



UST, Product Piping, Hoist, and Oil/water Separator Removal and Overexcavation Soil Sampling Report

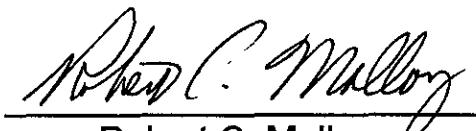
**Former Service Station Number 9-3356
19201 Center Street
Castro Valley, California**

prepared for

**Chevron U.S.A. Products Company
6001 Bollinger Canyon Road
San Ramon, California**

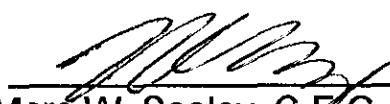
prepared by

Touchstone Developments



Robert C. Mallory

**Robert C. Mallory
Project Manager**



Marc W. Seeley C.E.G. #1014
Technical Review



September 22, 1995

INTRODUCTION

This report prepared by Touchstone Developments (Touchstone) documents the removal of gasoline and used-oil Underground Storage Tanks (USTs), associated piping, hydraulic hoists, and an oil/water separator sump. In addition, this report also describes and documents overexcavation activities and disposal of soil generated at the above referenced location (Figure 1).

Gasoline and Used-oil USTs, product piping, hydraulic hoists, and the oil/water separator removals at this location were performed on July 20, 1995. Overexcavation activities were performed on July 24 and 27, 1995.

SITE CONDITIONS

The former service station site consisted of three 10,000 gallon gasoline storage tanks, one 1,000 gallon used-oil tank, two dispenser islands and associated product piping, and a station building housing two hydraulic hoists and an oil/water separator. The station building was demolished prior to July 20, 1995. The site is presently a vacant lot. Three groundwater monitoring wells are currently onsite. Groundwater was encountered in the gasoline UST excavation at approximately 10 feet below ground surface (bgs).

SERVICE STATION FIELD ACTIVITIES

UST and associated piping removal, excavation, and backfill was performed by American Construction of Livermore, California. A Touchstone representative was on site to observe the removal/excavation activities, and to collect soil samples from the excavations and soil stockpiles. Amy Leech from the Alameda County Health Agency (ACHA) and Edward Laudani from the Alameda County Fire Department were present during the UST removal. Also on site were Kenneth Kan and Rick Garrett of Chevron U.S.A. Transportation and disposal of the USTs and associated piping was accomplished by Erickson, Inc. of Richmond, California.

UST Sampling

Soil samples T-1 through T-9 were collected from the sidewalls of the UST excavation, in native soil, at approximately 8 1/2 to 10 1/2 feet bgs as directed by Amy Leech of the ACHA. The UST excavation measured approximately 40 feet long by 37 feet wide and 12 feet deep. The soil sample locations are shown on Figure 2 and analytical data and sample depths are presented in Table A.

Used-Oil UST Sampling

Two soil samples were collected from beneath both ends of the used-oil tank in the excavation at approximately 10 feet bgs and labeled UO-1 and UO-2. The used-oil tank excavation measured approximately 12 feet long by 8 feet wide and 9 feet deep. The excavation and sample locations are shown on Figure 2. Soil sample analytical results and sample depths are presented in Table A.

Product Piping Sampling

Soil samples P-1 through P-4 were collected in native soil from beneath the former product lines at depths of between 3 and 4 feet bgs. Soil sample locations are shown on Figure 2 and analytical soil sample results are presented on Table A.

Oil/Water Separator Sampling

One soil sample, designated SUMP, was collected from beneath a concrete, two compartment oil/water separator located inside the former station building. This sample was collected at a depth of approximately 4 1/2 feet bgs. The sample location is presented on Figure 2.

Hoist Sampling

Soil samples H-1 and H-2 were collected from the bottom of the hoist excavation located inside the former station building. These samples were collected at approximately 9 feet bgs. Sample locations are shown on Figure 2. Oil/water separator and hoist soil sample analytical data and samples depths are presented in Table A.

OVEREXCAVATION SAMPLING ACTIVITIES

UST Excavation Activities

On July 24, 1995, three soil samples, TX-1, TX-2, and TX-3, were collected from the sidewalls of overexcavated areas in the northwest corner of the UST excavation. One additional sample, TX-2B, was collected from this area on July 27, 1995 after additional overexcavation. Each of these samples were collected at a depth of approximately 9 feet bgs. Approximately 200 cubic yards (cy) of soil were removed during UST complex excavation activities. The UST overexcavation extent and soil sample locations are shown on Figures 3 and 4 and soil sample analytical data are presented in Table B.

Pump Island and Product Piping Excavation Activities

On July 24, 1995, eight soil samples, PX-1 through PX-8, were collected after overexcavation activities in the vicinity of the former product piping and dispenser islands. Four additional samples, PX-3B, PX-5B, PX-6B, and PX-7B, were collected on July 27, 1995 after additional overexcavation. Soil sample depths ranged between 4 and 10 feet bgs. Approximately 120 cy of soil were removed during this phase of overexcavation. The final dimensions of the excavated area were approximately 22 feet by 22 feet with depths ranging between 5 1/2 and 10 feet bgs. The pump island and product piping overexcavation extent and soil sample locations are shown on Figures 3 and 4, and soil sample analytical data are presented in Table A.

Used-oil UST Excavation Activities

Two soil samples, XUO-1 and XUO-2, were collected on July 24, 1995, subsequent to overexcavation activities from the used-oil UST. These soil samples were collected from 11 and 11 1/2 feet bgs. Approximately 35 cy of soil were removed during the used-oil UST overexcavation to an excavation depth of 11 1/2 feet bgs. Used-oil UST overexcavation limits and soil sample locations are shown on Figure 3. Soil sample analytical results are presented in Table B.

Oil/water Separator Excavation Activities

After overexcavation activities, soil sample X-SUMP-7 was collected on July 24, 1995, from the vicinity of the former oil/water separator. Two additional soil samples, X-SUMPB and X-SUMPC, were collected on July 27, 1995 after further excavation. These samples were collected at depths of 7 and 9 feet bgs. Approximately 25 cy of soil were removed during excavation activities. Final excavation dimensions were approximately 7 feet by 10 feet by 9 feet in depth. Oil/water separator overexcavation extent and soil sample locations are shown on Figures 3 and 4 and soil sample analytical data are presented in Table B.

STOCKPILE SAMPLING AND DISPOSAL

Soil stockpiles SP-1(A-D) through SP-4(A-D) and XSP-1(A-D) through XSP-3(A-D) represent approximately 500 cy of soil and pea gravel generated from UST removal and overexcavation. Four soil samples were collected and combined for approximately every 100 cy of material. Upon receipt of chemical analytical data and with approval of Amy Leech of the ACHA, stockpiled soils represented by composites SP-1 through SP-4 were used as backfill for the UST excavation. Composites XSP-1 and XSP-3 were transported by Allwaste Transportation and Remediation, Inc. (Allwaste) to Redwood Landfill located in Novato, California.

In showed see 1 discrete sample for each 30 cy of soil for reuse bent
since see results were no this is ok.

Composite XSP-2 was transported by Allwaste to Browning-Ferris Industries (BFI) Vasco Road Landfill located in Livermore, California. The stockpile analytical results are summarized on Table C and stockpile locations are shown on Figure 5.

Stockpile UOSP-1(A-D) represents soil generated from the used-oil tank, sump, and hoist excavation and overexcavation (approximately 60 cy). Upon receipt of chemical analytical data the soil represented by UOSP-1 was transported by Allwaste to Redwood Landfill located in Novato, California. The stockpile analytical results are summarized on Table C and stockpile locations are shown on Figure 5.

SAMPLING PROTOCOL

Verification soil samples were collected from the excavation sidewalls and/or bottoms at various depths or where hydrocarbon impact was suspected. Soil samples were collected from the excavator or backhoe bucket by removing the top few inches of soil and pushing a clean, six-inch-long, two-inch diameter, brass sample tube into the soil until completely full. The ends of the sample tubes were covered with aluminum foil and sealed with plastic end 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 Redwood City, California.

Stockpile Sampling

Four soil samples were collected for approximately every 75-100 cy of material generated. The four samples were then combined in the laboratory and analyzed as one. All stockpile samples were collected by removing the top 6 to 12 inches of soil, then pushing a sample tube or glass jar into the soil until completely full. The samples were sealed, labeled and handled as described above.

SAMPLE ANALYSIS

Soil samples collected from the UST excavations, product piping trenches and associated stockpiles were analyzed for Total Petroleum Hydrocarbons calculated as gasoline (TPH-Gasoline) according to EPA Method 8015 (Modified) and Benzene, Toluene, Ethylbenzene and Xylenes (BTEX) according to EPA Method 8020.

The soil samples collected from the used-oil tank excavation, oil/water separator/hoist excavations and associated stockpiles were analyzed for one or

more of the following: TPH-Gasoline, BTEX, Total Petroleum Hydrocarbons calculated as Diesel (TPH-Diesel) according to EPA Method 8015 (Modified), Total Recoverable Petroleum Hydrocarbons according to Standard Methods method 5520 E&F, Volatile Organic Compounds (VOCs) according to EPA Method 8010, Semivolatile Organics according to EPA SW-846 Method 8270, and Cadmium, Chromium, Lead, Nickel, & Zinc according to EPA Method SW-846 6010. Copies of the analytical laboratory reports and Chain-of-Custody forms are presented in Appendix A.

TABLES

TABLE A
UST and Used-Oil Tank Excavations, Piping, Oil/water Separator, and Hoist Sampling Summary
Former Chevron Service Station No. 9-3356
19201 Center Street, Castro Valley, California

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

Gasoline UST Excavation and Piping Sampling Results

Sample ID	Depth (ft.)	Laboratory	Date	TPH-Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes
T-1	8.5	Sequoia	20-Jul-95	230	ND	ND	0.27	2.3
T-2	10.5	Sequoia	20-Jul-95	930	1.1	ND	3.9	30
T-3	9.0	Sequoia	20-Jul-95	ND	ND	ND	ND	ND
T-4	9.0	Sequoia	20-Jul-95	ND	ND	ND	ND	ND
T-5	10.0	Sequoia	20-Jul-95	240	0.33	1.3	0.89	7.1
T-6	9.0	Sequoia	20-Jul-95	ND	ND	ND	ND	ND
T-7	9.0	Sequoia	20-Jul-95	ND	ND	ND	ND	ND
T-8	9.0	Sequoia	20-Jul-95	ND	ND	ND	ND	ND
T-9	10.0	Sequoia	20-Jul-95	ND	ND	ND	ND	ND
P-1	3.0	Sequoia	20-Jul-95	ND	ND	ND	ND	0.014
P-2	3.0	Sequoia	20-Jul-95	29	0.028	0.083	0.67	0.43
P-3	3.0	Sequoia	20-Jul-95	2000	ND	ND	9.5	80
P-4	4.0	Sequoia	20-Jul-95	ND	ND	ND	0.011	ND

Used-oil Tank Sampling Results

Sample ID	Depth (ft.)	Laboratory	Date	TPH-Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	TPH-Diesel	TRPH
UO-1	10.0	Sequoia	20-Jul-95	ND	ND	ND	ND	ND	15	ND
UO-2	10.0	Sequoia	20-Jul-95	ND	ND	ND	ND	ND	1.4	99

TABLE A
UST and Used-Oil Tank Excavations, Piping, Oil/water Separator, and Hoist Sampling Summary
Former Chevron Service Station No. 9-3356
19201 Center Street, Castro Valley, California

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

Sample ID	Depth (ft.)	Laboratory	Date	Cadmium	Chromium	Lead	Nickel	Zinc	8010 ✓	8270 ✓
UO-1	10.0	Sequoia	20-Jul-95	ND	21	7.2	28	41	ND	ND
UO-2	10.0	Sequoia	20-Jul-95	ND	44	7.8	35	44	ND	ND

Sump Sampling Results

Sample ID	Depth (ft.)	Laboratory	Date	TPH- Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	TPH- Diesel	TRPH
SUMP	4.5	Sequoia	20-Jul-95	ND	ND	ND	ND	ND	31	69

Sample ID	Depth (ft.)	Laboratory	Date	Cadmium	Chromium	Lead	Nickel	Zinc	8010	8270
SUMP	4.5	Sequoia	20-Jul-95	ND	28	9.3	27	35	ND	ND

Hoist Sampling Results

Sample ID	Depth (ft.)	Laboratory	Date	TRPH
H-1	9.0	Sequoia	20-Jul-95	ND
H-2	9.0	Sequoia	20-Jul-95	ND

TPH-Gasoline = Total Petroleum Hydrocarbons calculated as Gasoline

TPH-Diesel = Total Petroleum Hydrocarbons calculated as Diesel.

TRPH = Total Recoverable Petroleum Hydrocarbons

ND = Not detected at or above laboratory detection limits.

NA = Analysis not requested

TABLE B
Overexcavation Sampling Summary
Former Chevron Service Station No. 9-3356
19201 Center Street, Castro Valley, California

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

Gasoline UST and Piping Overexcavation Sampling Results

Sample ID	Depth (ft.)	Laboratory	Date	TPH-Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes
TX-1	9.0	Sequoia	24-Jul-95	ND	ND	ND	ND	ND
TX-2	9.0	Sequoia	24-Jul-95	49	ND	0.025	0.29	0.35
TX-2B	9.0	Sequoia	27-Jul-95	ND	ND	ND	ND	ND
TX-3	9.0	Sequoia	24-Jul-95	ND	ND	ND	ND	ND
PX-1	4.5	Sequoia	24-Jul-95	ND	ND	ND	ND	ND
PX-2	4.5	Sequoia	24-Jul-95	ND	ND	ND	ND	0.024
PX-3	9.0	Sequoia	24-Jul-95	32	ND	ND	0.4	1.5
PX-4	4.0	Sequoia	24-Jul-95	ND	ND	ND	ND	0.005
PX-5	4.5	Sequoia	24-Jul-95	74	ND	ND	ND	ND
PX-6	5.5	Sequoia	24-Jul-95	75	ND	ND	0.16	0.4
PX-7	4.5	Sequoia	24-Jul-95	1.0	0.038	0.0095	ND	0.044
PX-8	9.0	Sequoia	24-Jul-95	ND	ND	0.0053	ND	0.0088
PX-3B	10.0	Sequoia	27-Jul-95	3.2	ND	ND	0.038	0.0065
PX-5B	6.0	Sequoia	27-Jul-95	4.0	ND	0.010	0.013	0.037
PX-6B	6.0	Sequoia	27-Jul-95	7.3	ND	ND	0.0078	ND
PX-7B	5.5	Sequoia	27-Jul-95	ND	ND	ND	ND	ND

TABLE B
Overexcavation Sampling Summary
Former Chevron Service Station No. 9-3356
19201 Center Street, Castro Valley, California

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

Sump Overexcavation Sampling Results

Sample ID	Depth (ft.)	Laboratory	Date	TPH-Diesel	TRPH
X-SUMP-7	7.0	Sequoia	24-Jul-95	58	18
X-SUMPB	9.0	Sequoia	27-Jul-95	ND	ND
X-SUMPC	9.0	Sequoia	27-Jul-95	ND	ND

Used-oil Tank Overexcavation Sampling Results

Sample ID	Depth (ft.)	Laboratory	Date	TPH-Diesel	TRPH
XUO-1	11.0	Sequoia	24-Jul-95	ND	NA
XUO-2	11.5	Sequoia	24-Jul-95	1.3	ND

TPH-Gasoline = Total Petroleum Hydrocarbons calculated as Gasoline

TPH-Diesel = Total Petroleum Hydrocarbons calculated as Diesel.

TRPH = Total Recoverable Petroleum Hydrocarbons

ND = Not detected at or above laboratory detection limits.

NA = Analyses not requested.

TABLE C
Soil Stockpile Sampling Summary
Former Chevron Service Station No. 9-3356
19201 Center Street, Castro Valley, California

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

UST and Piping Excavation and Overexcavation Soil Stockpile Sampling Results

Sample ID	Laboratory	Date	TPH-Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	Lead
SP-1(A-D)	Sequoia	19-Jul-95	ND	ND	ND	ND	ND	5.9
SP-2(A-D)	Sequoia	19-Jul-95	ND	ND	ND	ND	ND	6.8
SP-3(A-D)	Sequoia	19-Jul-95	ND	ND	ND	ND	ND	6.1
SP-4(A-D)	Sequoia	19-Jul-95	ND	ND	ND	ND	ND	5.4
XSP-1(A-D)	Sequoia	24-Jul-95	100	ND	0.15	0.59	2.4	8.2
XSP-2(A-D)	Sequoia	24-Jul-95	680	0.70	1.7	11	64	6.8
XSP-3(A-D)	Sequoia	24-Jul-95	49	ND	0.15	0.48	3.2	7.3

Used-oil Tank Soil Stockpile Sampling Results

Sample ID	Laboratory	Date	TPH-Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	TPH-Diesel	TRPH
UOSP-1(A-D)	Sequoia	19-Jul-95	ND	ND	ND	ND	ND	12	ND

Sample ID	Laboratory	Date	Cadmium	Chromium	Lead	Nickel	Zinc	8010	8270
UOSP-1(A-D)	Sequoia	19-Jul-95	ND	25	7.5	27	46	ND	ND

TPH-Gasoline = Total Petroleum Hydrocarbons calculated as Gasoline

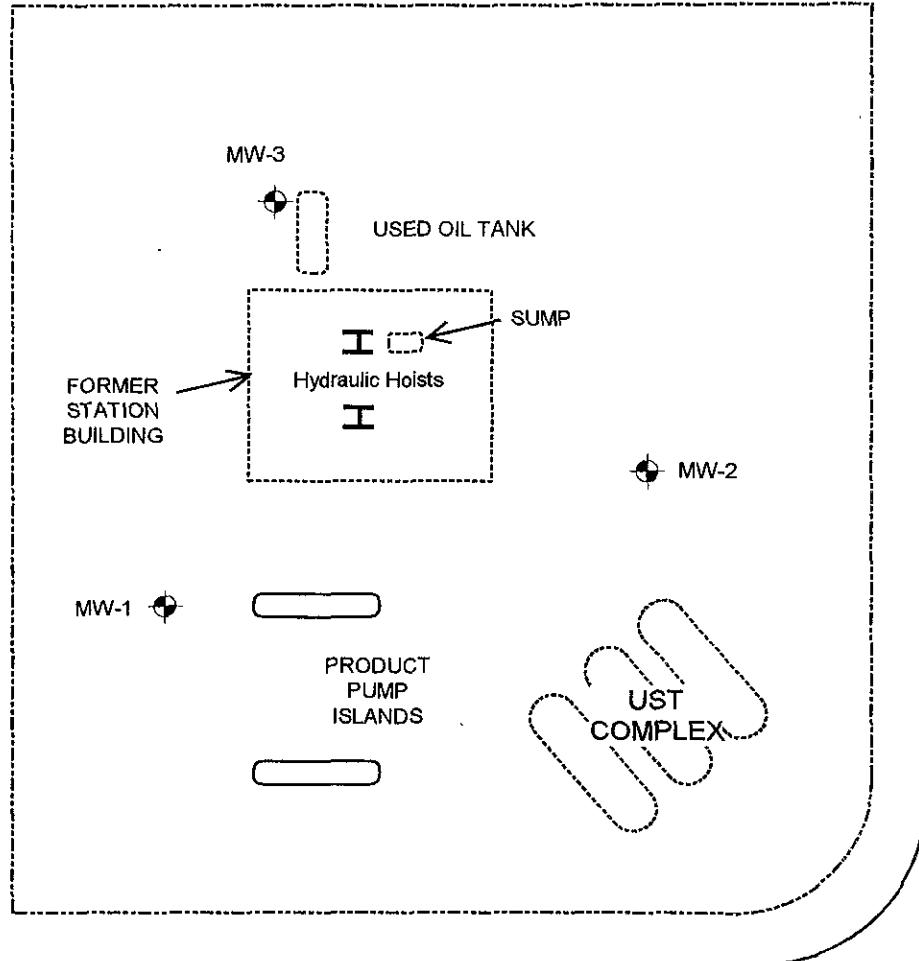
TPH-Diesel = Total Petroleum Hydrocarbons calculated as Diesel.

