND<330	330	93/97	45-119	4%
naphthalene:	ND<330	330			
benzoic acid:	ND<330	330			
4-chloroaniline:	ND<330	330			
hexachlorobutadiene:	ND<330	330			
4-chloro-3-methylpheno:	ND<330	330	89/95	50-120	7%
2-methyl-naphthalene:	ND<330	330			
hexaclorocyclopentadie:	ND<330	330			
2,4,6-trichlorophenol:	ND<330	330			
2,4,5-trichlorophenol:	ND<800	800			

Superior Precision Analytical, Inc.
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EPA SW-846 METHOD 8270 SEMIVOLATILE ORGANICS BY GC/MS
Quality Assurance and Control Data - Soil

Laboratory Number 30385

ompound	Method Blank (ug/Kg)	RL (ug/Kg)	Spike Recovery (%)	Limits (%)	RPD (%)
?-chloronaphthalene:	ND<330	330			
?-nitroaniline:	ND<800	800			
acenaphthylene:	ND<330	330			
dimethylphthlate:	ND<330	330			
2,6-dinitrotoluene:	ND<330	330			
acenaphthene:	ND<330	330	104/108	55-112	4%
3-nitroaniline:	ND<800	800			
2,4-dinitrophenol:	ND<800	800			
dibenzofuran:	ND<330	330			
2,4-dinitrotoluene:	ND<330	330	67/70	40-101	4%
4-nitrophenol:	ND<330	330	81/87	11-157	7%
fluorene:	ND<800	800			
4-chlorophenyl-phenyle:	ND<330	330			
diethylphthlate:	ND<330	330			
4-nitroaniline:	ND<330	330			
4,6-dinitro-2-methylph:	ND<800	800			
n-nitrosodiphenylamine:	ND<800	800			
4-bromo-phenyl-phenyle:	ND<330	330			
hexachlorobenzene:	ND<330	330			
pentachlorophenol:	ND<330	330			
phenanthrene:	ND<800	800	99/95	17-144	4%
anthracene:	ND<330	330			
di-n-butylphthlate:	ND<330	330			
fluoranthene:	ND<330	330			
benzidine:	ND<330	330			
pyrene:	ND<330	330			
butylbenzylphthlate:	ND<330	330			
3.3'-dichlorobenzidine:	ND<1700	1700			
benzo[a]anthracene:	ND<330	330	106/106	55-136	0%
	ND<330	330			
	ND<330	330			
	ND<660	660			
	ND<330	330			

Superior Precision Analytical, Inc.
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EPA SW-846 METHOD 8270 SEMIVOLATILE ORGANICS BY GC/MS
Quality Assurance and Control Data - Soil

Laboratory Number 30385

Compound	Method Blank (ug/Kg)	RL (ug/Kg)	Spike Recovery (%)	Limits (%)	RPD (%)
Chrysene:	ND<330	330			
bis(2-ethylhexyl)phtha:	ND<330	330			
di-n-octylphthalate:	ND<330	330			
benzo(b,k)fluoranthene:	ND<330	330			
benzo[a]pyrene:	ND<330	330			
indeno[1,2,3-cd]pyrene:	ND<330	330			
dibenzo[a,h]anthracene:	ND<330	330			
benzo[g,h,i]anthracene:	ND<330	330			
2-fluorophenol:	71			50-108	
phenol-d6:	77			54-106	
nitrobenzene-d5:	86			45-109	
2-fluorobiphenyl:	98			52-115	
2,4,6-tribromophenol:	86			37-122	
terphenyl-d14:	83			55-131	

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
ug/Kg = Parts per billion (ppb)
QC File No. 30385

4/5/94
Senior Chemist
Account Manager

Certified Laboratories

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No 30385

Chain-of-Custody-Record

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

Chevron Facility Number 9-6504
Facility Address 5301 Hopyard Blvd, Pleasanton
Consultant Project Number 0504-1
Consultant Name Delta Environmental
Address 1801 2nd St Suite 100 Pleasanton CA
Project Contact (Name) Jeff Monroe
(Phone) 510 566 8808 (Fax Number) 566 8812

Chevron Contact (Name) Mark Miller
(Phone) 510 842 8134
Laboratory Name Sequoia
Laboratory Release Number 75537C
Samples Collected by (Name) Jeff Monroe
Collection Date 5-29-94
Signature Jeff Monroe

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air 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)	CAM-17					Remarks
WC-E		1	S	D			Yes	X	X	X	X			X	X	X					24 hr
WC-W		1	↓	D			↓	↓	↓	↓	↓			↓	X						for all
WSP-1@6		2		C											X						TOG
WSP-2@6		2	↓	C			↓	↓	↓	↓	↓			↓	↓	X					
																					72 hr
																					all other
																					analyses

Please Initial: RD
Samples Stored in: Ice 4°C
Appropriate containers: Yes
Samples preserved: Yes
VOA's with Soil Headspace: N/A
Comments:

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Jeff Monroe	TD	3:29-94	Suman	Sequoia	
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time 3/29/94

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

COC-3.DWG/03 91/HCH

Superior Precision Analytical, Inc.
P.O. Box 1545 • Martinez, California 94553 • (510) 229-1590 / fax (510) 229-0916

TOUCHSTONE DEVELOPMENTS
Attn: JEFF MONROE

Project 0504-2
Reported 04/07/94

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
30393- 1	XWO-E	03/31/94	04/07/94	Soil

RESULTS OF ANALYSIS

Laboratory Number: 30393- 1

Oil and Grease:	ND<50
Concentration:	mg/Kg

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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

QA/QC INFORMATION
SET: 30393

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Oil and Grease:	83/82	1%	56-106

Michael R. Boon
Senior Chemist

Superior Precision Analytical, Inc.
PO Box 1545 • Martinez, California 94553 • (510) 229-1590 / fax (510) 229-0916

TOUCHSTONE DEVELOPMENTS
Attn: JEFF MONROE

Project 0504-2
Reported 05-April-1994

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.