TRPH = Total Recoverable Petroleum Hydrocarbons

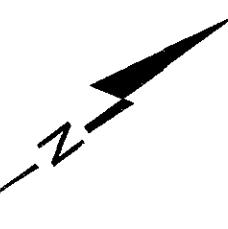
ND = Not detected at or above laboratory detection limits.

NA = Analysis not requested

FIGURES



CENTER STREET



EXPLANATION

UST Underground Storage Tank

MW-1 Monitoring Well Location

0 10 20 30
scale in feet



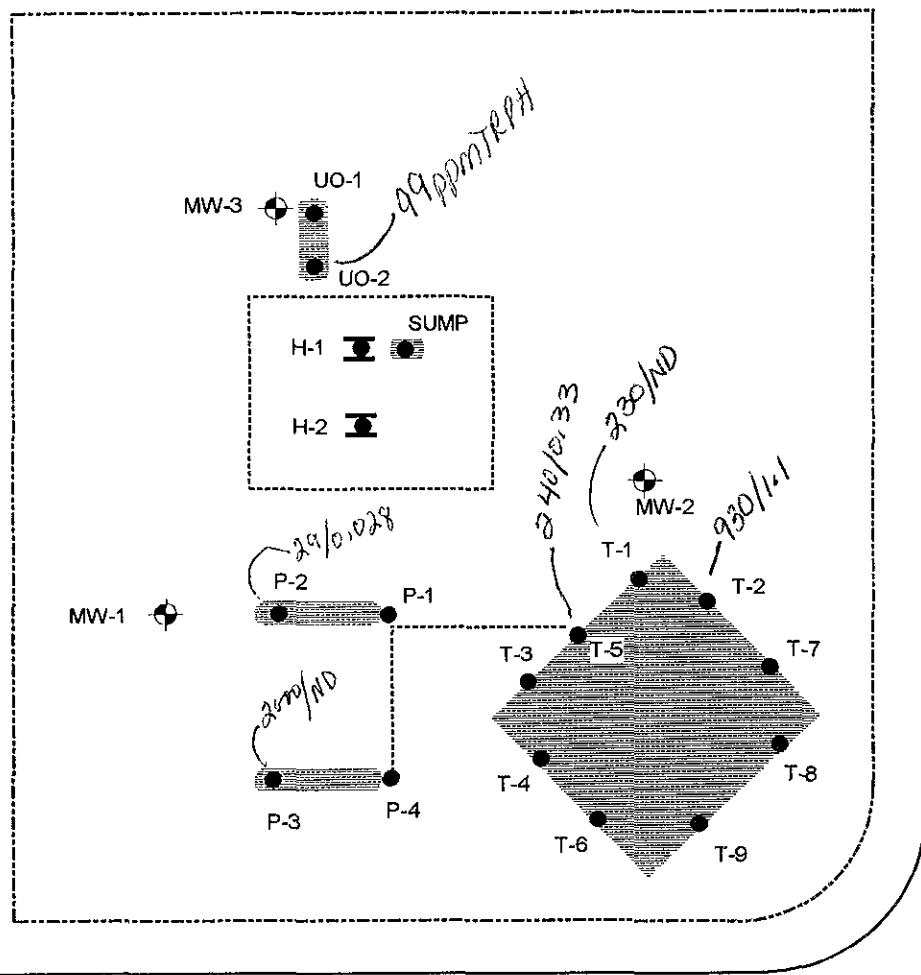
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SITE PLAN

Former Chevron Service Station No. 9-3356
19201 Center Street
Castro Valley, California

FIGURE

1



CENTER STREET

HEYER STREET

EXPLANATION

- UST Excavation Limits
 - T-1 Sample Location and Sample ID
 - MW-1 Monitoring Well Location
- 0 10 20 30
scale in feet

UST, PUMP ISLAND, SUMP, AND HYDRAULIC HOIST SAMPLE LOCATION MAP

Former Chevron Service Station No. 9-3356
19201 Center Street
Castro Valley, California

FIGURE

2



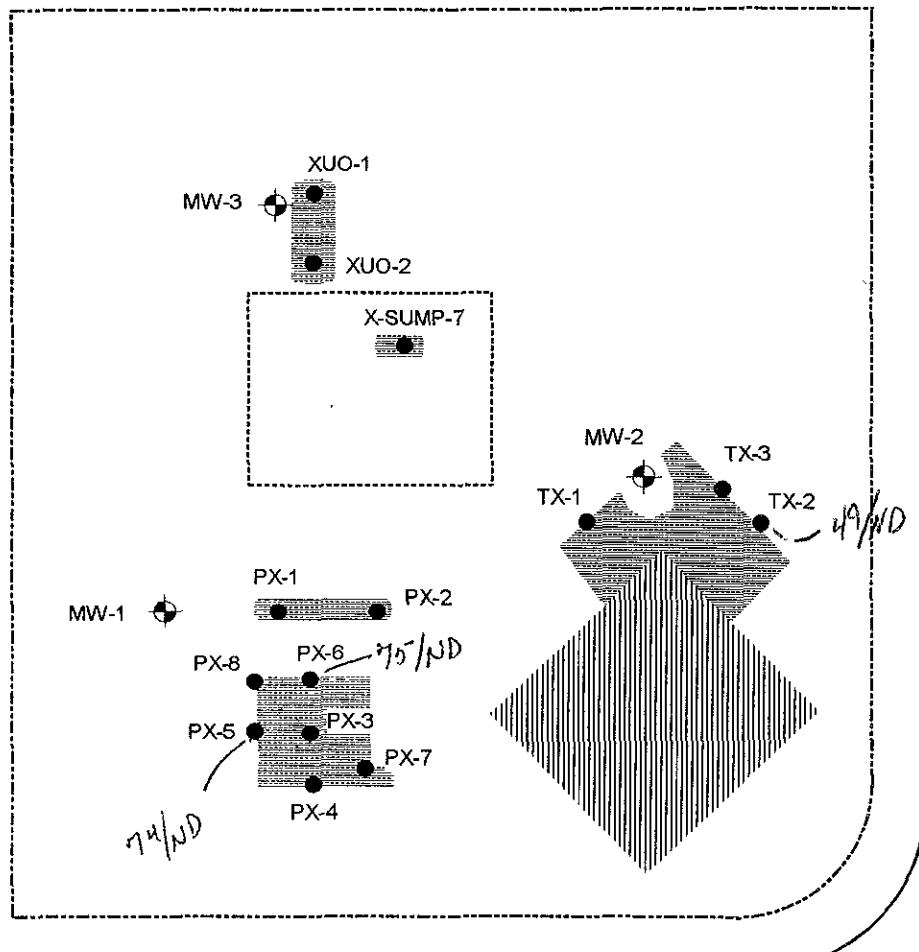
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9-3356

DATE:
9/95

DRAWN BY:
WTJ

BASE MAP
Groundwater Technology Map 10/93



EXPLANATION

- T-1 Sample Location and Sample ID
- Overexcavation Limits
- ||||| Previous Excavation Limits
- MW-1 Monitoring Well Location

0 10 20 30
scale in feet

OVEREXCAVATION SAMPLE LOCATION MAP

Former Chevron Service Station No. 9-3356
19201 Center Street
Castro Valley, California

FIGURE

3



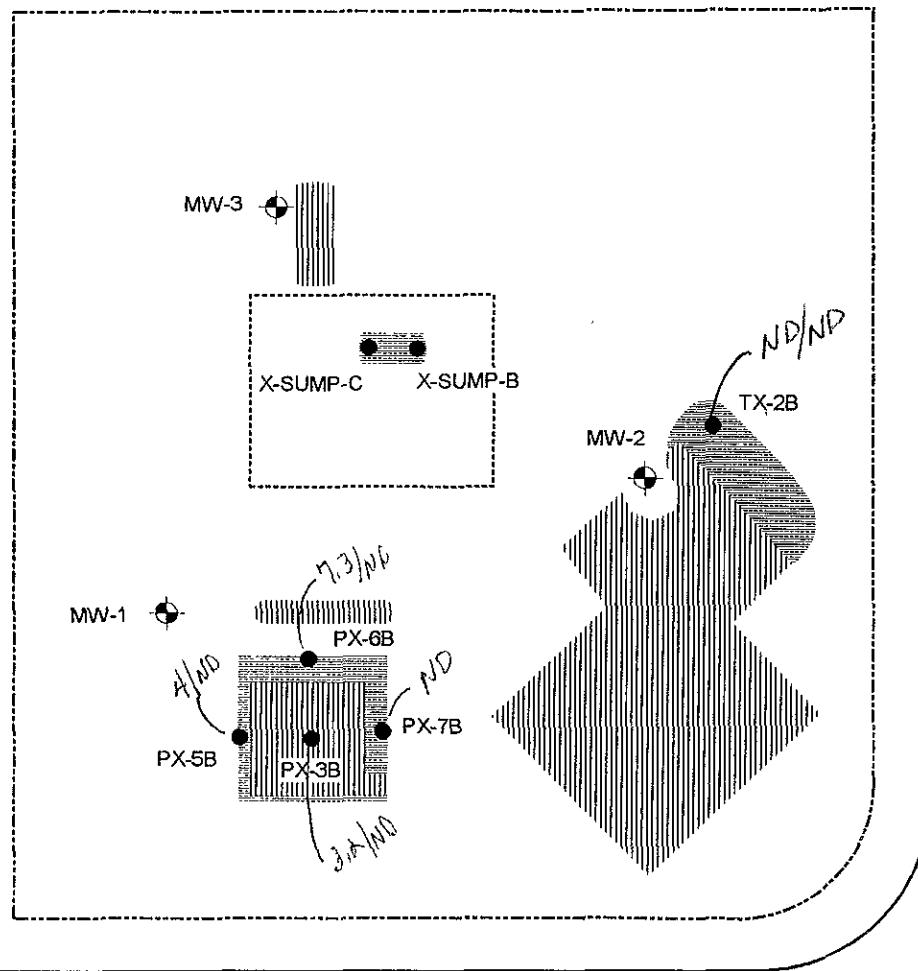
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PROJECT NO.
9-3356

DATE
9/95

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WTJ

BASE MAP
Groundwater Technology Map 10/93



CENTER STREET

HEYER STREET

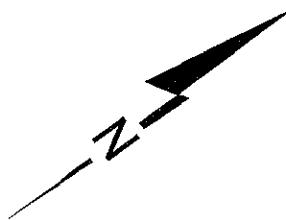
EXPLANATION

MW-1 Monitoring Well Location

● T-1 Sample Location and Sample ID

: Additional Overexcavation Limits

||||| Previous Excavation Limits



0 10 20 30

scale in feet



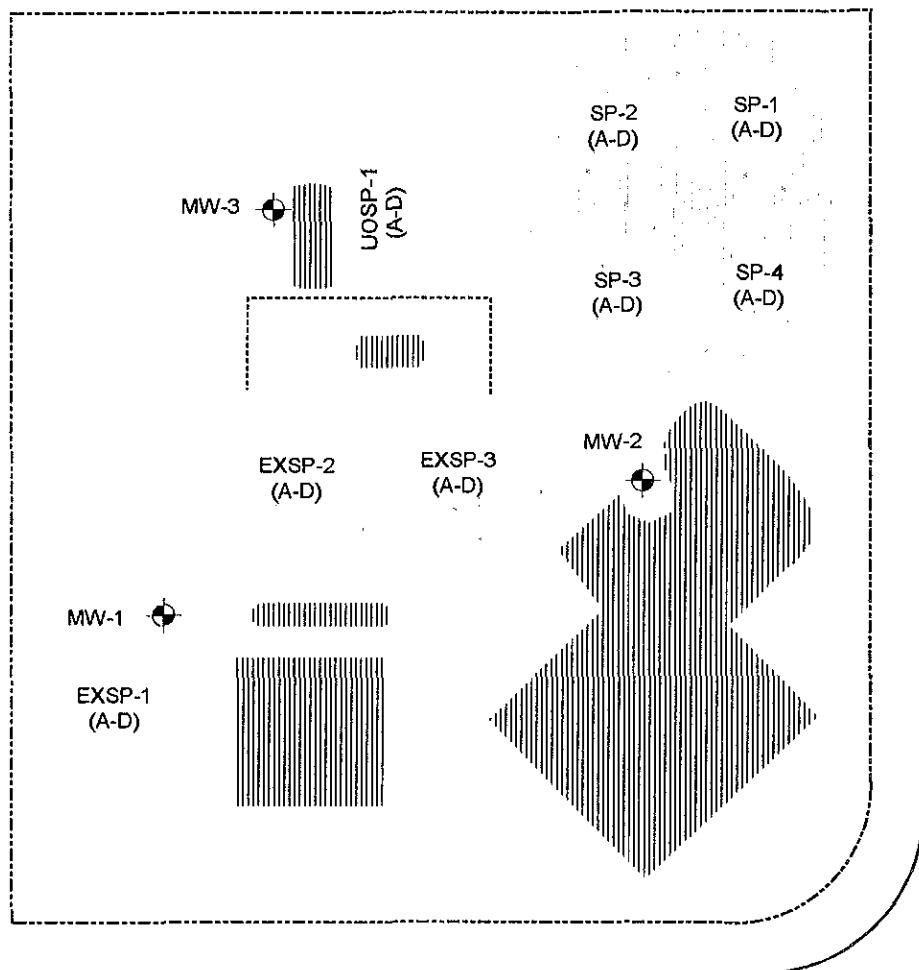
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ADDITIONAL OVEREXCAVATION SAMPLING LOCATION MAP

Former Chevron Service Station No. 9-3356
19201 Center Street
Castro Valley, California

FIGURE

4



CENTER STREET

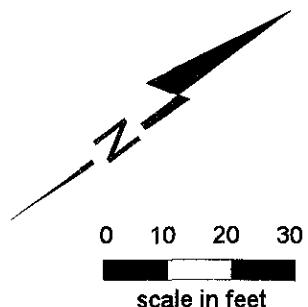
EXPLANATION

Soil Stockpile Limits

● T-1 Sample Location and Sample ID

||||| Previous Excavation Limits

MW-1 ● Monitoring Well Location



STOCKPILE SAMPLING LOCATION MAP

Former Chevron Service Station No. 9-3356
19201 Center Street
Castro Valley, California

FIGURE

5



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9-3356

DATE:
9/95

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WTJ

BASE MAP
Groundwater Technology Map 10/93

APPENDIX A

CHEMICAL ANALYTICAL REPORTS AND

CHAIN-OF-CUSTODY FORMS



Sequoia
Analytical

680 Chesapeake Drive
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FAX (510) 988-9673
FAX (916) 921-0100

Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Client Proj. ID: 3356-1, Chevron 9-3356

Sampled: 07/19/95
Received: 07/20/95
Analyzed: see below

Lab Proj. ID: 9507B67

Reported: 07/24/95

Attention: Jeff Monroe

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9507B67-01 Sample Desc : SOLID,SP-1 (A-D)	Lead mg/Kg	07/21/95	5.0	5.9
Lab No: 9507B67-02 Sample Desc : SOLID,SP-2 (A-D)	Lead mg/Kg	07/21/95	5.0	6.8
Lab No: 9507B67-03 Sample Desc : SOLID,SP-3 (A-D)	Lead mg/Kg	07/21/95	5.0	6.1
Lab No: 9507B67-04 Sample Desc : SOLID,SP-4 (A-D)	Lead mg/Kg	07/21/95	5.0	5.4
Lab No: 9507B67-05 Sample Desc : SOLID,UOSP-1 (A-D)	Cadmium mg/Kg Chromium mg/Kg Lead mg/Kg Nickel mg/Kg TRPH (SM 5520 E&F Mod.) mg/Kg Zinc mg/Kg	07/21/95 07/21/95 07/21/95 07/21/95 07/21/95	0.50 0.50 5.0 2.5 50 0.50	N.D. 25 7.5 27 N.D. 46

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark
Project Manager



Sequoia
Analytical

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FAX (916) 921-0100

Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: SP-1 (A-D)
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B67-01

Sampled: 07/19/95
Received: 07/20/95
Extracted: 07/21/95
Analyzed: 07/22/95
Reported: 07/24/95

Attention: Jeff Monroe

QC Batch Number: GC072195BTEXEXA
Instrument ID: GCHP01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte

TPPH as Gas
Benzene
Toluene
Ethyl Benzene
Xylenes (Total)
Chromatogram Pattern:

Surrogates
Trifluorotoluene

Detection Limit mg/Kg

1.0	N.D.
0.0050	N.D.

Control Limits %

70 130

Sample Results mg/Kg

88
88
88
88
88
88

% Recovery

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Vickie Tague Clark
Project Manager



Sequoia
Analytical

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FAX (510) 988-9673
FAX (916) 921-0100

Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

QC Batch Number: GC072195BTEXEXA
Instrument ID: GCHP01

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: SP-2 (A-D)
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B67-02

Sampled: 07/19/95
Received: 07/20/95
Extracted: 07/21/95
Analyzed: 07/22/95
Reported: 07/24/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	90

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

SEQUOIA ANALYTICAL - ELAP #1210


Vickie Tague Clark
Project Manager



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

QC Batch Number: GC072195BTEXEXA
Instrument ID: GCHP01

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: SP-3 (A-D)
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B67-03

Sampled: 07/19/95
Received: 07/20/95
Extracted: 07/21/95
Analyzed: 07/22/95
Reported: 07/24/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	91

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark
Project Manager



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

QC Batch Number: GC072195BTEXEXA
Instrument ID: GCHP01

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: SP-4 (A-D)
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B67-04

Sampled: 07/19/95
Received: 07/20/95
Extracted: 07/21/95
Analyzed: 07/22/95
Reported: 07/24/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte

TPPH as Gas
Benzene
Toluene
Ethyl Benzene
Xylenes (Total)
Chromatogram Pattern:

Surrogates

Trifluorotoluene

Detection Limit mg/Kg

1.0	N.D.
0.0050	N.D.

Control Limits %

70 130

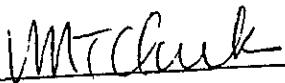
Sample Results mg/Kg

% Recovery

91

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

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Vickie Tague Clark
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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

QC Batch Number: GC0719958010EXB
Instrument ID: GCHP24

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: UOSP-1 (A-D)
Matrix: SOLID
Analysis Method: EPA 8010
Lab Number: 9507B67-05

Sampled: 07/19/95
Received: 07/20/95
Extracted: 07/22/95
Analyzed: 07/23/95
Reported: 07/24/95

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	5.0	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	10	N.D.
Vinyl chloride		
Surrogates		
1-Chloro-2-fluorobenzene	60	130
Control Limits %		% Recovery
		91

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

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Vickie Tague Clark
Project Manager

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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

QC Batch Number: MS0719958270EXB
Instrument ID: F4

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: UOSP-1 (A-D)
Matrix: SOLID
Analysis Method: EPA 8270
Lab Number: 9507B67-05

Sampled: 07/19/95
Received: 07/20/95
Extracted: 07/21/95
Analyzed: 07/24/95
Reported: 07/24/95

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzyl alcohol	250	N.D.
Bis(2-chloroethoxy)methane	250	N.D.
Bis(2-chloroethyl)ether	250	N.D.
Bis(2-chloroisopropyl)ether	500	N.D.
Bis(2-ethylhexyl)phthalate	250	N.D.
4-Bromophenyl phenyl ether	250	N.D.
Butyl benzyl phthalate	500	N.D.
4-Chloroaniline	250	N.D.
2-Chloronaphthalene	250	N.D.
4-Chloro-3-methylphenol	250	N.D.
2-Chlorophenol	250	N.D.
4-Chlorophenyl phenyl ether	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Dibenzofuran	500	N.D.
Di-n-butyl phthalate	250	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	500	N.D.
3,3-Dichlorobenzidine	250	N.D.
2,4-Dichlorophenol	250	N.D.
Diethyl phthalate	250	N.D.
2,4-Dimethylphenol	250	N.D.
Dimethyl phthalate	500	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	250	N.D.



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

QC Batch Number: MS0719958270EXB

Instrument ID: F4

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: UOSP-1 (A-D)
Matrix: SOLID
Analysis Method: EPA 8270
Lab Number: 9507B67-05

Sampled: 07/19/95
Received: 07/20/95
Extracted: 07/21/95
Analyzed: 07/24/95
Reported: 07/24/95

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
2,6-Dinitrotoluene	250	N.D.
Di-n-octyl phthalate	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Hexachlorobenzene	250	N.D.
Hexachlorobutadiene	500	N.D.
Hexachlorocyclopentadiene	250	N.D.
Hexachloroethane	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Isophorone	250	N.D.
2-Methylnaphthalene	250	N.D.
2-Methylphenol	250	N.D.
4-Methylphenol	250	N.D.
Naphthalene	500	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	250	N.D.
Nitrobenzene	250	N.D.
2-Nitrophenol	500	N.D.
4-Nitrophenol	250	N.D.
N-Nitrosodiphenylamine	250	N.D.
N-Nitroso-di-n-propylamine	500	N.D.
Pentachlorophenol	250	N.D.
Phenanthrene	250	N.D.
Phenol	250	N.D.
Pyrene	250	N.D.
1,2,4-Trichlorobenzene	500	N.D.
2,4,5-Trichlorophenol	250	N.D.
2,4,6-Trichlorophenol		
Surrogates		% Recovery
2-Fluorophenol	25	66
Phenol-d5	24	77
Nitrobenzene-d5	23	73
2-Fluorobiphenyl	30	71
2,4,6-Tribromophenol	19	61
p-Terphenyl-d14	18	82
Control Limits %		
	121	
	113	
	120	
	115	
	122	
	137	

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid

Work Order #: 9507B67 -05

Reported: Jul 31, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0720956010MDD	ME0720956010MDD	ME0720956010MDD	ME0720956010MDD
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050

Analyst:	S. O'Donnell	S. O'Donnell	S. O'Donnell	S. O'Donnell
MS/MSD #:	9507A0502	9507A0502	9507A0502	9507A0502
Sample Conc.:	0.87	N.D.	110	140
Prepared Date:	7/20/95	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/21/95	7/21/95	7/21/95	7/21/95
Instrument I.D. #:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/Kg	100 mg/Kg	100 mg/Kg	100 mg/Kg
Result:	98	93	160	200
MS % Recovery:	97	93	50	60
Dup. Result:	96	91	210	230
MSD % Recov.:	95	91	100	90
RPD:	2.1	2.2	27	14
RPD Limit:	0-30	0-30	0-30	0-30

LCS #:	BLK072095	BLK072095	BLK072095	BLK072095
Prepared Date:	7/20/95	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/21/95	7/21/95	7/21/95	7/21/95
Instrument I.D. #:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/Kg	100 mg/Kg	100 mg/Kg	100 mg/Kg
LCS Result:	100	99	100	100
LCS % Recov.:	100	99	100	100

MS/MSD LCS Control Limits	75-125	75-125	75-125	75-125

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.

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

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

9507B67.TTT <1>



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid
Work Order #: 9507B67-05

Reported: Jul 31, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Total Recoverable Petroleum Hydrocarb.	Diesel
QC Batch#:	OP0720955520EXA	GC0721950HBPEXB
Anal. Method:	SM 5520 EF-MOD	EPA 8015 M
Prep. Method:	N/A	EPA 3550

Analyst:	C. Garde	T. Olive
MS/MSD #:	9507A0501	950788103
Sample Conc.:	N.D.	*
Prepared Date:	7/20/95	7/21/95
Analyzed Date:	7/21/95	7/24/95
Instrument I.D. #:	Manual	GCHP5
Conc. Spiked:	500 mg/Kg	25 mg/Kg

Result:	500	*
MS % Recovery:	100	*
Dup. Result:	450	*
MSD % Recov.:	90	*
RPD:	11	*
RPD Limit:	0-50	0-50

LCS #:	BLK072095	BLK072195
Prepared Date:	7/20/95	7/21/95
Analyzed Date:	7/21/95	7/22/95
Instrument I.D. #:	Manual	GCHP5
Conc. Spiked:	500 mg/Kg	25 mg/Kg
LCS Result:	430	23
LCS % Recov.:	86	92

MS/MSD	60-140
LCS	70-110
Control Limits	38-122

* MS/MSD diluted out. Batch accepted based on LCS results.

Please Note:

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SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

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9507B67.TTT <2>



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Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid

Work Order #: 9507B67-01-5

Reported: Jul 31, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC072195BTEXEXA	GC072195BTEXEXA	GC072195BTEXEXA	GC072195BTEXEXA
Anal. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	R. Burton	R. Burton	R. Burton	R. Burton
MS/MSD #:	950758601	950758601	950758601	950758601
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/21/95	7/21/95	7/21/95	7/21/95
Analyzed Date:	7/21/95	7/21/95	7/21/95	7/21/95
Instrument I.D. #:	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg
Result:	0.17	0.17	0.17	0.52
MS % Recovery:	85	85	85	87
Dup. Result:	0.17	0.17	0.17	0.53
MSD % Recov.:	85	85	85	88
RPD:	0.0	0.0	0.0	1.9
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

Prepared Date:
Analyzed Date:
Instrument I.D. #:
Conc. Spiked:

LCS Result:
LCS % Recov.:

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

Please Note:

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SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

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

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Touchstone Developments
P.O. Box 2554
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Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid
Work Order #: 9507B67-05

Reported: Jul 31, 1995

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
QC Batch#:	GC0719958010EXB	GC0719958010EXB	GC0719958010EXB
Analyt. Method:	EPA 8010	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030

Analyst:	H. Porter	H. Porter	H. Porter
MS/MSD #:	950790211	950790211	N.D.
Sample Conc.:	N.D.	25	7/19/95
Prepared Date:	7/19/95	7/19/95	7/20/95
Analyzed Date:	7/20/95	7/20/95	GCHP24
Instrument I.D. #:	GCHP24	GCHP24	GCHP24
Conc. Spiked:	25 µg/Kg	25 µg/Kg	25 µg/Kg
Result:	27	65	27
MS % Recovery:	108	160	108
Dup. Result:	25	60	25
MSD % Recov.:	100	140	100
RPD:	7.7	8.0	7.7
RPD Limit:	0-50	0-50	0-50

LCS #:	BLK071995	BLK071995	BLK071995
Prepared Date:	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/20/95	7/20/95	7/20/95
Instrument I.D. #:	GCHP24	GCHP24	GCHP24
Conc. Spiked:	25 µg/Kg	25 µg/Kg	25 µg/Kg
LCS Result:	27	22	23
LCS % Recov.:	108	88	92

MS/MSD	28-167	35-146	38-150
LCS			
Control Limits			

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

Please Note:
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** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9507B67.TTT <4>



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid

Work Order #: 9507B67-05

Reported: Jul 31, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Phenol	2-Chlorophenol	1,4-Dichloro benzene	N-Nitroso-Di-N-propylamine
QC Batch#:	MS0719958270EXB	MS0719958270EXB	MS0719958270EXB	MS0719958270EXB
Anal. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550

Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	950788607	950788607	950788607	950788607
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D. #:	H5	H5	H5	H5
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
Result:	2300	2400	2200	2400
MS % Recovery:	70	73	67	73
Dup. Result:	2100	2200	2100	2200
MSD % Recov.:	64	67	64	67
RPD:	9.1	8.7	4.7	8.7
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	BLK071995	BLK071995	BLK071995	BLK071995
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D. #:	H5	H5	H5	H5
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
LCS Result:	2200	2400	2300	2400
LCS % Recov.:	67	73	70	73

MS/MSD LCS Control Limits	5-112	23-134	20-124	DL-230
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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

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid
Work Order #: 9507B67-05

Reported: Jul 31, 1995

QUALITY CONTROL DATA REPORT

Analyte:	1,2,4-Trichloro benzene	4-Chloro-3 Methylphenol	Acenaphthene	4-Nitrophenol
QC Batch#:	MS0719958270EXB	MS0719958270EXB	MS0719958270EXB	MS0719958270EXB
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550

Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	950788607	950788607	950788607	950788607
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D.:#:	H5	H5	H5	H5
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
Result:	2300	2400	2400	2500
MS % Recovery:	70	73	73	76
Dup. Result:	2200	2200	2200	2400
MSD % Recov.:	67	67	67	73
RPD:	4.4	8.7	8.7	4.1
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	BLK071995	BLK071995	BLK071995	BLK071995
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D.:#:	H5	H5	H5	H5
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
LCS Result:	2300	2300	2300	2100
LCS % Recov.:	70	70	70	64

MS/MSD LCS Control Limits	44-142	22-147	47-145	DL-132
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SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

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



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid

Work Order #: 9507B67-05

Reported: Jul 31, 1995

QUALITY CONTROL DATA REPORT

Analyte:	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
QC Batch#:	MS0719958270EXB	MS0719958270EXB	MS0719958270EXB
Analy. Method:	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550

Analyst:	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	950788607	950788607	950788607
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/20/95	7/20/95	7/20/95
Instrument I.D. #:	H5	H5	H5
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
Result:	2300	2300	1900
MS % Recovery:	70	70	58
Dup. Result:	2100	2100	1700
MSD % Recov.:	64	64	52
RPD:	9.1	9.1	11
RPD Limit:	0-50	0-50	0-50

LCS #:	BLK071995	BLK071995	BLK071995
Prepared Date:	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/20/95	7/20/95	7/20/95
Instrument I.D. #:	H5	H5	H5
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
LCS Result:	2200	2100	1900
LCS % Recov.:	67	64	58

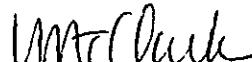
MS/MSD LCS Control Limits	39-139	14-176	52-115
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Please Note:

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

SEQUOIA ANALYTICAL


Vickie Tague Clark
Project Manager

Yes No

Check copy of Lab Report and COC to Chevron Contact: No

Chain-of-Custody-Record

evron U.S.A. Inc. D. BOX 5004 n Ramon, CA 94583 X (415)842-9591	Chevron Facility Number <u>9-3356</u> Facility Address <u>19201 Center St. Castro Valley,</u> Consultant Project Number <u>3356-1</u> Consultant Name <u>Techdecks Inc., Dow Chemicals</u> Address <u>P.O. Box 2554 Santa Rosa, CA</u> Project Contact (Name) <u>Jeff Monroe</u> (Phone) <u>7075388818</u> (Fax Number) <u>5288812</u>	Chevron Contact (Name) <u>Rick Garrett</u> (Phone) <u>510 842 9178</u> Laboratory Name <u>Sequoia</u> Laboratory Release Number <u>3535050</u> Samples Collected by (Name) <u>Jeff Monroe</u> Collection Date <u>7-19-95</u> Signature <u>Jeff Monroe</u>
--	--	---

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water	A = Air C = Charcoal	Type G = Composite C = Discrete D = Grab	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed							Remarks	
									ETEX + 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)	Total Pb
P-1a-d	4 S C	1	5:00	01	ES			X									ASOT36x
P-2a-d			5:05	02													
P-3a-d			5:10	03													
P-4a-d			5:15	04													
LOSPa-d		V V V	5:20	05				V	X X X	X X X	X X X	X X X	X X X	X X X	X X X		
P-4	1 S D	11:30		YES													
SUMP			11:40														
H-1			11:50														
H-2		V V V	11:55														

Relinquished By (Signature)	Organization	Date/Time 12:20	Received By (Signature)	Organization	Date/Time 12:20	Turn Around Time (Circle Choice)
M	TD	7/20/95	Miles C. Miller	TD	7/20/95	24 Hrs.
Relinquished By (Signature)	Organization	Date/Time 13:17	Received By (Signature)	Organization	Date/Time	48 Hrs.
M	TD	7/20/95				5 Days
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)	Organization	Date/Time	10 Days
M	TD					As Contracted



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

Client Proj. ID: 3356-1, Chevron 9-3356

Lab Proj. ID: 9507B60

Sampled: 07/20/95

Received: 07/20/95

Analyzed: see below

Reported: 07/21/95

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9507B60-02 Sample Desc : SOLID,Sump				
Cadmium	mg/Kg	07/21/95	0.50	N.D.
Chromium	mg/Kg	07/21/95	0.50	28
Lead	mg/Kg	07/21/95	5.0	9.3
Nickel	mg/Kg	07/21/95	2.5	27
TRPH (SM 5520 E&F Mod.)	mg/Kg	07/21/95	50	69
Zinc	mg/Kg	07/21/95	0.50	35
Lab No: 9507B60-03 Sample Desc : SOLID,H-1				
TRPH (SM 5520 E&F Mod.)	mg/Kg	07/21/95	50	N.D.
Lab No: 9507B60-04 Sample Desc : SOLID,H-2				
TRPH (SM 5520 E&F Mod.)	mg/Kg	07/21/95	50	N.D.

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

SEQUOIA ANALYTICAL - ELAP #1210

MTC

Vickie Tague Clark
Project Manager



Sequoia
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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: P-4
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B60-01

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/21/95
Reported: 07/21/95

Attention: Jeff Monroe

QC Batch Number: GC072095BTEXEXD
Instrument ID: GCHP01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	0.011
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	
Trifluorotoluene	70	130
		% Recovery
		101

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager



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P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

QC Batch Number: GC0720958010EXA
Instrument ID: GCHP08

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: Sump
Matrix: SOLID
Analysis Method: EPA 8010
Lab Number: 9507B60-02

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/20/95
Reported: 07/21/95

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
Surrogates		
1-Chloro-2-fluorobenzene	60	130
Control Limits %		
% Recovery		
		74

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

SEQUOIA ANALYTICAL - ELAP #1210


Vickie Tague Clark
Project Manager



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

QC Batch Number: MS0714958270EXA
Instrument ID: H5

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: Sump
Matrix: SOLID
Analysis Method: EPA 8270
Lab Number: 9507B60-02

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/20/95
Reported: 07/21/95

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	1300	N.D.
Acenaphthylene	1300	N.D.
Anthracene	1300	N.D.
Benzoic Acid	2500	N.D.
Benzo(a)anthracene	1300	N.D.
Benzo(b)fluoranthene	1300	N.D.
Benzo(k)fluoranthene	1300	N.D.
Benzo(g,h,i)perylene	1300	N.D.
Benzo(a)pyrene	1300	N.D.
Benzyl alcohol	1300	N.D.
Bis(2-chloroethoxy)methane	1300	N.D.
Bis(2-chloroethyl)ether	1300	N.D.
Bis(2-chloroisopropyl)ether	2500	N.D.
Bis(2-ethylhexyl)phthalate	1300	N.D.
4-Bromophenyl phenyl ether	1300	N.D.
Butyl benzyl phthalate	2500	N.D.
4-Chloroaniline	1300	N.D.
2-Chloronaphthalene	1300	N.D.
4-Chloro-3-methylphenol	1300	N.D.
2-Chlorophenol	1300	N.D.
4-Chlorophenyl phenyl ether	1300	N.D.
Chrysene	1300	N.D.
Dibenzo(a,h)anthracene	1300	N.D.
Dibenzofuran	2500	N.D.
Di-n-butyl phthalate	1300	N.D.
1,2-Dichlorobenzene	1300	N.D.
1,3-Dichlorobenzene	1300	N.D.
1,4-Dichlorobenzene	2500	N.D.
3,3-Dichlorobenzidine	1300	N.D.
2,4-Dichlorophenol	1300	N.D.
Diethyl phthalate	1300	N.D.
2,4-Dimethylphenol	1300	N.D.
Dimethyl phthalate	2500	N.D.
4,6-Dinitro-2-methylphenol	2500	N.D.
2,4-Dinitrophenol	1300	N.D.
2,4-Dinitrotoluene	1300	N.D.



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

QC Batch Number: MS0714958270EXA
Instrument ID: H5

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: Sump
Matrix: SOLID
Analysis Method: EPA 8270
Lab Number: 9507B60-02

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/20/95
Reported: 07/21/95

Analyte

[Handwritten signatures]
Detection Limit
ug/Kg

Sample Results
ug/Kg

2,6-Dinitrotoluene	1300	N.D.
Di-n-octyl phthalate	1300	N.D.
Fluoranthene	1300	N.D.
Fluorene	1300	N.D.
Hexachlorobenzene	1300	N.D.
Hexachlorobutadiene	2500	N.D.
Hexachlorocyclopentadiene	1300	N.D.
Hexachloroethane	1300	N.D.
Indeno(1,2,3-cd)pyrene	1300	N.D.
Isophorone	1300	N.D.
2-Methylnaphthalene	1300	N.D.
2-Methylphenol	1300	N.D.
4-Methylphenol	1300	N.D.
Naphthalene	1300	N.D.
2-Nitroaniline	2500	N.D.
3-Nitroaniline	2500	N.D.
4-Nitroaniline	2500	N.D.
Nitrobenzene	1300	N.D.
2-Nitrophenol	1300	N.D.
4-Nitrophenol	1300	N.D.
N-Nitrosodiphenylamine	1300	N.D.
N-Nitroso-di-n-propylamine	2500	N.D.
Pentachlorophenol	1300	N.D.
Phenanthrene	1300	N.D.
Phenol	1300	N.D.
Pyrene	1300	N.D.
1,2,4-Trichlorobenzene	2500	N.D.
2,4,5-Trichlorophenol	1300	N.D.
2,4,6-Trichlorophenol	1300	N.D.

Surrogates

	Control Limits %	% Recovery
2-Fluorophenol	25	72
Phenol-d5	24	84
Nitrobenzene-d5	23	79
2-Fluorobiphenyl	30	81
2,4,6-Tribromophenol	19	68
p-Terphenyl-d14	18	77

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

SEQUOIA ANALYTICAL - ELAP #1210

[Handwritten signature]
Vickie Tague Clark
Project Manager



Sequoia
Analytical

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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Proj. ID: 3356-1, Chevron 9-3356

Received: 07/20/95

Lab Proj. ID: 9507B60

Reported: 07/21/95

LABORATORY NARRATIVE

The detection limits were raised for the following analyses:

Sample	Analysis	Factor	Reason
Sump	TEPH as Diesel	2	
Sump	EPA 8270	5	High baseline caused by hydrocarbons.