Chronology

Laboratory Number 30393

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
XWO-E	03/31/94	04/01/94	/ /	04/04/94		1

Superior Precision Analytical, Inc.
P.O. Box 1515 • Martinez, California 94553 • (510) 229-1590 / fax (510) 229 0916

TOUCHSTONE DEVELOPMENTS
Attn: JEFF MONROE

Project 0504-2
Reported 05-April-1994

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.

Laboratory Number	Sample Identification	Matrix
30393- 1	XWO-E	Soil

RESULTS OF ANALYSIS

Laboratory Number: 30393- 1

Chloromethane:	ND<5
Vinyl Chloride:	ND<5
Bromomethane:	ND<5
Chloroethane:	ND<5
Trichlorofluoromethane:	ND<5
1,1-Dichloroethene:	ND<5
Dichloromethane:	ND<10
t-1,2-Dichloroethene:	ND<5
1,1-Dichloroethane:	ND<5
c-1,2-Dichloroethene:	ND<5
Chloroform:	ND<5
1,1,1-Trichloroethane:	ND<5
Carbon tetrachloride:	ND<5
1,2-Dichloroethane:	ND<5
Trichloroethene:	ND<5
c-1,3-Dichloropropene:	ND<5
1,2-Dichloropropane:	ND<5
t-1,3-Dichloropropene:	ND<5
Bromodichloromethane:	ND<5
1,1,2-Trichloroethane:	ND<5
Tetrachloroethene:	ND<5
Dibromochloromethane:	ND<5
Chlorobenzene:	ND<5
Bromoform:	ND<5
1,1,2,2-Tetrachloroeth:	ND<5
1,3-Dichlorobenzene:	ND<5
1,2-Dichlorobenzene:	ND<5
1,4-Dichlorobenzene:	ND<5

Concentration: ug/Kg

Superior Precision Analytical, Inc.
PO Box 1545 • Martinez, California 94553 • (510) 229-1590 / fax (510) 229-0916

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.
Quality Assurance and Control Data - Soil

Laboratory Number 30393

Compound	Method Blank (ug/Kg)	RL (ug/Kg)	Spike Recovery (%)	Limits (%)	RPD (%)
Chloromethane:	ND<5	5			
Vinyl Chloride:	ND<5	5			
Bromomethane:	ND<5	5			
Chloroethane:	ND<5	5			
Trichlorofluoromethane:	ND<5	5			
1,1-Dichloroethene:	ND<5	5	87/104	48-180	18%
Dichloromethane:	ND<10	10			
t-1,2-Dichloroethene:	ND<5	5			
1,1-Dichloroethane:	ND<5	5			
c-1,2-Dichloroethene:	ND<5	5			
Chloroform:	ND<5	5			
1,1,1-Trichloroethane:	ND<5	5			
Carbon tetrachloride:	ND<5	5			
1,2-Dichloroethane:	ND<5	5			
Trichloroethene:	ND<5	5	97/106	71-138	9%
c-1,3-Dichloropropene:	ND<5	5			
1,2-Dichloropropane:	ND<5	5			
t-1,3-Dichloropropene:	ND<5	5			
Bromodichloromethane:	ND<5	5			
1,1,2-Trichloroethane:	ND<5	5			
Tetrachloroethene:	ND<5	5			
Dibromochloromethane:	ND<5	5			
Chlorobenzene:	ND<5	5	88/94	79-134	7%
Bromoform:	ND<5	5			
1,1,2,2-Tetrachloroeth:	ND<5	5			
1,3-Dichlorobenzene:	ND<5	5			
1,2-Dichlorobenzene:	ND<5	5			
1,4-Dichlorobenzene:	ND<5	5			

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
ug/Kg = Parts per billion (ppb)
QC File No. 30393

Michael R. Nixon
Senior Chemist
Account Manager

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No 5039

Chain-of-Custody-Record

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

Chevron Facility Number: 9-0504
Facility Address: 15900 Hesperian, San Lorenzo
Consultant Project Number: 0504-7
Consultant Name: Touchstone Developments
Address: PO Box 2554 Santa Rosa CA
Project Contact (Name): Jeff Monroe
(Phone) 707 538 8818 (Fax Number) 538 8812

Chevron Contact (Name): Wade Miller
(Phone) 510 842 8134
Laboratory Name: Superior
Laboratory Release Number: 7583810
Samples Collected by (Name): Jeff Monroe
Collection Date: 3-31-94
Signature: Jeff Monroe

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
XLO-E		1	S	D	7:30		Yes			X	X										

Analyses To Be Performed

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
[signature]	D	4-1-94	[signature]		4-1-94 3:30
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
[signature]	ARRO	4-1-94			
Relinquished By (Signature)	Organization	Date/Time	Received for Laboratory By (Signature)		Date/Time
			[signature]		4/1/94 1815

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

COC-3.DWG/03 91/HCH