SEQUOIA ANALYTICAL

Vickie Tague Clark

Vickie Tague Clark
Project Manager



**Sequoia
Analytical**

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--	--	--	--

Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid

Work Order #: 9507B60 -01, 02

Reported: Aug 3, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC072095BTEXEXD	GC072095BTEXEXD	GC072095BTEXEXD	GC072095BTEXEXD
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	G. Garcia	G. Garcia	G. Garcia	G. Garcia
MS/MSD #:	-	-	-	-
Sample Conc.:	-	-	-	-
Prepared Date:	-	-	-	-
Analyzed Date:	-	-	-	-
Instrument I.D. #:	-	-	-	-
Conc. Spiked:	-	-	-	-
Result:	-	-	-	-
MS % Recovery:	-	-	-	-
Dup. Result:	-	-	-	-
MSD % Recov.:	-	-	-	-
RPD:	-	-	-	-
RPD Limit:	-	-	-	-

LCS #:	BLK072095	BLK072095	BLK072095	BLK072095
Prepared Date:	7/20/95	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/21/95	7/21/95	7/21/95	7/21/95
Instrument I.D. #:	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg
LCS Result:	0.17	0.19	0.20	0.58
LCS % Recov.:	85	95	100	97

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL

Vickie Tague Clark

Project Manager

Please Note:

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

9507B60.TTT <1>



**Sequoia
Analytical**

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

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

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

Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid

Work Order #: 9507B60-02

Reported: Aug 3, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0720956010MDD	ME0720956010MDD	ME0720956010MDD	ME0720956010MDD
Anal. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050

Analyst:	S. O'Donnell	S. O'Donnell	S. O'Donnell	S. O'Donnell
MS/MSD #:	9507A0502	9507A0502	9507A0502	9507A0502
Sample Conc.:	0.87	N.D.	110	140
Prepared Date:	7/20/95	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/21/95	7/21/95	7/21/95	7/21/95
Instrument I.D. #:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/Kg	100 mg/Kg	100 mg/Kg	100 mg/Kg
Result:	98	93	160	200
MS % Recovery:	97	93	50	60
Dup. Result:	96	91	210	230
MSD % Recov.:	95	91	100	90
RPD:	2.1	2.2	27	14
RPD Limit:	0-30	0-30	0-30	0-30

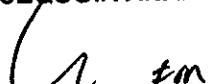
LCS #:	BLK072095	BLK072095	BLK072095	BLK072095
Prepared Date:	7/20/95	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/21/95	7/21/95	7/21/95	7/21/95
Instrument I.D. #:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/Kg	100 mg/Kg	100 mg/Kg	100 mg/Kg
LCS Result:	100	99	100	100
LCS % Recov.:	100	99	100	100

MS/MSD LCS Control Limits	75-125	75-125	75-125	75-125
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SEQUOIA ANALYTICAL


Vickie Tague Clark
Project Manager



**Sequoia
Analytical**

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819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: Sump
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B60-02

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/21/95
Reported: 07/21/95

QC Batch Number: GC072095BTEXEXD
Instrument ID: GCHP01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates		
Trifluorotoluene	Control Limits % 70 130	% Recovery 99

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

SEQUOIA ANALYTICAL - ELAP #1210

WT Clark

Vickie Tague Clark
Project Manager



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Analytical

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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid
Work Order #: 9507B60-02-04

Reported: Aug 3, 1995

QUALITY CONTROL DATA REPORT

Analyte: Total Recoverable
Petroleum Hydrocarb.

QC Batch#: OP0720955520EXA
Anal. Method: SM 5520 EF-MOD
Prep. Method: N/A

Analyst: C. Garde
MS/MSD #: 9507A0501
Sample Conc.: N.D.
Prepared Date: 7/20/95
Analyzed Date: 7/21/95
Instrument I.D. #: Manual
Conc. Spiked: 500 mg/Kg

Result: 500
MS % Recovery: 100

Dup. Result: 450
MSD % Recov.: 90

RPD: 11
RPD Limit: 0-50

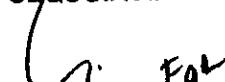
LCS #: BLK072095

Prepared Date: 7/20/95
Analyzed Date: 7/21/95
Instrument I.D. #: Manual
Conc. Spiked: 500 mg/Kg

LCS Result: 430
LCS % Recov.: 86

MS/MSD	60-140
LCS	70-110
Control Limits	

SEQUOIA ANALYTICAL


Vickie Tague Clark
Project Manager

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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid
Work Order #: 9507B60-02

Reported: Aug 3, 1995

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC0721950HBPEXA
Analy. Method: EPA 8015M
Prep. Method: EPA 3550

Analyst: T. Olive
MS/MSD #: 950748604
Sample Conc.: 5.8
Prepared Date: 7/21/95
Analyzed Date: 7/22/95
Instrument I.D.#: GCHP5
Conc. Spiked: 25 mg/Kg

Result: 25
MS % Recovery: 77

Dup. Result: 27
MSD % Recov.: 85

RPD: 7.7
RPD Limit: 0-50

LCS #: BLK072195

Prepared Date: 7/21/95
Analyzed Date: 7/21/95
Instrument I.D.#: GCHP5
Conc. Spiked: 25 mg/Kg

LCS Result: 25
LCS % Recov.: 100

MS/MSD
LCS
Control Limits
38-122

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

For

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Touchstone Developments
 P.O. Box 2554
 Santa Rosa, CA 95405
 Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
 Matrix: Solid

Work Order #: 9507B60-02

Reported: Aug 3, 1995

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
QC Batch#:	GC0720958010EXA	GC0720958010EXA	GC0720958010EXA
Analy. Method:	EPA 8010	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030

Analyst:	D. Nelson	D. Nelson	D. Nelson
MS/MSD #:	9507A4701	9507A4701	9507A4701
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/20/95	7/20/95	7/20/95
Instrument I.D. #:	GCHP24	GCHP24	GCHP24
Conc. Spiked:	25 µg/Kg	25 µg/Kg	25 µg/Kg
Result:	27	24	24
MS % Recovery:	108	96	96
Dup. Result:	25	22	23
MSD % Recov.:	100	88	92
RPD:	7.7	8.7	4.3
RPD Limit:	0-50	0-50	0-50

LCS #:	BLK072095	BLK072095	BLK072095
Prepared Date:	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/20/95	7/20/95	7/20/95
Instrument I.D. #:	GCHP24	GCHP24	GCHP24
Conc. Spiked:	25 µg/Kg	25 µg/Kg	25 µg/Kg
LCS Result:	29	24	26
LCS % Recov.:	116	96	104

MS/MSD LCS Control Limits	28-167	35-146	38-150
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SEQUOIA ANALYTICAL

FW

Vickie Tague Clark
Project Manager



**Sequoia
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Touchstone Developments
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 Santa Rosa, CA 95405
 Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
 Matrix: Solid
 Work Order #: 9507B60-02

Reported: Aug 3, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Phenol	2-Chlorophenol	1,4-Dichloro benzene	N-Nitroso-Di-N-propylamine
QC Batch#:	MS0714958270EXA	MS0714958270EXA	MS0714958270EXA	MS0714958270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550

Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	950717001	950717001	950717001	950717001
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/14/95	7/14/95	7/14/95	7/14/95
Analyzed Date:	7/14/95	7/14/95	7/14/95	7/14/95
Instrument I.D. #:	H5	H5	H5	H5
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
Result:	2500	2700	2500	2800
MS % Recovery:	76	82	76	85
Dup. Result:	2200	2500	2300	2400
MSD % Recov.:	67	76	70	73
RPD:	13	7.7	8.3	15
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	-	-	-
Prepared Date:	-	-	-
Analyzed Date:	-	-	-
Instrument I.D. #:	-	-	-
Conc. Spiked:	-	-	-
LCS Result:	-	-	-
LCS % Recov.:	-	-	-

MS/MSD LCS Control Limits	5-112	23-134	20-124	DL-230
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SEQUOIA ANALYTICAL

[Signature]
 Vickie Tague Clark
 Project Manager



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FAX (916) 921-0100

Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid

Work Order #: 9507B60-02

Reported: Aug 3, 1995

QUALITY CONTROL DATA REPORT

Analyte:	1,2,4-Trichloro benzene	4-Chloro-3 Methylphenol	Acenaphthene	4-Nitrophenol
QC Batch#:	MS0714958270EXA	MS0714958270EXA	MS0714958270EXA	MS0714958270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550

Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	950717001	950717001	950717001	950717001
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/14/95	7/14/95	7/14/95	7/14/95
Analyzed Date:	7/14/95	7/14/95	7/14/95	7/14/95
Instrument I.D. #:	H5	H5	H5	H5
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
Result:	2700	2700	2700	2200
MS % Recovery:	82	82	82	67
Dup. Result:	2400	2400	2400	1900
MSD % Recov.:	73	73	73	58
RPD:	12	12	12	15
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

Prepared Date:
Analyzed Date:
Instrument I.D. #:
Conc. Spiked:

LCS Result:
LCS % Recov.:

MS/MSD LCS Control Limits	44-142	22-147	47-145	DL-132
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SEQUOIA ANALYTICAL

[Signature]
Vickie Tague Clark
Project Manager



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid
Work Order #: 9507B60-02

Reported: Aug 3, 1995

QUALITY CONTROL DATA REPORT

Analyte:	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
QC Batch#:	MS0714958270EXA	MS0714958270EXA	MS0714958270EXA
Analyt. Method:	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550

Analyst:	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	950717001	950717001	950717001
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	7/14/95	7/14/95	7/14/95
Analyzed Date:	7/14/95	7/14/95	7/14/95
Instrument I.D. #:	H5	H5	H5
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
Result:	2700	2700	2400
MS % Recovery:	82	82	73
Dup. Result:	2400	2200	2200
MSD % Recov.:	73	67	67
RPD:	12	20	8.7
RPD Limit:	0-50	0-50	0-50

LCS #:	-	-	-
Prepared Date:	-	-	-
Analyzed Date:	-	-	-
Instrument I.D. #:	-	-	-
Conc. Spiked:	-	-	-
LCS Result:	-	-	-
LCS % Recov.:	-	-	-

MS/MSD LCS Control Limits	39-139	14-176	52-115
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SEQUOIA ANALYTICAL

[Signature] Vickie Tague Clark
Project Manager

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

Chain-of-Custody-Record

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

Chevron Facility Number	9-3356	Chevron Contact (Name)	Rick Garrett
Facility Address	19201 Center St. Castro Valley	(Phone)	510 842 9178
Consultant Project Number	3356-1	Laboratory Name	Sequoia
Consultant Name	Treadstone Due Lagniaps	Laboratory Release Number	03535050
Address	P.O. Box 2554, Santa Rosa, CA	Samples Collected by (Name)	Jeff Monroe
Project Contact (Name)	Jeff Monroe	Collection Date	7-19-95
(Phone)	7075388868 (Fax Number)	Signature	Jeff Monroe

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water	Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Load (Yes or No)	Analyses To Be Performed							Remarks
									STEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (8520)	Purgeable Hydrocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICP or A)
SP-1a-d	4 S C	15:00	W	Yes	X											Sample comp
SP-2a-d		15:05														7-19-95
SP-3a-d		15:10														7-19-95
SP-4a-d		15:15														48 hr
10SP1a-d	V V V	15:20							X	X	X	X	X	X	X	7-20-95
<hr/>																
P-4	1 S D	11:30		Yes	X											
SUMP	1	11:40														Sampled
H-1	1	11:50														7-20-95
H-2	1 V V	11:55														24 hr

Relinquished By (Signature)	Organization	Date/Time 12:20	Received By (Signature)	Organization	Date/Time 12:26	Turn Around Time (Circle Choice)
Relinquished By (Signature)	TD	7-20-95	Wendy Miller	TD	7/20/95	24 Hrs.
Relinquished By (Signature)	Organization	Date/Time 13:17	Received By (Signature)	Organization	Date/Time	48 Hrs.
Relinquished By (Signature)	TD	7/20/95				5 Days
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)	Organization	Date/Time	10 Days
			M	Sequoia	7/20/95 13:15	As Contracted



Sequoia
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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Client Proj. ID: 3356-1, Chevron 9-3356
Lab Proj. ID: 9507B36

Sampled: 07/20/95
Received: 07/20/95
Analyzed: see below

Attention: Jeff Monroe

Reported: 07/27/95

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9507B36-01 Sample Desc : SOLID,UO-1				
Cadmium	mg/Kg	07/26/95	0.50	N.D.
Chromium	mg/Kg	07/26/95	0.50	21
Lead	mg/Kg	07/26/95	5.0	7.2
Nickel	mg/Kg	07/26/95	2.5	28
Zinc	mg/Kg	07/26/95	0.50	41
Lab No: 9507B36-02 Sample Desc : SOLID,UO-2				
Cadmium	mg/Kg	07/26/95	0.50	N.D.
Chromium	mg/Kg	07/26/95	0.50	44
Lead	mg/Kg	07/26/95	5.0	7.8
Nickel	mg/Kg	07/26/95	2.5	35
Zinc	mg/Kg	07/26/95	0.50	44

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark
Project Manager



Sequoia
Analytical

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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: UO-1
Matrix: SOLID
Analysis Method: EPA 8010
Lab Number: 9507B36-01

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/22/95
Analyzed: 07/24/95
Reported: 07/27/95

QC Batch Number: GC0720958010EXA
Instrument ID: GCHP8

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon Tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.
Surrogates		
1-Chloro-2-fluorobenzene	Control Limits % 60 130	% Recovery 88

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager



Sequoia
Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
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819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: UO-1
Matrix: SOLID
Analysis Method: EPA 8270
Lab Number: 9507B36-01

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/24/95
Analyzed: 07/24/95
Reported: 07/27/95

QC Batch Number: MS0719958270EXB
Instrument ID: F4

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzolic Acid	500	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzyl alcohol	250	N.D.
Bis(2-chloroethoxy)methane	250	N.D.
Bis(2-chloroethyl)ether	250	N.D.
Bis(2-chloroisopropyl)ether	250	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	250	N.D.
Butyl benzyl phthalate	250	N.D.
4-Chloroaniline	500	N.D.
2-Chloronaphthalene	250	N.D.
4-Chloro-3-methylphenol	250	N.D.
2-Chlorophenol	250	N.D.
4-Chlorophenyl phenyl ether	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Dibenzofuran	250	N.D.
Di-n-butyl phthalate	500	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	250	N.D.
Diethyl phthalate	250	N.D.
2,4-Dimethylphenol	250	N.D.
Dimethyl phthalate	250	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	250	N.D.



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--	--	--	--

Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: UO-1
Matrix: SOLID
Analysis Method: EPA 8270
Lab Number: 9507B36-01

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/24/95
Analyzed: 07/24/95
Reported: 07/27/95

QC Batch Number: MS0719958270EXB
Instrument ID: F4

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
2,6-Dinitrotoluene	250	N.D.
Di-n-octyl phthalate	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Hexachlorobenzene	250	N.D.
Hexachlorobutadiene	250	N.D.
Hexachlorocyclopentadiene	500	N.D.
Hexachloroethane	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Isophorone	250	N.D.
2-Methylnaphthalene	250	N.D.
2-Methylphenol	250	N.D.
4-Methylphenol	250	N.D.
Naphthalene	250	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	250	N.D.
2-Nitrophenol	250	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	250	N.D.
N-Nitroso-di-n-propylamine	250	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	250	N.D.
Phenol	250	N.D.
Pyrene	250	N.D.
1,2,4-Trichlorobenzene	250	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	250	N.D.

Surrogates	Control Limits %	% Recovery
2-Fluorophenol	25	121
Phenol-d5	24	113
Nitrobenzene-d5	23	120
2-Fluorobiphenyl	30	115
2,4,6-Tribromophenol	19	122
p-Terphenyl-d14	18	137

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager



**Sequoia
Analytical**

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--	--	--	--

Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: UO-2
Matrix: SOLID
Analysis Method: EPA 8270
Lab Number: 9507B36-02

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/24/95
Analyzed: 07/24/95
Reported: 07/27/95

QC Batch Number: MS0719958270EXB
Instrument ID: F4

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
2,6-Dinitrotoluene	250	N.D.
Di-n-octyl phthalate	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Hexachlorobenzene	250	N.D.
Hexachlorobutadiene	250	N.D.
Hexachlorocyclopentadiene	500	N.D.
Hexachloroethane	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Isophorone	250	N.D.
2-Methylnaphthalene	250	N.D.
2-Methylphenol	250	N.D.
4-Methylphenol	250	N.D.
Naphthalene	250	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	250	N.D.
2-Nitrophenol	250	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	250	N.D.
N-Nitroso-di-n-propylamine	250	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	250	N.D.
Phenol	250	N.D.
Pyrene	250	N.D.
1,2,4-Trichlorobenzene	250	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	250	N.D.

Surrogates	Control Limits %	% Recovery
2-Fluorophenol	25	75
Phenol-d5	24	86
Nitrobenzene-d5	23	84
2-Fluorobiphenyl	30	79
2,4,6-Tribromophenol	19	81
p-Terphenyl-d14	18	69

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager



**Sequoia
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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid

Work Order #: 9507B36 -01-2

Reported: Aug 2, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0725956010MDE	ME0725956010MDE	ME0725956010MDE	ME0725956010MDE
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050

Analyst:	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser
MS/MSD #:	9507D2004	9507D2004	9507D2004	9507D2004
Sample Conc.:	1.0	N.D.	70	53
Prepared Date:	7/25/95	7/25/95	7/25/95	7/25/95
Analyzed Date:	7/26/95	7/26/95	7/26/95	7/26/95
Instrument I.D. #:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/Kg	100 mg/Kg	100 mg/Kg	100 mg/Kg
Result:	94	92	150	140
MS % Recovery:	93	92	80	87
Dup. Result:	94	94	160	140
MSD % Recov.:	93	94	90	87
RPD:	0.0	2.2	6.5	0.0
RPD Limit:	0-30	0-30	0-30	0-30

LCS #:	BLK072595	BLK072595	BLK072595	BLK072595
Prepared Date:	7/25/95	7/25/95	7/25/95	7/25/95
Analyzed Date:	7/26/95	7/26/95	7/26/95	7/26/95
Instrument I.D. #:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/Kg	100 mg/Kg	100 mg/Kg	100 mg/Kg
LCS Result:	100	100	100	100
LCS % Recov.:	100	100	100	100

MS/MSD LCS Control Limits	75-125	75-125	75-125	75-125
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SEQUOIA ANALYTICAL

Vickie Jague Clark
Project Manager

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

9507B36.TTT <1>



**Sequoia
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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid
Work Order #: 9507B36-01-2

Reported: Aug 2, 1995

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
QC Batch#:	GC0720958010EXA	GC0720958010EXA	GC0720958010EXA
Analy. Method:	EPA 8010	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030

Analyst:	D. Nelson	D. Nelson	D. Nelson
MS/MSD #:	9507A4701	9507A4701	9507A4701
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/20/95	7/20/95	7/20/95
Instrument I.D. #:	GCHP24	GCHP24	GCHP24
Conc. Spiked:	25 µg/Kg	25 µg/Kg	25 µg/Kg
Result:	27	24	24
MS % Recovery:	108	96	96
Dup. Result:	25	22	23
MSD % Recov.:	100	88	92
RPD:	7.7	8.7	4.3
RPD Limit:	0-50	0-50	0-50

LCS #:	BLK072095	BLK072095	BLK072095
Prepared Date:	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/20/95	7/20/95	7/20/95
Instrument I.D. #:	GCHP24	GCHP24	GCHP24
Conc. Spiked:	25 µg/Kg	25 µg/Kg	25 µg/Kg
LCS Result:	29	24	26
LCS % Recov.:	116	96	104

MS/MSD LCS Control Limits	28-167	35-146	38-150
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SEQUOIA ANALYTICAL

Vickie Fague Clark
Project Manager

Please Note:

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

9507B36.TTT <2>



**Sequoia
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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid

Work Order #: 9507B36-01-2

Reported: Aug 2, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Phenol	2-Chlorophenol	1,4-Dichloro benzene	N-Nitroso-Di-N-propylamine
QC Batch#:	MS0719958270EXB	MS0719958270EXB	MS0719958270EXB	MS0719958270EXB
Anal. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550

Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	950788607	950788607	950788607	950788607
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D. #:	H5	H5	H5	H5
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
Result:	2300	2400	2200	2400
MS % Recovery:	70	73	67	73
Dup. Result:	2100	2200	2100	2200
MSD % Recov.:	64	67	64	67
RPD:	9.1	8.7	4.7	8.7
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	BLK071995	BLK071995	BLK071995	BLK071995
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D. #:	H5	H5	H5	H5
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
LCS Result:	2200	2400	2300	2400
LCS % Recov.:	67	73	70	73

MS/MSD LCS Control Limits	5-112	23-134	20-124	DL-230
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Please Note:

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

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager



**Sequoia
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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid

Work Order #: 9507B36-01-2

Reported: Aug 2, 1995

QUALITY CONTROL DATA REPORT

Analyte:	1,2,4-Trichloro benzene	4-Chloro-3 Methylphenol	Acenaphthene	4-Nitrophenol
QC Batch#:	MS0719958270EXB	MS0719958270EXB	MS0719958270EXB	MS0719958270EXB
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550

Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	950788607	950788607	950788607	950788607
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D. #:	H5	H5	H5	H5
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
Result:	2300	2400	2400	2500
MS % Recovery:	70	73	73	76
Dup. Result:	2200	2200	2200	2400
MSD % Recov.:	67	67	67	73
RPD:	4.4	8.7	8.7	4.1
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	BLK071995	BLK071995	BLK071995	BLK071995
Prepared Date:	7/19/95	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D. #:	H5	H5	H5	H5
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
LCS Result:	2300	2300	2300	2100
LCS % Recov.:	70	70	70	64

MS/MSD LCS Control Limits	44-142	22-147	47-145	DL-132
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Please Note:

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

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager



**Sequoia
Analytical**

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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid

Work Order #: 9507B36-01-2

Reported: Aug 2, 1995

QUALITY CONTROL DATA REPORT

Analyte:	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
QC Batch#:	MS0719958270EXB	MS0719958270EXB	MS0719958270EXB
Analy. Method:	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550

Analyst:	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	950788607	950788607	950788607
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/20/95	7/20/95	7/20/95
Instrument I.D. #:	H5	H5	H5
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
Result:	2300	2300	1900
MS % Recovery:	70	70	58
Dup. Result:	2100	2100	1700
MSD % Recov.:	64	64	52
RPD:	9.1	9.1	11
RPD Limit:	0-50	0-50	0-50

LCS #:	BLK071995	BLK071995	BLK071995
Prepared Date:	7/19/95	7/19/95	7/19/95
Analyzed Date:	7/20/95	7/20/95	7/20/95
Instrument I.D. #:	H5	H5	H5
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
LCS Result:	2200	2100	1900
LCS % Recov.:	67	64	58

MS/MSD LCS Control Limits	39-139	14-176	52-115
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SEQUOIA ANALYTICAL

Vickie Hague Clark
Project Manager

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

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

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

Chevron Facility Number 9-3356
Facility Address 19201 Center St, Castro Valley
Consultant Project Number 3356-
Consultant Name Touchstone Developments
Address PO Box 2553 Santa Fea CA
Project Contact (Name) Jeff Monroe
(Phone) 7075388818 Fax Number 5388812

Chevron Contact (Name) Kick Garrett
(Phone) 510 842-9178
Laboratory Name Sequoia
Laboratory Release Number 3535050
Samples Collected by (Name) Jeff Monroe
Collection Date 7-20-95
Signature J. Monroe

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Charcoal	Type G = Composite C = Grab D = Discrete	Time	Sample Preservation	Load (Yes or No)	Analyses To Be Performed							Remarks
								STEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5530) P/F	Flammable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (82240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICP or AA)
T-1	S	D	10:30	V/S			X								
T-2					10:32										
T-1					10:40										
T-2					10:46										
T-3					10:48										
T-4					10:50										
T-5					10:55										
T-6					10:57										
T-7					10:57										
T-8					11:00										
T-9					11:03										
P-1					11:15										
P-2					11:17										
P-3					11:25										

Distinguished By (Signature)

Distinguished By (Signature)

Distinguished By (Signature)

Organization TD

Organization TD

Organization TD

Date/Time 12:20

Date/Time 13:15

Date/Time

Received By (Signature)
J. Monroe

Received By (Signature)
J. Monroe

Received For Laboratory By (Signature)
J. Monroe

Organization TD

Organization

Organization

Date/Time 12:20
7/20/95

Date/Time

Date/Time
7/20/95

Turn Around Time (Circle Choice)

24 Hrs.

48 Hrs.

5 Days

10 Days

As Contracted

a5071326

Remarks

24 hr TAT
on gas &
Diesel
1061

(5 day on
other)
a 1061



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Client Proj. ID: 3356-1, Chevron 9-3356
Lab Proj. ID: 9507B31

Sampled: 07/20/95
Received: 07/20/95
Analyzed: see below
Reported: 07/23/95

Attention: Jeff Monroe

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9507B31-01 Sample Desc : SOLID,UO-1 TRPH (SM 5520 E&F Mod.)	mg/Kg	07/21/95	50	N.D.
Lab No: 9507B31-02 Sample Desc : SOLID,UO-2 TRPH (SM 5520 E&F Mod.)	mg/Kg	07/21/95	50	99

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark
Project Manager



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P.O. Box 2554
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Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: UO-1
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B31-01

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/20/95
Reported: 07/23/95

Attention: Jeff Monroe

QC Batch Number: GC072095BTEXEXE
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	111

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

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Attention: Jeff Monroe

QC Batch Number: GC0720950HBPEXA
Instrument ID: GCHP4A

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: UO-1
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9507B31-01

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/21/95
Reported: 07/23/95

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel Chromatogram Pattern:	5.0 C14-C24	15 Unidentified HC
Surrogates n-Pentacosane (C25)	50 Control Limits %	152 Q % Recovery

Results quantitated against a diesel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

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Attention: Jeff Monroe

QC Batch Number: GC072095BTEXEXE
Instrument ID: GCHP22

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: UO-2
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B31-02

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/20/95
Reported: 07/23/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	125

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

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Attention: Jeff Monroe

QC Batch Number: GC0720950HBPEXA
Instrument ID: GCHP4B

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: UO-2
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9507B31-02

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/21/95
Reported: 07/23/95

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel Chromatogram Pattern:	1.0 C14-C24	1.4 Unidentified HC
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 94

Results quantitated against a diesel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

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Attention: Jeff Monroe

QC Batch Number: GC072095BTEXEXE
Instrument ID: GCHP01

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: T-1
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B31-03

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/21/95
Reported: 07/23/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	50	230
Benzene	0.25	N.D.
Toluene	0.25	N.D.
Ethyl Benzene	0.25	0.27
Xylenes (Total)	0.25	2.3
Chromatogram Pattern:		C9-C12
Weathered Gas		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	102

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

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Attention: Jeff Monroe

QC Batch Number: GC072095BTEXEXE
Instrument ID: GCHP01

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: T-2
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B31-04

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/21/95
Reported: 07/23/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	200	930
Benzene	1.0	1.1
Toluene	1.0	N.D.
Ethyl Benzene	1.0	3.9
Xylenes (Total)	1.0	30
Chromatogram Pattern: Weathered Gas		C8-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	96

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

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Attention: Jeff Monroe

QC Batch Number: GC072095BTEXEXE
Instrument ID: GCHP18

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: T-3
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B31-05

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/20/95
Reported: 07/23/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	102

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

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Attention: Jeff Monroe

QC Batch Number: GC072095BTEXEXE
Instrument ID: GCHP18

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: T-4
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B31-06

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/20/95
Reported: 07/23/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates		
Trifluorotoluene		

Control Limits %
70 130

% Recovery
88

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

SEQUOIA ANALYTICAL - ELAP #1210

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Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: T-5
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B31-07

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/21/95
Reported: 07/23/95

Attention: Jeff Monroe

QC Batch Number: GC072095BTExExE
Instrument ID: GCHP01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEx

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	50	240
Benzene	0.25	0.33
Toluene	0.25	1.3
Ethyl Benzene	0.25	0.89
Xylenes (Total)	0.25	7.1
Chromatogram Pattern:		C6-C12
Weathered Gas		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	99

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

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Attention: Jeff Monroe

QC Batch Number: GC072095BTEXEXE
Instrument ID: GCHP18

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: T-6
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B31-08

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/20/95
Reported: 07/23/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	90

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

SEQUOIA ANALYTICAL - ELAP #1210

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Attention: Jeff Monroe

QC Batch Number: GC072095BTEXEXE
Instrument ID: GCHP18

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: T-7
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B31-09

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/20/95
Reported: 07/23/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	
Chromatogram Pattern:		
Surrogates		
Trifluorotoluene		

Control Limits %
70 130

% Recovery
90

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

SEQUOIA ANALYTICAL - ELAP #1210

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Touchstone Developments
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Attention: Jeff Monroe

QC Batch Number: GC072095BTEXEXE
Instrument ID: GCHP18

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: T-8
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B31-10

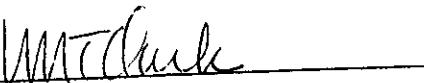
Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/20/95
Reported: 07/23/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	97

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

SEQUOIA ANALYTICAL - ELAP #1210


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Touchstone Developments
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Attention: Jeff Monroe

QC Batch Number: GC072095BTEXEXE
Instrument ID: GCHP18

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: T-9
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B31-11

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/20/95
Reported: 07/23/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	
Trifluorotoluene	70	130
		% Recovery 100

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

SEQUOIA ANALYTICAL - ELAP #1210

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Attention: Jeff Monroe

QC Batch Number: GC072095BTEXEXE
Instrument ID: GCHP18

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: P-1
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B31-12

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/20/95
Reported: 07/23/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	0.014
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	99

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

SEQUOIA ANALYTICAL - ELAP #1210

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Attention: Jeff Monroe

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: P-2
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B31-13

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/21/95
Reported: 07/23/95

QC Batch Number: GC072095BTEXEXE
Instrument ID: GCHP01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	5.0	29
Benzene	0.025	0.028
Toluene	0.025	0.083
Ethyl Benzene	0.025	0.67
Xylenes (Total)	0.025	0.43
Chromatogram Pattern:		C6-C12
Weathered Gas		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	105

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

SEQUOIA ANALYTICAL - ELAP #1210


Vickie Tague Clark
Project Manager

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Analytical

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(916) 921-9600

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

Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

Client Proj. ID: 3356-1, Chevron 9-3356
Sample Descript: P-3
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507B31-14

Sampled: 07/20/95
Received: 07/20/95
Extracted: 07/20/95
Analyzed: 07/20/95
Reported: 07/23/95

QC Batch Number: GC072095BTEXEXE
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1000	2000
Benzene	5.0	N.D.
Toluene	5.0	N.D.
Ethyl Benzene	5.0	9.5
Xylenes (Total)	5.0	80
Chromatogram Pattern: Weathered Gas		C8-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	79

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Proj. ID: 3356-1, Chevron 9-3356

Received: 07/20/95

Lab Proj. ID: 9507B31

Reported: 07/23/95

LABORATORY NARRATIVE

Q: Surrogate recovery high due to coelution.

The detection limits were raised on the following analyses:

Sample	Analysis	Factor
UO-1	TEPH as Diesel	5
T-1	TPPH as Gas	50
T-2	TPPH as Gas	200
T-5	TPPH as Gas	50
P-2	TPPH as Gas	5
P-3	TPPH as Gas	1000

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid

Work Order #: 9507B31 -01-2

Reported: Jul 27, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Total Recoverable Petroleum Hydrocarb.	Diesel
QC Batch#:	OP0720955520EXA	GC0720950HBPEXA
Anal. Method:	SM 5520 EF-MOD	EPA 8015 M
Prep. Method:	N/A	EPA 3550

Analyst:	C. Garde	T. Olive
MS/MSD #:	9507A0501	950782703
Sample Conc.:	N.D.	490
Prepared Date:	7/20/95	7/20/95
Analyzed Date:	7/21/95	7/21/95
Instrument I.D. #:	Manual	GCHP4
Conc. Spiked:	500 mg/Kg	25 mg/Kg

Result:	500	520
MS % Recovery:	100	120

Dup. Result:	450	540
MSD % Recov.:	90	200

RPD:	11	3.8
RPD Limit:	0-50	0-50

LCS #:	BLK072095	BLK072095
Prepared Date:	7/20/95	7/20/95
Analyzed Date:	7/21/95	7/21/95
Instrument I.D. #:	Manual	GCHP4
Conc. Spiked:	500 mg/Kg	25 mg/Kg

LCS Result:	430	24
LCS % Recov.:	86	96

MS/MSD	60-140
LCS	70-110
Control Limits	38-122

Please Note:

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SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

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

9507B31.TTT <1>



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-1, Chevron 9-3356
Matrix: Solid

Work Order #: 9507B31-01-14

Reported: Jul 27, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC072095BTEXEXE	GC072095BTEXEXE	GC072095BTEXEXE	GC072095BTEXEXE
Anal. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	E. Cunanan	E. Cunanan	E. Cunanan	E. Cunanan
MS/MSD #:	950758602	950758602	950758602	950758602
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/20/95	7/20/95	7/20/95	7/20/95
Analyzed Date:	7/20/95	7/20/95	7/20/95	7/20/95
Instrument I.D. #:	GCHP1	GCHP1	GCHP1	GCHP1
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg
Result:	0.18	0.20	0.22	0.66
MS % Recovery:	90	100	110	110
Dup. Result:	0.16	0.17	0.18	0.56
MSD % Recov.:	80	85	90	93
RPD:	12	16	20	16
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

Prepared Date:
Analyzed Date:
Instrument I.D. #:
Conc. Spiked:

LCS Result:
LCS % Recov.:

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

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.

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

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

9507B31.TTT <2>

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

Chain-of-Custody-Record

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chevron Facility Number	9-3356	Chevron Contact (Name)	Rick Garrett
	Facility Address	19201 Center St., Castro Valley	(Phone)	510 842 9178
	Consultant Project Number	3356	Laboratory Name	Sequioa
	Consultant Name	Toughstone Developments	Laboratory Release Number	3535050
	Address	P.O. Box 2554 Santa Rosa CA	Samples Collected by (Name)	Jeff Monroe
	Project Contact (Name)	Jeff Monroe	Collection Date	7-22-95
(Phone)	7075388818	Fax Number	5388812	

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water	A = Air C = Charcoal	G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed						Remarks	
									BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520) D/F	Purgeable Halocarbons (8010)	Purgeable Aromatic (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)
10-1	1	S	D	10:30	G1	10:30	V3	X	X	X	X	X	X	X	X	AS OF 7/23
10-2				10:32	02											
T-1				10:40	03											94 hr TAT
T-2				10:45	04											on gas
T-3				10:48	05											Diesel
T-4				10:50	06											1061
T-5				10:55	07											
T-6				10:57	08											
T-7				10:59	09											
T-8				11:00	10											
T-9				11:03	11											
P-1				11:15	12											
P-2				11:17	13											
P-3		V	V	11:25	14	V	V									6 day on a sample

Relinquished By (Signature)	Organization	Date/Time 12:20	Received By (Signature)	Organization	Date/Time 12:20	Turn Around Time (Circle Choice)
<i>Jeff Monroe</i>	ID	7-20-95	<i>MH</i>	ID	7/20/95	24 Hrs.
Relinquished By (Signature)	Organization	Date/Time 13:15	Received By (Signature)	Organization	Date/Time	48 Hrs.
<i>MH</i>	ID	7/20/95				5 Days
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)	Organization	Date/Time	10 Days
			<i>JL</i>	<i>Seguin</i>	7/20/95 13:15	As Contracted



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

Client Proj. ID: 3356-2, Chevron 9-3356

Lab Proj. ID: 9507D83

Sampled: 07/24/95
Received: 07/24/95
Analyzed: see below

Reported: 07/26/95

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9507D83-01 Sample Desc : SOLID,XSP-1 (A-D)	Lead mg/Kg	07/26/95	5.0	8.2
Lab No: 9507D83-02 Sample Desc : SOLID,XSP-2 (A-D)	Lead mg/Kg	07/26/95	5.0	6.8
Lab No: 9507D83-03 Sample Desc : SOLID,XSP-3 (A-D)	Lead mg/Kg	07/26/95	5.0	7.3

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark
Project Manager



**Sequoia
Analytical**

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819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: XSP-1 (A-D)
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507D83-01

Sampled: 07/24/95
Received: 07/24/95
Extracted: 07/25/95
Analyzed: 07/25/95
Reported: 07/26/95

QC Batch Number: GC072595BTEXEXA
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg	
TPPH as Gas	10 100
Benzene	0.050 N.D.
Toluene	0.050 0.15
Ethyl Benzene	0.050 0.59
Xylenes (Total)	0.050 2.4
Chromatogram Pattern: Weathered Gas	C8-C12
 Surrogates		Control Limits %	
Trifluorotoluene	70	130	% Recovery 106

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: XSP-2 (A-D)
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507D83-02

Sampled: 07/24/95
Received: 07/24/95
Extracted: 07/25/95
Analyzed: 07/25/95
Reported: 07/26/95

QC Batch Number: GC072595BTEXEXA
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	100	680
Benzene	0.50	0.70
Toluene	0.50	1.7
Ethyl Benzene	0.50	11
Xylenes (Total)	0.50	64
Chromatogram Pattern: Weathered Gas		C6-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	117

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark
Project Manager



Sequoia
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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

QC Batch Number: GC072595BTEXEXA
Instrument ID: GCHP06

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: XSP-3 (A-D)
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507D83-03

Sampled: 07/24/95
Received: 07/24/95
Extracted: 07/25/95
Analyzed: 07/25/95
Reported: 07/26/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	20	49
Benzene	0.10	N.D.
Toluene	0.10	0.15
Ethyl Benzene	0.10	0.48
Xylenes (Total)	0.10	3.2
Chromatogram Pattern: Weathered Gas		C8-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	116

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark
Project Manager



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-2, Chevron 9-3356
Matrix: Solid

Work Order #: 9507D83-01-3

Reported: Aug 2, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0726956010MDF	ME0726956010MDF	ME0726956010MDF	ME0726956010MDF
Anal. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050

Analyst:	S. O'Donnell	S. O'Donnell	S. O'Donnell	S. O'Donnell
MS/MSD #:	9507D2710	9507D2710	9507D2710	9507D2710
Sample Conc.:	N.D.	N.D.	37	45
Prepared Date:	7/26/95	7/26/95	7/26/95	7/26/95
Analyzed Date:	7/26/95	7/26/95	7/26/95	7/26/95
Instrument I.D. #:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/Kg	100 mg/Kg	100 mg/Kg	100 mg/Kg
Result:	97	93	130	140
MS % Recovery:	97	93	93	95
Dup. Result:	98	93	130	140
MSD % Recov.:	98	93	93	95
RPD:	1.0	0.0	0.0	0.0
RPD Limit:	0-30	0-30	0-30	0-30

LCS #:	BLK072695	BLK072695	BLK072695	BLK072695
Prepared Date:	7/26/95	7/26/95	7/26/95	7/26/95
Analyzed Date:	7/26/95	7/26/95	7/26/95	7/26/95
Instrument I.D. #:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/Kg	100 mg/Kg	100 mg/Kg	100 mg/Kg
LCS Result:	100	97	99	99
LCS % Recov.:	100	97	99	99

MS/MSD LCS Control Limits	75-125	75-125	75-125	75-125

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SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

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

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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-2, Chevron 9-3356
Matrix: Solid

Work Order #: 9507D83-01-3

Reported: Aug 2, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC072595BTEXEXA	GC072595BTEXEXA	GC072595BTEXEXA	GC072595BTEXEXA
Anal. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler
MS/MSD #:	9507A4601	9507A4601	9507A4601	N.D.
Sample Conc.:	N.D.	N.D.	N.D.	7/25/95
Prepared Date:	7/25/95	7/25/95	7/25/95	7/25/95
Analyzed Date:	7/25/95	7/25/95	7/25/95	GCHP22
Instrument I.D. #:	GCHP22	GCHP22	GCHP22	0.60 mg/Kg
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	
Result:	0.19	0.19	0.22	0.57
MS % Recovery:	95	95	110	95
Dup. Result:	0.20	0.19	0.20	0.68
MSD % Recov.:	100	95	100	113
RPD:	5.1	0.0	9.5	18
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	BLK031895	BLK031895	BLK031895	BLK031895
Prepared Date:	3/18/95	3/18/95	3/18/95	3/18/95
Analyzed Date:	3/19/95	3/19/95	3/19/95	3/19/95
Instrument I.D. #:	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg
LCS Result:	0.20	0.21	0.21	0.63
LCS % Recov.:	100	105	105	105

MS/MSD				
LCS				
Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

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

9507D83.TTT <2>

Fax copy of Lab Report and COC to Chevron Contact:

Yes
 No

Chain-of-Custody-Record

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

Chevron Facility Number 9-3356
Facility Address 19201 Center St, Castro Valley
Consultant Project Number 3356-2
Consultant Name Pebblestone Developments
Address Box 2554 Sausalito, CA
Project Contact (Name) Jeff Monroe
(Phone) 538 8818 (Fax Number) 538 8812

Chevron Contact (Name) Renee
(Phone) 510 842 8752
Laboratory Name Sigma
Laboratory Release Number 3545932
Samples Collected by (Name) Jeff Monroe
Collection Date 7-24-95
Signature JM

Sample Number	Lab Sample Number	Number of Containers	Matrix	A = Air B = Soil C = Water S = SW	Type	C = Grab Composite D = Discrete	Time	Sample Preservation	Isad (Yes or No)	Analyses To Be Performed										Remarks
										STEX + 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 AAS)	TOT	PCP	
XSP-1-a-d	4-SC	1	Soil	A	Grab		12:00		Yes	X										
XSP-2-a-d		1	Soil	A	Grab		12:02													
XSP-3-a-d	V	1	Soil	A	Grab		12:15													

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	24 Hrs.
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)	Organization	Date/Time	48 Hrs.
Relinquished By (Signature)	Organization	Date/Time				5 Days
						10 Days
						As Contracted

SEP 26 '95 04:58PM SEQUOIA ANALYTICAL



**Sequoia
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680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 3	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 Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

QC Batch Number: GC072595BTEXEXA
Instrument ID: GCHP08

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: TX-1
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507D84-01

Sampled: 07/24/95
Received: 07/24/95
Extracted: 07/25/95
Analyzed: 07/25/95
Reported: 09/26/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte

**Detection Limit
mg/Kg**

**Sample Results
mg/Kg**

TPPH as Gas
Benzene
Toluene
Ethyl Benzene
Xylenes (Total)
Chromatogram Pattern:

1.0
0.0050
0.0050
0.0050
0.0050

N.D.
N.D.
N.D.
N.D.
N.D.

Surrogates
Trifluorotoluene

**Control Limits %
70 130**

**% Recovery
95**

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

SEQUOIA ANALYTICAL - ELAP #1210

[Signature]
Vickie Tague Clark
Project Manager

SEP 26 '95 04:59PM SEQUOIA ANALYTICAL



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

QC Batch Number: GC072595BTEXEXA
Instrument ID: GCHP08

Client Proj. ID: 8866-2, Chevron 9-3356
Sample Descript: TX-2
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507D84-02

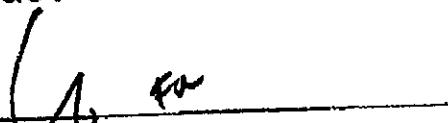
Sampled: 07/24/95
Received: 07/24/95
Extracted: 07/25/95
Analyzed: 07/25/95
Reported: 09/26/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	5.0	49
Benzene	0.025	N.D.
Toluene	0.025	0.025
Ethyl Benzene	0.025	0.29
Xylenes (Total)	0.025	0.35
Chromatogram Pattern: Weathered Gas	C8-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130

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

SEQUOIA ANALYTICAL - ELAP #1210


Vickie Tague Clark
Project Manager

SEP 26 '95 04:59PM SEQUOIA ANALYTICAL

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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

QC Batch Number: GC072595BTEXEXA
Instrument ID: GCHP07

Client Proj. ID: 0356-2, Chevron 9-3356
Sample Descript: TX-3
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507D84-08

Sampled: 07/24/95
Received: 07/24/95
Extracted: 07/25/95
Analyzed: 07/25/95
Reported: 09/26/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0060	
Chromatogram Pattern:		
Surrogates	Control Limits %	
Trifluorotoluene	70	130
		% Recovery 89

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager

SEP 26 '95 05:00PM SEQUOIA ANALYTICAL

P.6



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Proj. ID: 3356-2, Chevron 9-3356
Lab Proj. ID: 9507D84

Received: 07/24/95
Reported: 09/26/95

LABORATORY NARRATIVE

The detection limits for sample TX-2 were raised by a factor of five.

Report revised on September 26, 1995

JOIA ANALYTICAL

[Handwritten signature]



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-2, Chevron 9-3356
Matrix: Solid

Work Order #: 9507D84-01-3

Reported: Aug 1, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC072595BTEXEXA	GC072595BTEXEXA	GC072595BTEXEXA	GC072595BTEXEXA
Anal. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler
MS/MSD #:	9507A4601	9507A4601	9507A4601	9507A4601
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/25/95	7/25/95	7/25/95	7/25/95
Analyzed Date:	7/25/95	7/25/95	7/25/95	7/25/95
Instrument I.D. #:	GCHP22	GCHP22	GCHP22	GCHP22
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg
Result:	0.19	0.19	0.22	0.57
MS % Recovery:	95	95	110	95
Dup. Result:	0.20	0.19	0.20	0.68
MSD % Recov.:	100	95	100	113
RPD:	5.1	0.0	9.5	18
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	BLK031895	BLK031895	BLK031895	BLK031895
Prepared Date:	3/18/95	3/18/95	3/18/95	3/18/95
Analyzed Date:	3/19/95	3/19/95	3/19/95	3/19/95
Instrument I.D. #:	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg
LCS Result:	0.20	0.21	0.21	0.63
LCS % Recov.:	100	105	105	105

MS/MSD				
LCS				
Control Limits	55-145	47-149	47-155	56-140

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.

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

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

9507D84.TT <1>

Fax copy of Lab Report and COC to Chevron Contact: 105 No

Chain-of-Custody-Record

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591	Chevron Facility Number	9-3356	Chevron Contact (Name)	Renee Kamm
	Facility Address	19201 Center St. Foster City	(Phone)	510 842 8752
	Consultant Project Number	3356-Z	Laboratory Name	Segueia
	Consultant Name	Tuckstone Developments	Laboratory Release Number	3545032
	Address	P.O. Box 2554 Santa Rosa, CA	Samples Collected by (Name)	Jeff Monroe
Project Contact (Name)	Jeff Monroe	Collection Date	7-24-95	
(Phone)	7075389818 (Fax Number)	Signature	<i>[Signature]</i>	

Sample Number	Lab Sample Number	Number of Containers	Matrix A = Soil B = Water C = Air D = Charcoal	Type G = Grab C = Composite D = Discards	Time	Sample Preservation	Load (Yes or No)	Analyses To Be Performed						Remarks	
								FTIR + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (8520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AAS)
XUO-1	1	S D	8:40		10:05			X	X	X					
XUO-2	1	1	8:42					X	X	X					
X-SUMAP			8:55					X	X	X					
PX-1			9:15					X							
PX-2			9:18												
PX-3			10:38												
PX-4			10:00												
PX-5			10:03												
PX-6			10:06												
PX-7			10:08												
PX-8			10:40												
TX-1			1:50											01	
TX-2			1:53											02	
TX-3			1:56											03	
															24 hr
															TAT

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
<i>Jeff Monroe</i>	TD	16:10 7-24-95				24 Hrs.
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	48 Hrs.
<i>Jeff Monroe</i>	Prime Garde	16:10 7-24-95				5 Days
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)	Organization	Date/Time	10 Days
<i>Jeff Monroe</i>			<i>Segueia</i>		7/29/95 1750	As Contracted



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FAX (916) 921-0100

Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

QC Batch Number: GC0731950HBPEXA
Instrument ID: GCHP5A

Client Proj. ID: 3356-2 Chevron 9-3356
Sample Descript: XUO-2
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9507J57-01

Sampled: 07/24/95
Received: 07/24/95
Extracted: 07/31/95
Analyzed: 08/01/95
Reported: 08/02/95

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel Chromatogram Pattern:	1.0	N.D.
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 92

Results quantitated against a diesel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mark Cargasacchi
Project Manager

Page: 2



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Analytical

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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-2, Chevron 9-3356
Matrix: Solid

Work Order #: 9507J57 -01

Reported: Aug 3, 1995

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch #: GC0731950HBPEXA
Analy. Method: EPA 8015M
Prep. Method: EPA 3550

Analyst: T. Olive

MS/MSD #: -
Sample Conc.: -
Prepared Date: -
Analyzed Date: -
Instrument I.D.#: -
Conc. Spiked: -

Result: -
MS % Recovery: -

Dup. Result: -
MSD % Recov.: -

RPD: -
RPD Limit: -

LCS #: BLK073195

Prepared Date: 7/31/95
Analyzed Date: 7/31/95
Instrument I.D.#: GCHP5
Conc. Spiked: 25 mg/Kg

LCS Result: 23
LCS % Recov.: 92

MS/MSD
LCS
Control Limits

38-122

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.

SEQUOIA ANALYTICAL

Mark J. Cargasacchi
Project Manager

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

9507J57.TTT <1>

Fax copy of Lab Report and COC to Chevron Contact:

Yes
 No

Chain-of-Custody-Re

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

9-3-956
14101 Centre St. Facility
77-6-2
Touchstone Developments
1800X2554 Santa Rosa, CA
Jeff Monroe
3075388418 (Fax Number) 538 8842

Yes
No
Kenneth Kan
510 842 8752
Segura
3545032
Jeff Monroe
7-24-95
Signature

Sample Number	Lab Sample Number	Number of Containers	Matrix	A = Air C = Charcoal S = Soil W = Water	Type	Time	Sample Preservation	Load (Yes or No)	Analyses To Be Performed						Remarks	
									BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5570)	Purgeable Hydrocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd, Cr, Pb, Zn, Ni (ICAP or AA)
XUO-1	15	D	8:40	01				Yes								9507D85
XUO-2	1		8:42	02												
X-SUMP			8:55	03												
PX-1			9:15	04												
PX-2			9:18	05												
PX-3			10:38	06												
PX-4			10:00	07												
PX-5			10:03	08												
PX-6			10:26	09												
PX-7			10:08	10												
PX-8			10:40	11												
PX-1			1:50													
PX-2			1:53													
PX-3			1:56													

Relinquished By (Signature)

Jeff Monroe

Organization

TD

Date/Time 16:00

7-24-95

Received By (Signature)

Jeff Monroe

Organization

Date/Time

Turn Around Time (Circle Choice)

24 Hrs.

48 Hrs.

5 Days

10 Days

As Contracted

Relinquished By (Signature)

Jeff Monroe

Organization

Pinx Research

Date/Time 16:00

7-24-95

Received By (Signature)

Jeff Monroe

Organization

Date/Time

Relinquished By (Signature)

Jeff Monroe

Organization

Date/Time

Received For Laboratory By (Signature)

Jeff Monroe

Organization

Date/Time



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Client Proj. ID: 3356-2, Chevron 9-3356

Sampled: 07/24/95
Received: 07/24/95
Analyzed: see below

Lab Proj. ID: 9507D85

Reported: 07/27/95

Attention: Jeff Monroe

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9507D85-02 Sample Desc : SOLID,XUO-2 TRPH (SM 5520 E&F Mod.)	mg/Kg	07/26/95	50	N.D.
Lab No: 9507D85-03 Sample Desc : SOLID,X-SUMP TRPH (SM 5520 E&F Mod.)	mg/Kg	07/26/95	50	58

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark
Project Manager



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: XUO-1
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9507D85-01

Sampled: 07/24/95
Received: 07/24/95
Extracted: 07/26/95
Analyzed: 07/27/95
Reported: 07/27/95

QC Batch Number: GC0724950HBPEXA
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel Chromatogram Pattern:	1.0	N.D.
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 106

Results quantitated against a diesel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark
Project Manager



Sequoia
Analytical

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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

QC Batch Number: GC0724950HBPEXA
Instrument ID: GCHP4A

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: XUO-2
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9507D85-02

Sampled: 07/24/95
Received: 07/24/95
Extracted: 07/26/95
Analyzed: 07/27/95
Reported: 07/27/95

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel Chromatogram Pattern:	1.0 C9-C24	1.3 Unidentified HC
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 105

Results quantitated against a diesel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager



**Sequoia
Analytical**

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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

QC Batch Number: GC0724950HBPEXA
Instrument ID: GCHP4A

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: X-SUMP
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9507D85-03

Sampled: 07/24/95
Received: 07/24/95
Extracted: 07/26/95
Analyzed: 07/27/95
Reported: 07/27/95

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel Chromatogram Pattern:	1.0 C9-C24	18 Unidentified HC
Surrogates n-Pentacosane (C25)	Control Limits % 50	% Recovery 150 142

Results quantitated against a diesel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark
Project Manager



**Sequoia
Analytical**

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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

QC Batch Number: GC072595BTEXEXD
Instrument ID: GCHP06

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: PX-1
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507D85-04

Sampled: 07/24/95
Received: 07/24/95
Extracted: 07/25/95
Analyzed: 07/25/95
Reported: 07/27/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	
Trifluorotoluene	70	130
		% Recovery
		102

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager



**Sequoia
Analytical**

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FAX (916) 921-0100

Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: PX-2
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507D85-05

Sampled: 07/24/95
Received: 07/24/95
Extracted: 07/25/95
Analyzed: 07/25/95
Reported: 07/27/95

QC Batch Number: GC072595BTEXEXD
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	0.024
Chromatogram Pattern:		
Surrogates		
Trifluorotoluene	Control Limits % 70 130	% Recovery 95

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark
Project Manager



Sequoia
Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
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819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: PX-3
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507D85-06

Sampled: 07/24/95
Received: 07/24/95
Extracted: 07/25/95
Analyzed: 07/25/95
Reported: 07/27/95

QC Batch Number: GC072595BTEXXD
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	10	32
Benzene	0.050	N.D.
Toluene	0.050	N.D.
Ethyl Benzene	0.050	0.40
Xylenes (Total)	0.050	1.5
Chromatogram Pattern:		C8-C12
Weathered Gas		
Surrogates	Control Limits %	
Trifluorotoluene	70	130
	% Recovery	
		110

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: PX-4
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507D85-07

Sampled: 07/24/95
Received: 07/24/95
Extracted: 07/25/95
Analyzed: 07/25/95
Reported: 07/27/95

QC Batch Number: GC072595BTEXEXD
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	0.0050
Chromatogram Pattern:		
Surrogates		
Trifluorotoluene		

Control Limits %
70 130

% Recovery
87

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Vickie Tague Clark
Project Manager

Page:

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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: PX-5
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507D85-08

Sampled: 07/24/95
Received: 07/24/95
Extracted: 07/25/95
Analyzed: 07/25/95
Reported: 07/27/95

QC Batch Number: GC072595BTEXEXD
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	10	74
Benzene	0.050	N.D.
Toluene	0.050	N.D.
Ethyl Benzene	0.050	N.D.
Xylenes (Total)	0.050	N.D.
Chromatogram Pattern:		C9-C12
Weathered Gas		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	115

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager



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Touchstone Developments
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Attention: Jeff Monroe

QC Batch Number: GC072595BTEXEXD
Instrument ID: GHCP06

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: PX-6
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507D85-09

Sampled: 07/24/95
Received: 07/24/95
Extracted: 07/25/95
Analyzed: 07/25/95
Reported: 07/27/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	10	75
Benzene	0.050	N.D.
Toluene	0.050	N.D.
Ethyl Benzene	0.050	0.16
Xylenes (Total)	0.050	0.40
Chromatogram Pattern:		C7-C12
Weathered Gas		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
		101

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: PX-7
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507D85-10

Sampled: 07/24/95
Received: 07/24/95
Extracted: 07/25/95
Analyzed: 07/25/95
Reported: 07/27/95

QC Batch Number: GC072595BTEXEXD
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	1.0
Benzene	0.0050	0.038
Toluene	0.0050	0.0095
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	0.044
Chromatogram Pattern:		Gas
Surrogates	Control Limits %	
Trifluorotoluene	70	130
	% Recovery	
		93

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: PX-8
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507D85-11

Sampled: 07/24/95
Received: 07/24/95
Extracted: 07/25/95
Analyzed: 07/25/95
Reported: 07/27/95

QC Batch Number: GC072595BTEXEXD
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	0.0053
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	0.0088
Chromatogram Pattern:		Gas
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-2, Chevron 9-3356
Matrix: Solid

Work Order #: 9507D85 -02, 3

Reported: Aug 1, 1995

QUALITY CONTROL DATA REPORT

Analyte: Total Recoverable
Petroleum Hydrocarb.

QC Batch #: OP0719955520EXA
Analy. Method: SM 5520 EF-MOD
Prep. Method: N/A

Analyst: C. Garde
MS/MSD #: 950783501
Sample Conc.: 480
Prepared Date: 7/19/95
Analyzed Date: 7/20/95
Instrument I.D. #: Manual
Conc. Spiked: 500 mg/Kg

Result: 950
MS % Recovery: 94

Dup. Result: 1100
MSD % Recov.: 124

RPD: 15
RPD Limit: 0-50

LCS #: BLK071995

Prepared Date: 7/19/95
Analyzed Date: 7/20/95
Instrument I.D. #: Manual
Conc. Spiked: 500 mg/Kg

LCS Result: 480
LCS % Recov.: 96

MS/MSD	60-140
LCS	70-110
Control Limits	

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.

SEQUOIA ANALYTICAL

Vickie Tague Clark

Vickie Tague Clark
Project Manager

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

9507D85.TTT <1>



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-2, Chevron 9-3356
Matrix: Solid

Work Order #: 9507D85-01-3

Reported: Aug 1, 1995

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC0724950HBPEXB
Anal. Method: EPA 8015 M
Prep. Method: EPA 3550

Analyst: T. Olive
MS/MSD #: 9507B9902
Sample Conc.: N.D.
Prepared Date: 7/24/95
Analyzed Date: 7/25/95
Instrument I.D.#: GCHP5
Conc. Spiked: 25 mg/Kg

Result: 20
MS % Recovery: 80

Dup. Result: 21
MSD % Recov.: 84

RPD: 4.8
RPD Limit: 0-50

LCS #: BLK072495

Prepared Date: 7/24/95
Analyzed Date: 7/25/95
Instrument I.D.#: GCHP5
Conc. Spiked: 25 mg/Kg

LCS Result: 20
LCS % Recov.: 80

MS/MSD
LCS
Control Limits 38-122

SEQUOIA ANALYTICAL

Vickie Tague Clark

Vickie Tague Clark
Project Manager

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.



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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405
Attention: Jeff Monroe

Client Project ID: 3356-2, Chevron 9-3356
Matrix: Solid

Work Order #: 9507D85-04-11

Reported: Aug 1, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC072595BTEXEXD	GC072595BTEXEXD	GC072595BTEXEXD	GC072595BTEXEXD
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	E. Cunanan	E. Cunanan	E. Cunanan	E. Cunanan
MS/MSD #:	9507A4603	9507A4603	9507A4603	9507A4603
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/25/95	7/25/95	7/25/95	7/25/95
Analyzed Date:	7/25/95	7/25/95	7/25/95	7/25/95
Instrument I.D. #:	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg
Result:	0.16	0.14	0.16	0.45
MS % Recovery:	80	70	80	75
Dup. Result:	0.16	0.14	0.16	0.47
MSD % Recov.:	80	70	80	78
RPD:	0.0	0.0	0.0	4.3
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

Prepared Date:
Analyzed Date:
Instrument I.D. #:
Conc. Spiked:

LCS Result:
LCS % Recov.:

MS/MSD	LCS		
Control Limits	55-145	47-149	47-155

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.

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

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

Chain-of-Custody-Record

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

Chevron Facility Number 9-3356
Facility Address 19301 Center St. Castro Valley
Consultant Project Number 33-6-2
Consultant Name Tarckstone Developments
Address P.O. Box 2554 Santa Rosa, CA
Project Contact (Name) Jeff Monroe
(Phone) 7075361118 (Fax Number) 5388812

Chevron Contact (Name) Kenneth Lam
(Phone) 510 842 8752
Laboratory Name Spectra
Laboratory Release Number 3545032
Samples Collected by (Name) Jeff Monroe
Collection Date 7-24-95
Signature JKM

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water G = Grab C = Composite D = Discrete	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Load (No. or No)	Analyses To Be Performed							Remarks	
								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 (ICP or AA)	
XID-1	15 D	8:40	01	105												
XID-2	11	8:42	02	1												
X-SAMP		8:55	03	1												
PX-1		9:15	04													
PX-2		9:18	05													
PX-3		10:38	06													
PX-4		10:00	07													
PX-5		10:03	08													
PX-6		10:06	09													
PX-7		10:08	10													
PX-8		10:40	11													
TX-1		1:50														
TX-2		1:53														
TX-3		1:56														

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
<u>Jeff Monroe</u>	TD	16:10 7-24-95				24 Hrs.
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	48 Hrs.
<u>Jeff Monroe</u>	TD	16:10 7-24-95				5 Days
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)	Organization	Date/Time	10 Days
<u>Jeff Monroe</u>	TD	16:10 7-24-95	<u>Spectra</u>			As Contracted



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Touchstone Developments
171 70 Keaton Ave.
Sonoma, CA 95476

Attention: Tim Walker

QC Batch Number: GC0803950HBPEXA
Instrument ID: GCHP4B

Client Proj. ID: Chevron 9-3356/3356-2
Sample Descript: X-SUMPB
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9508074-01

Sampled: 07/27/95
Received: 07/27/95
Extracted: 08/02/95
Analyzed: 08/03/95
Reported: 08/08/95

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte

TEPH as Diesel
Chromatogram Pattern:

Detection Limit
mg/Kg

1.0

Sample Results
mg/Kg

N.D.

Surrogates

n-Pentacosane (C25)

Control Limits %
50 150

% Recovery
71

Results quantitated against a diesel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Mark Cargasacchi
Project Manager



Sequoia
Analytical

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Touchstone Developments
17170 Keaton Ave.
Sonoma, CA 95476

Client Proj. ID: 3356-2, Chevron 9-3356

Sampled: 07/27/95
Received: 07/27/95
Analyzed: see below

Attention: Tim Walker

Lab Proj. ID: 9507H11

Reported: 07/31/95

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9507H11-02 Sample Desc : SOLID,X-SUMPB	mg/Kg	07/31/95	50	N.D.
TRPH (SM 5520 E&F Mod.)	mg/Kg	07/31/95	50	N.D.

Lab No: 9507H11-03
Sample Desc : SOLID,X-SUMPC

TRPH (SM 5520 E&F Mod.) mg/Kg 07/31/95 50 N.D.

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

SEQUOIA ANALYTICAL - ELAP #1210

[Signature] FOR

Tracie Tague Clark
Project Manager



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Touchstone Developments
17170 Keaton Ave.
Sonoma, CA 95476

Attention: Tim Walker

QC Batch Number: GC072895BTEXEXA
Instrument ID: GCHP18

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: TX-2B
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507H11-01

Sampled: 07/27/95
Received: 07/27/95
Extracted: 07/28/95
Analyzed: 07/28/95
Reported: 07/31/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates		
Trifluorotoluene	Control Limits %	% Recovery
	70 130	87

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

SEQUOIA ANALYTICAL - ELAP #1210

For

Vickie Tague Clark
Project Manager

Page:

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Touchstone Developments
17170 Keaton Ave.
Sonoma, CA 95476

Attention: Tim Walker

QC Batch Number: GC0728950HBPEXA
Instrument ID: GCHP4B

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: X-SUMPB
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9507H11-02

Sampled: 07/27/95
Received: 07/27/95
Extracted: 07/28/95
Analyzed: 07/28/95
Reported: 07/31/95

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel Chromatogram Pattern:	1.0 C9-C24	1.2 Unidentified HC
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 89

Results quantitated against a diesel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

J. Tague

Vickie Tague Clark
Project Manager

Page: 3



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Touchstone Developments
17170 Keaton Ave.
Sonoma, CA 95476
Attention: Tim Walker

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: X-SUMPC
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9507H11-03

Sampled: 07/27/95
Received: 07/27/95
Extracted: 07/28/95
Analyzed: 07/28/95
Reported: 07/31/95

QC Batch Number: GC0728950HBPEXA
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel Chromatogram Pattern:	1.0 C9-C24	1.1 Unidentified HC
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 97

Results quantitated against a diesel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

U, For

Vickie Tague Clark
Project Manager



Sequoia
Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Touchstone Developments
17170 Keaton Ave.
Sonoma, CA 95476
Attention: Tim Walker

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: PX-3B
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507H11-04

Sampled: 07/27/95
Received: 07/27/95
Extracted: 07/28/95
Analyzed: 07/28/95
Reported: 07/31/95

QC Batch Number: GC072895BTEXEXA
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	3.2
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	0.038
Xylenes (Total)	0.0050	0.0065
Chromatogram Pattern: Weathered Gas		C8-C12
 Surrogates		
Trifluorotoluene	Control Limits % 70 130	% Recovery 88

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

SEQUOIA ANALYTICAL - ELAP #1210


Vickie Tague Clark
Project Manager



**Sequoia
Analytical**

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Touchstone Developments
17170 Keaton Ave.
Sonoma, CA 95476

Attention: Tim Walker

QC Batch Number: GC072895BTEXEXA
Instrument ID: GCHP18

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: PX-5B
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507H11-05

Sampled: 07/27/95
Received: 07/27/95
Extracted: 07/28/95
Analyzed: 07/28/95
Reported: 07/31/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	4.0
Benzene	0.0050	N.D.
Toluene	0.0050	0.010
Ethyl Benzene	0.0050	0.013
Xylenes (Total)	0.0050	0.037
Chromatogram Pattern: Weathered Gas		C7-C12
Surrogates	Control Limits %	
Trifluorotoluene	70	130
	% Recovery	
		94

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

SEQUOIA ANALYTICAL - ELAP #1210

J. Fin

Vickie Tague Clark
Project Manager



Sequoia
Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Touchstone Developments
17170 Keaton Ave.
Sonoma, CA 95476

Attention: Tim Walker

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: PX-6B
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507H11-06

Sampled: 07/27/95
Received: 07/27/95
Extracted: 07/28/95
Analyzed: 07/28/95
Reported: 07/31/95

QC Batch Number: GC072895BTEXEXA
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	7.3
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	0.0078
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern: Weathered Gas		C8-C12
 Surrogates	 Control Limits %	 % Recovery
Trifluorotoluene	70 130	86

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager



Sequoia
Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233
404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Touchstone Developments
17170 Keaton Ave.
Sonoma, CA 95476

Attention: Tim Walker

QC Batch Number: GC072895BTEXEXA
Instrument ID: GCHP18

Client Proj. ID: 3356-2, Chevron 9-3356
Sample Descript: PX-7B
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9507H11-07

Sampled: 07/27/95
Received: 07/27/95
Extracted: 07/28/95
Analyzed: 07/28/95
Reported: 07/31/95

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	90

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager



**Sequoia
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	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 Developments
17170 Keaton Ave.
Sonoma, CA 95476
Attention: Tim Walker

Client Project ID: 3356-2, Chevron 9-3356
Matrix: Solid

Work Order #: 9507H11 -01, 04, 05, 06, 07

Reported: Aug 4, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch #:	GC072895BTEXEXA	GC072895BTEXEXA	GC072895BTEXEXA	GC072895BTEXEXA
Anal. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	G. Garcia	G. Garcia	G. Garcia	G. Garcia
MS/MSD #:	9507D2707	9507D2707	9507D2707	9507D2707
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	7/28/95	7/28/95	7/28/95	7/28/95
Analyzed Date:	7/28/95	7/28/95	7/28/95	7/28/95
Instrument I.D. #:	GCHP1	GCHP1	GCHP1	GCHP1
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg
Result:	0.17	0.17	0.17	0.50
MS % Recovery:	85	85	85	83
Dup. Result:	0.16	0.16	0.16	0.49
MSD % Recov.:	80	80	80	82
RPD:	6.1	6.1	6.1	2.0
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

Prepared Date:
Analyzed Date:
Instrument I.D. #:
Conc. Spiked:

LCS Result:
LCS % Recov.:

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

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.

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager



**Sequoia
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	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
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Touchstone Developments
17170 Keaton Ave.
Sonoma, CA 95476
Attention: Tim Walker

Client Project ID: 3356-2, Chevron 9-3356
Matrix: Solid

Work Order #: 9507H11-02, 03

Reported: Aug 4, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Diesel	Total Recoverable
		Petroleum Hydrocarbon
QC Batch#:	GC0728950HBPEXA	OP0725955520EXB
Analy. Method:	EPA 8015M	SM 5520 EF-MOD
Prep. Method:	EPA 3550	EPA 3550

Analyst: T. Olive **C. Garde**
MS/MSD #: 9507F1837 9507D2004
Sample Conc.: 4.8 3600
Prepared Date: 7/28/95 7/25/95
Analyzed Date: 7/28/95 7/26/95
Instrument I.D. #: GCHP4 Manual
Conc. Spiked: 25 mg/Kg 500 mg/Kg

Result: 26 4200
MS % Recovery: 85 120

Dup. Result: 24 4000
MSD % Recov.: 77 80

RPD: 8.0 4.9
RPD Limit: 0-50 0-50

LCS #: BLK072895 BLK072595

Prepared Date: 7/28/95 7/25/95
Analyzed Date: 7/28/95 7/26/95
Instrument I.D. #: GCHP4 Manual
Conc. Spiked: 25 mg/Kg 500 mg/Kg

LCS Result: 20 400
LCS % Recov.: 80 80

MS/MSD	70-110
LCS	38-122
Control Limits	60-140

SEQUOIA ANALYTICAL

[Signature] Vickie Ague Clark
Project Manager

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.

Chain-of-Custody-Record

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

Contract
Chevron Facility Number 9-3551
Facility Address 10201 Parker St., 25th fl., Pk
Consultant Project Number 556-R
Consultant Name Washington Tech Solutions
Address 111 E. 20th St., Suite 1000, NY, NY 10003
Project Contact (Name) Ted H. Pechman, Tim Leib
(Phone) 212-388-8711 (Fax Number) 212-388-8712

1-144-41-100
Chevron Contact (Name) Karen P. L. Lam
(Phone) 510 842 8752
Laboratory Name 2000 LLC
Laboratory Release Number 13595032
Samples Collected by (Name) J. H. M. M. L.
Collection Date 7-27-95
Signature [Signature]

2006/03 91 / HCH

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	<input checked="" type="radio"/> 24 Hrs. <input checked="" type="radio"/> 48 Hrs. <input type="radio"/> 5 Days <input type="radio"/> 10 Days <input type="radio"/> As Contracted
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)	Organization	Date/Time	

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

Chain-of-Custody-Record

Chevron U.S.A. Inc. P.O. BOX 5004 San Ramon, CA 94583 FAX (415)842-9591		Chevron Facility Number <u>9-3356</u> Facility Address <u>19201 Penfor St., Castro Valley</u> Consultant Project Number <u>5356-2</u> Consultant Name <u>Purchstone Developments</u> Address <u>P.O. Box 25541 Santa Rosa CA</u> Project Contact (Name) <u>Tel 14 Monroe Timbuktu</u> (Phone) <u>705388818</u> (Fax Number) <u>558 8872</u>		Chevron Contact (Name) <u>Kenneth Kan</u> (Phone) <u>510 842 8752</u> Laboratory Name <u>Service</u> Laboratory Release Number <u>1 3545032</u> Samples Collected by (Name) <u>J. Ft Monroe</u> Collection Date <u>7-27-95</u> Signature <u>1</u>	
--	--	---	--	---	--

Sample Number	Lab Sample Number	Number of Containers	Media S = Soil W = Water	A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Load (See or No)	Analyses To Be Performed							Remarks
									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 (ICP or AA)
TX-26	15 D						X									C1
X-SAMP. B										X						C2
X-SAMP.C										X						C3
TX-35							X									C4
TX-5B								X								C5
TX-65																C6
TX-75																C7

COC-2 LONG/03 01/MCH

Relinquished By (Signature)	Organization	Date/Time <u>14:10</u> <u>7-27-95</u>	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	24 Hrs. 48 Hrs. 5 Days 10 Days As Contracted
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)	<u>S. Szwarc</u>	Date/Time <u>7/27/95</u> <u>1407</u>	

APPENDIX A
FIELD SAMPLE FORMS,
OFFICIAL LABORATORY RESULTS, AND
CHAIN OF CUSTODY FORMS

ALTON GEOSCIENCE, INC.
1170 Burnett Ave., Ste. S
Concord, CA 94520

JCB NUMBER 30189

TECHNICIAN Bennet L

JOB LOCATION castro valley

DATE 092790

ALTON GEOSCIENCE, INC.
Well Development and
Water Sampling Field Survey

Project # 30189 Site: 93356 Date: 09-27-90

Well: MWL Sampling Team: Bennett

Well Development Method: Hand Bailor

Sampling Method: Hand Bailor

Describe Equipment Decontamination Before Sampling:
Triple Rinse with TSP

Well Development/Well Sampling Data

Total Well Depth: 34.87 feet Time: _____ Water level Before Pumping: 19.13

Water Column	Casing Diameter 2-inch 4-inch	Volume	Factor	Volume to Purge
<u>15.74</u> feet x 0.16	<u>0.63</u>	<u>10.73</u>	<u>3</u>	<u>30.7</u>

Depth Purging From: _____ feet. Time Purging Begins: _____

Notes on Initial Discharge: Grey odor

Time	Volume	pH	Conductivity	I	Notes
<u>0810</u>	<u>26</u>	<u>11.03</u>	<u>1.91</u>	<u>72.6</u>	<u>Same</u>
<u>0815</u>	<u>27</u>	<u>8.36</u>	<u>1.94</u>	<u>71.2</u>	<u>Same</u>
<u>0821</u>	<u>29</u>	<u>8.33</u>	<u>1.91</u>	<u>70.7</u>	<u>Same</u>
<u>0822</u>	<u>30</u>	<u>9.01</u>	<u>1.88</u>	<u>69.55</u>	<u>Same</u>
<u>0823</u>	<u>31</u>	<u>9.02</u>	<u>1.92</u>	<u>70.0</u>	<u>Same</u>

Time Field Parameter Measurement Begins: _____

Rep #1 Rep #2 Rep #3 Rep #4

pH	_____	_____	_____	_____
Conductivity	_____	_____	_____	_____
Temperature (F)	_____	_____	_____	_____

Presample Collection Gallons Purged: 44

Time Sample Collection Begins: 1853

Time Sample Collection Ends: 1853

Total Gallons Purged: 44

Comments: _____

ALTON GEOSCIENCE, INC.
Well Development and
Water Sampling Field Survey

Project # 30189 Site: A3356 Date: 09/3/90

Well: MW2 Sampling Team: Bennett

Well Development Method: Hand Bailor

Sampling Method: Hand Bailor

Describe Equipment Decontamination Before Sampling:
Triple Rinse with TSP

Well Development/Well Sampling Data

Total Well Depth: 39.67 feet Time: _____ Water level Before Pumping: 14.75

Water Column	Casing Diameter 2-inch	Volume	Factor	Volume to Purge
<u>14.92</u> feet x 0.16	<u>0.65</u>	<u>9.10</u>	<u>3</u>	<u>29.1</u>

Depth Purging From: _____ feet. Time Purging Begins: _____

Notes on Initial Discharge: _____

Time	Volume	pH	Conductivity	I	Notes
1020	<u>21</u>	<u>8.36</u>	<u>13.7</u>	<u>73.4</u>	Same
1021	<u>22</u>	<u>8.20</u>	<u>13.7</u>	<u>70.1</u>	Same
1022	<u>23</u>	<u>8.07</u>	<u>13</u>	<u>69.5</u>	Same
1024	<u>24</u>	<u>8.32</u>	<u>13.3</u>	<u>68.7</u>	Same
1025	<u>27</u>	<u>8.23</u>	<u>13.0</u>	<u>68.3</u>	Same

Time Field Parameter Measurement Begins: _____

Rep #1 Rep #2 Rep #3 Rep #4

pH	_____	_____	_____
Conductivity	_____	_____	_____
Temperature (F)	_____	_____	_____

Presample Collection Gallons Purged: 30

Time Sample Collection Begins: 1920

Time Sample Collection Ends: 1920

Total Gallons Purged: 38

Comments: _____

ALTON GEOSCIENCE, INC.
 Well Development and
 Water Sampling Field Survey

Project # 30189 Site: 93356 Date: 092790

Well: MW3 Sampling Team: Bennett

Well Development Method: Hand Bailor

Sampling Method: Hand Bailor

Describe Equipment Decontamination Before Sampling:
Triple Rinse with + SP

Well Development/Well Sampling Data

Total Well Depth: <u>3944</u> feet	Time: _____	Water level Before Pumping: _____
------------------------------------	-------------	-----------------------------------

Water Column	Casing Diameter 2-inch 4-inch	Volume	Factor	Volume to Purge
<u>21.06</u> feet x 0.16	(<u>0.65</u>)	<u>13.69</u>	<u>3</u>	<u>41.1</u>

Depth Purging From: _____ feet. Time Purging Begins: _____

Notes on Initial Discharge: clear

Time	Volume	pH	Conductivity	I	Notes
1101	<u>35</u>	<u>8.43</u>	<u>1.45</u>	<u>73.0</u>	<u>grey</u>
1103	<u>36</u>	<u>8.47</u>	<u>1.45</u>	<u>72.9</u>	<u>grey</u>
1105	<u>37</u>	<u>8.36</u>	<u>1.43</u>	<u>72.3</u>	<u>same</u>
1107	<u>38</u>	<u>8.36</u>	<u>1.43</u>	<u>71.9</u>	<u>same</u>
1109	<u>40</u>	<u>8.27</u>	<u>1.43</u>	<u>72.1</u>	<u>same</u>

Time Field Parameter Measurement Begins: _____

Rep #1 Rep #2 Rep #3 Rep #4

pH	_____	_____	_____	_____
Conductivity	_____	_____	_____	_____
Temperature (F)	_____	_____	_____	_____

Presample Collection Gallons Purged: 44

Time Sample Collection Begins: 1940

Time Sample Collection Ends: 1940

Total Gallons Purged: 44

Comments: _____



Northwest Region
4080-C Pike Lane
Concord, CA 94520
(415) 685-7852
(800) 544-3422 from inside California
(800) 423-7143 from outside California
(415) 825-0720 (FAX)

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-8-X
Facility Number: 93356
Work Order Number: C009731,C009732,
C009733,C009734
Report Issue Date: October 15, 1990

Stephan Rosen
Alton Geoscience
1000 Burnette Ave, Ste. #140
Concord, CA 94520

Dear Mr. Rosen:

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories on 09/28/90.

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

GTEL is certified by the California State Department of Health Services to perform analyses for drinking water, wastewater, and hazardous waste materials according to approved protocols.

If you have any questions concerning this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,

GTEL Environmental Laboratories, Inc.

A handwritten signature in black ink that reads "Emma P. Popek". The signature is fluid and cursive, with "Emma" on top and "P. Popek" below it.

Emma P. Popek
Laboratory Director

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-9-X
Facility Number: 93356
Work Order Number: C009731
Report Issue Date: October 10, 1990

Table 1
ANALYTICAL RESULTS

Purgeable Aromatics in Water
MODIFIED EPA METHOD 602¹

GTEL Sample Number		01	02		
Client Identification		MW 1	MW 2		
Date Sampled		09/27/90	09/27/90		
Date Analyzed		10/03/90	10/03/90		
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.3	<0.3	<0.3		
Toluene	0.3	<0.3	<0.3		
Ethylbenzene	0.3	<0.3	<0.3		
Xylene (total)	0.6	<0.6	<0.6		

1 = Extraction by EPA Method 5030

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-9-X
Facility Number: 93356
Work Order Number: C009731
Report Issue Date: October 10, 1990

QA Conformance Summary

Purgeable Aromatics In Water MODIFIED EPA METHOD 602

1.0 Blanks

Four of 4 target compounds were below detection limits in the reagent blank as shown in Table 2.

2.0 Independent QC Check Sample

The control limits were met for 4 out of 4 QC check compounds as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (naphthalene) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

Percent recovery limits were met for 4 of 4 compounds in the MS as shown in Table 5.

5.0 Reagent Water Spike (WS) and Reagent Water Spike (WSD) Duplicate Precision

Relative percent difference (RPD) criteria was met for 4 of 4 analytes in the WS and WSD as shown in Table 6.

6.0 Sample Handling

- 6.1 Sample handling and holding time criteria were met for all samples.
- 6.2 There were no exceptional conditions requiring dilution of samples.

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-9-X
Facility Number: 93358
Work Order Number: C009731
Report Issue Date: October 10, 1990

Table 2
REAGENT BLANK DATA
Purgeable Aromatics In Water
MODIFIED EPA METHOD 602

Date of Analysis: 10/03/90

Analyte	Concentration, ug/L
Benzene	<0.3
Toluene	<0.3
Ethylbenzene	<0.3
Xylene (total)	<0.6

<# = Not detected at the indicated detection limit.

Project Number: SFB-175-0204.72
 Consultant Project Number: 30-189
 Contract Number: N46CWC0244-9-X
 Facility Number: 93356
 Work Order Number: C009731
 Report Issue Date: October 10, 1990

Table 3
INDEPENDENT QC CHECK SAMPLE RESULTS
Purgeable Aromatics In Water
MODIFIED EPA METHOD 602

Date of Analysis: 09/28/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Benzene	50	50	100	85 - 115
Toluene	50	50	100	85 - 115
Ethylbenzene	50	51	102	85 - 115
Xylene (total)	150	156	104	85 - 115

Table 3a
INDEPENDENT QC CHECK SAMPLE SOURCE
Purgeable Aromatics In Water
MODIFIED EPA METHOD 602

Analyte	Lot Number	Source
Benzene	LA18042	SUPELCO
Toluene	LA18042	SUPELCO
Ethylbenzene	LA18042	SUPELCO
Xylene (total)	LA18042	SUPELCO

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-9-X
Facility Number: 93356
Work Order Number: C009731
Report Issue Date: October 10, 1990

Table 4
SURROGATE COMPOUND RECOVERY
Naphthalene
Purgeable Aromatics In Water
MODIFIED EPA METHOD 602

Acceptability Limits¹: 70 - 130 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Blank	200	242	121
01	200	221	111
02	200	204	102
MS	200	172	86
WS	200	198	99
WSD	200	189	95

MS = Matrix Spike

WS = Reagent Water Spike

WSD = Reagent Water Spike Duplicate

1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Project Number: SFB-175-0204.72
 Consultant Project Number: 30-189
 Contract Number: N46CWC0244-9-X
 Facility Number: 93356
 Work Order Number: C009731
 Report Issue Date: October 10, 1990

Table 5
MATRIX SPIKE (MS) RECOVERY REPORT
Purgeable Aromatics in Water
MODIFIED EPA METHOD 602

Date of Analysis: 10/03/90
 Sample Spiked: C010002

Client ID: AS EFFL
 Units: ug/L

Analyte	Sample Result	Concentration Added	Concentration Recovered	MS Result	MS, % Recovery	Acceptability Limits, ¹ %
Benzene	<0.3	25	23.6	23.6	94	71 - 123
Toluene	<0.3	25	23.3	23.3	93	69 - 120
Ethylbenzene	<0.3	25	23.1	23.1	92	72 - 121
Xylene (total)	<0.6	75	72.3	72.3	96	75 - 123

<# = Not detected at the indicated detection limit.
 1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Project Number: SFB-175-0204.72
 Consultant Project Number: 30-189
 Contract Number: N46CWC0244-9-X
 Facility Number: 933356
 Work Order Number: C009731
 Report Issue Date: October 10, 1990

Table 6

**REAGENT WATER SPIKE (WS) AND REAGENT WATER SPIKE DUPLICATE (WSD)
RECOVERY AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT**

**Purgeable Aromatics in Water
MODIFIED EPA METHOD 602**

Date of Analysis: 10/03/90

Units: ug/L

Analyte	Concentration Added	WS Result	WS, % Recovery	WSD Result	WSD, % Recovery
Benzene	25	23.3	93	22.7	91
Toluene	25	22.9	92	22.3	89
Ethylbenzene	25	23.6	94	22.8	91
Xylene (total)	75	72.1	96	69.7	93

Analyte	RPD, %	Maximum RPD, %	Acceptability Limits ¹ % Recovery
Benzene	2	30	76 - 120
Toluene	3	30	72 - 117
Ethylbenzene	3	30	73 - 123
Xylene (total)	3	30	81 - 125

1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-9-X
Facility Number: 93356
Work Order Number: C009732
Report Issue Date: October 9, 1990

Table 1
ANALYTICAL RESULTS
**Total Petroleum Hydrocarbons
as Gasoline in Water
EPA Method 8015¹**

GTEL Sample Number		01	02	03	04
Client Identification		MW-3	MW3D	RINSATE	TRIPBLANK
Date Sampled		09/27/90	09/27/90	09/27/90	09/27/90
Date Analyzed		10/03/90	10/03/90	10/03/90	10/03/90
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Gasoline	50	<50	<50	<50	<50

1 = Extraction by EPA Method 5030

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-9-X
Facility Number: 93356
Work Order Number: C009732
Report Issue Date: October 9, 1990

QA Conformance Summary
Total Petroleum Hydrocarbons
as Gasoline in Water
EPA Method 8015

1.0 Blanks

One of 1 target compound was below detection limits in the reagent blank as shown in Table 2.

2.0 Independent QC Check Sample

The control limits were met for 1 out of 1 QC check compound as shown in Table 3.

3.0 Surrogate Compound Recoveries

Percent recovery limits were met for the surrogate compound (octadecane) for all samples as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

Percent recovery limits were met for 4 of 4 compounds in the MS as shown in Table 5.

5.0 Reagent Water Spike (WS) and Reagent Water Spike Duplicate (WSD) Accuracy and Precision

- 5.1 Percent recovery limits were met for 4 of 4 compounds in the WS and WSD as shown in Table 5.
- 5.2 Relative percent difference (RPD) criteria was met for 4 of 4 analytes in the WS and WSD as shown in Table 5.

6.0 Sample Handling

- 6.1 Sample handling and holding time criteria were met for all samples.
- 6.2 There were no exceptional conditions requiring dilution of samples.

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N48CWC0244-9-X
Facility Number: 93358
Work Order Number: C009732
Report Issue Date: October 9, 1990

Table 2
REAGENT BLANK DATA

Total Petroleum Hydrocarbons
as Gasoline In Water
EPA Method 8015

Date of Analysis: 10/03/90

Analyte	Concentration, ug/L
Gasoline	<50

<# = Not detected at the indicated detection limit.

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-9-X
Facility Number: 93356
Work Order Number: C009732
Report Issue Date: October 9, 1990

Table 3
INDEPENDENT QC CHECK SAMPLE RESULTS

Total Petroleum Hydrocarbons
as Gasoline in Water
EPA Method 8015

Date of Analysis: 10/05/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Gasoline	1040	968	93	85 - 115

Table 3a
INDEPENDENT QC CHECK SAMPLE SOURCE

Total Petroleum Hydrocarbons
as Gasoline In Water
EPA Method 8015

Analyte	Source
Gasoline	SHELL

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-S-X
Facility Number: 93356
Work Order Number: C009732
Report Issue Date: October 9, 1990

Table 4
SURROGATE COMPOUND RECOVERY
Octadecane
Total Petroleum Hydrocarbons
as Gasoline in Water
EPA Method 8015

Acceptability Limits¹: 70 - 130 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Blank	200	244	122
01	200	197	99
02	200	193	97
03	200	221	111
04	200	239	120
WS	200	198	99
WSD	200	189	95

WS = Reagent Water Spike

WSD = Reagent Water Spike Duplicate

1 = Acceptability limits are derived from the 99% confidence interval
of all samples during the previous quarter.

Project Number: SFB-175-0204.72
 Consultant Project Number: 30-189
 Contract Number: N46CWC0244-9-X
 Facility Number: 93356
 Work Order Number: C009732
 Report Issue Date: October 9, 1990

Table 5
REAGENT WATER SPIKE (WS) AND REAGENT WATER SPIKE DUPLICATE (WSD) RECOVERY
AND RELATIVE PERCENT DIFFERENCE (RPD) REPORT

Date of Analysis: 10/03/90

Units: ug/L

Analyte	Concentration Added	WS Result	WS, % Recovery	WSD Result	WSD, % Recovery
Benzene	25	23.3	93	22.7	91
Toluene	25	22.9	92	22.3	89
Ethylbenzene	25	23.6	94	22.8	91
Xylene (total)	75	72.1	96	69.7	95

Analyte	RPD, %	Maximum RPD, %	Acceptability Limits ¹ % Recovery
Benzene	2	30	76-120
Toluene	3	30	72-117
Ethylbenzene	3	30	73-123
Xylene (total)	3	30	81-125

1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-9-X
Facility Number: 93358
Work Order Number: C009733
Report Issue Date: October 15, 1990

Table 1

ANALYTICAL RESULTS

Total Recoverable Oil and Grease in Water by Infrared
EPA Method 413.2

Sample Identification		Date Sampled	Date Extracted	Date Analyzed	Concentration, mg/L ¹
GTEL No.	Client ID				
01	MW3	09/27/90	10/09/90	10/09/90	NA
02	MW3D	09/27/90	10/09/90	10/09/90	<1

¹ = Method detection limit = 1.0 mg/L; analyte below this level would not be detected.

NA = Not Available.

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-9-X
Facility Number: 93356
Work Order Number: C009733
Report Issue Date: October 15, 1990

QA Conformance Summary

Total Recoverable Oil and Grease in Water by Infrared EPA Method 413.2

1.0 Blanks

The method blank was below the detection limit as shown in Table 2.

2.0 Initial Instrument Calibration

The range of concentrations of the initial instrument calibration are shown in Table 3.

3.0 Calibration Verification Standards

- 3.1 The control limits were met for the initial calibration verification standard (ICVS) as shown in Table 4.
- 3.2 The control limits were met for the continuing calibration verification standard (CCVS) as shown in Table 4.

4.0 Matrix Spike (MS) Accuracy

The control limits were met for the reference oil in the MS as shown in Table 5.

5.0 Sample Duplicate Precision

Not enough sample was provided for a duplicate analysis.

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-9-X
Facility Number: 93356
Work Order Number: C009733
Report Issue Date: October 15, 1990

Table 2
METHOD BLANK DATA
Total Recoverable Oil and Grease in Water by Infrared
EPA Method 413.2

Date of Analysis: 10/09/90

Analyte	Concentration, mg/L
Oil and Grease	<1

<# = Not detected at the indicated detection limit.

Table 3
INITIAL CALIBRATION STANDARDS DATA
Total Recoverable Oil and Grease in Water by Infrared
EPA Method 413.2

Date of Analysis: 10/09/90

Standard Number	Concentration, mg/L
1	1.0
2	5.0
3	10.0
4	50.0
5	100.0

Project Number: SFB-175-0204.72
 Consultant Project Number: 30-189
 Contract Number: N46CWC0244-9-X
 Facility Number: 93356
 Work Order Number: C009733
 Report Issue Date: October 15, 1990

Table 4
INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS RESULTS

Total Recoverable Oil and Grease in Water by Infrared
EPA Method 413.2

Date of Analysis: 10/09/90

Initial Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, % ¹
Oil and Grease	5.3	5.1	96	80 - 120
Continuing Calibration Verification Standard				
Analyte	Expected Result, mg/L	Observed Result, mg/L	Recovery, %	Acceptability Limits, % ¹
Oil and Grease	5.3	5.4	102	80 - 120

1 = Acceptability limits are derived from the 99% confidence interval of all samples during the previous quarter.

Table 4a
INITIAL AND CONTINUING CALIBRATION
VERIFICATION STANDARDS SOURCE

Total Recoverable Oil and Grease in Water by Infrared
EPA Method 413.2

Initial Calibration Verification Standard		
Analyte	Lot Number	Source
Oil and Grease	RO7/STK12	GTEL
Continuing Calibration Verification Standard		
Analyte	Lot Number	Source
Oil and Grease	RO6/STK7	GTEL

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-9-X
Facility Number: 93356
Work Order Number: C009733
Report Issue Date: October 15, 1990

Table 5
MATRIX SPIKE (MS) RECOVERY REPORT

Total Recoverable Oil and Grease in Water by Infrared
EPA Method 413.2

Date of Analysis: 10/09/90 Units: mg/L
Sample Spiked: D.I. Water

Analyte	MS Result	Sample Result	Amount Recovered	Amount Added	MS, % Recovery	Acceptability Limits, % ¹
Oil and Grease	5.0	<1	5.0	5.0	100	70 - 130

¹ = Arbitrary limits, pending experimental determination.

<# = Not detected at the indicated detection limit.

Project Number: SFB-175-0204.72
 Consultant Project Number: 30-189
 Contract Number: N46CWC0244-9-X
 Facility Number: 93356
 Work Order Number: C009734
 Report Issue Date: October 4, 1990

Table 1
ANALYTICAL RESULTS
Purgeable Hydrocarbons In Water
EPA Method 624

	Date Sampled	09/27/90			
	Date Analyzed	10/02/90			
	Client Identification	MW-3			
	GTEL Sample Number	01			
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Chloromethane	10	<10			
Bromomethane	10	<10			
Vinyl Chloride	10	<10			
Chloroethane	10	<10			
Methylene Chloride	5	<5			
1,1-Dichloroethene	5	<5			
1,1-Dichloroethane	5	<5			
trans-1,2-Dichloroethene	5	<5			
Chloroform	5	<5			
1,2-Dichloroethane	5	<5			
1,1,1-Trichloroethane	5	<5			
Carbon Tetrachloride	5	<5			
Bromodichloromethane	5	<5			
1,2-Dichloropropane	5	<5			
c/s-1,3-Dichloropropene	5	<5			
Trichloroethene	5	<5			
Dibromochloromethane	5	<5			
1,1,2-Trichloroethane	5	<5			
Benzene	5	<5			
trans-1,3-Dichloropropene	5	<5			
2-Chloroethylvinylether	10	<10			

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-9-X
Facility Number: 93356
Work Order Number: C009734
Report Issue Date: October 4, 1990

Table 1 (Continued)
ANALYTICAL RESULTS

Purgeable Hydrocarbons in Water
EPA Method 624

Date Sampled	09/27/90				
Date Analyzed	10/02/90				
Client Identification	MW-3				
GTEL Sample Number	01				
Analyte	Detection Limit	Concentration, ug/L			
Bromoform	5	<5			
Tetrachloroethene	5	<5			
1,1,2,2-Tetrachloroethane	5	<5			
Toluene	5	<5			
Chlorobenzene	5	<5			
Ethylbenzene	5	<5			
1,2-Dichlorobenzene	5	<5			
1,3-Dichlorobenzene	5	<5			
1,4-Dichlorobenzene	5	<5			
Trichlorofluoromethane	5	<5			
Xylene	5	<5			

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-9-X
Facility Number: 93356
Work Order Number: C009734
Report Issue Date: October 4, 1990

QA Conformance Summary
Purgeable Hydrocarbons in Water
EPA Method 624

1.0 Blanks

Zero of 31 target compounds found in Reagent blank as shown in Table 2.

2.0 Independent QC Check Sample

The control limits were met for 8 of 8 QC check compounds in the aqueous QC check sample as shown in Table 3.

3.0 Surrogate Compound Recoveries

Recovery limits were met for all three surrogate compounds for all samples as shown in Tables 4a, 4b, and 4c.

5.0 Reagent Water Spike (WS) and Reagent Water Spike Duplicate (WSD) Precision

Relative percent difference (RPD) criteria were met for 5 of 5 compounds in the MS and MSD as shown in Table 5 percent recovery limits were met for 10 of 10 compounds in the MS and MSD as shown in table 6.

6.0 Sample Handling

- 6.1 Sample handling and holding time criteria were met for all samples.
- 6.2 There were no exceptional conditions requiring dilution of samples.

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-9-X
Facility Number: 93356
Work Order Number: C009734
Report Issue Date: October 4, 1990

Table 2
REAGENT BLANK DATA
Purgeable Hydrocarbons in Water
EPA Method 624

Date of Analysis: 10/02/90

Analyte	Observed Result, ug/L
Chloromethane	ND
Bromomethane	ND
Vinyl Chloride	ND
Chloroethane	ND
Methylene Chloride	ND
1,1-Dichloroethene	ND
1,1-Dichloroethane	ND
<i>trans</i> -1,2-Dichloroethene	ND
Chloroform	ND
1,2-Dichloroethane	ND
1,1,1-Trichloroethane	ND
Carbon Tetrachloride	ND
Bromodichloromethane	ND
1,2-Dichloropropane	ND
<i>cis</i> -1,3-Dichloropropene	ND
Trichloroethene	ND
Dibromochloromethane	ND
1,1,2-Trichloroethane	ND
Benzene	ND
<i>trans</i> -1,3-Dichloropropene	ND
2-Chloroethylvinylether	ND

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-9-X
Facility Number: 93356
Work Order Number: C009734
Report Issue Date: October 4, 1990

Table 2 (Continued)
REAGENT BLANK DATA

Purgeable Hydrocarbons in Water
EPA Method 624

Analyte	Observed Result, ug/L
Bromoform	ND
Tetrachloroethene	ND
1,1,2,2-Tetrachloroethane	ND
Toluene	ND
Chlorobenzene	ND
Ethylbenzene	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
Trichlorofluoromethane	ND

ND = Not detected above the statistical detection limit

Project Number: SFB-175-0204.72
 Consultant Project Number: 30-189
 Contract Number: N46CWC0244-9-X
 Facility Number: 93356
 Work Order Number: C009734
 Report Issue Date: October 4, 1990

Table 3
INDEPENDENT QC CHECK SAMPLE RESULTS
Purgeable Hydrocarbons in Water
EPA Method 624

Date of Analysis: 05/31/90

Analyte	Expected Result, ug/L	Observed Result, ug/L	Recovery, %	Acceptability Limits, %
Trichloroethylene	50	50	100	60 - 140
Carbon Tetrachloride	50	57	114	80 - 120
1,1,1-Trichloroethane	50	60	120	60 - 140
1,1,2-Trichloroethane	50	49	98	60 - 140
Vinyl Chloride	50	51	102	60 - 140
Benzene	50	52	104	60 - 140
1,1-Dichloroethylene	50	63	126	60 - 140
1,2-Dichlorobenzene	50	48	96	60 - 140

Table 3a
INDEPENDENT QC CHECK SAMPLE SOURCE
Purgeable Hydrocarbons in Water
EPA Method 624

Analyte	Lot Number	Source
Trichloroethylene	LA19682	Purgeable A Supelco
Carbon Tetrachloride	LA19682	Purgeable A Supelco
1,1,1-Trichloroethane	LA18769	Purgeable B Supelco
1,1,2-Trichloroethane	LA18769	Purgeable B Supelco
Vinyl Chloride	LA20078	Purgeable C Supelco
Benzene	LA18769	Purgeable B Supelco
1,1-Dichloroethylene	LA19682	Purgeable A Supelco
1,2-Dichlorobenzene	LA19682	Purgeable A Supelco

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-9-X
Facility Number: 93356
Work Order Number: C009734
Report Issue Date: October 4, 1990

Table 4a
SURROGATE COMPOUND RECOVERY
d8-Toluene
Purgeable Hydrocarbons in Water
EPA Method 624

Recovery Acceptability Limits¹: 88 - 110 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Blank	50	50	100
01	50	50	100
MS	50	49	98
MSD	50	53	106

MS = Matrix spike

MSD = Matrix spike duplicate

1 = Acceptability limits are derived from USEPA Contract Laboratory Program (CLP) requirements.

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-9-X
Facility Number: 93356
Work Order Number: C009734
Report Issue Date: October 4, 1990

Table 4b
SURROGATE COMPOUND RECOVERY
Bromofluorobenzene
Purgeable Hydrocarbons in Water
EPA Method 624

Recovery Acceptability Limits¹: 86 - 115 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Blank	50	50	100
01	50	54	108
MS	50	56	112
MSD	50	49	98

MS = Matrix spike

MSD = Matrix spike duplicate

¹ = Acceptability limits are derived from USEPA Contract Laboratory Program (CLP) requirements.

Project Number: SFB-175-0204.72
Consultant Project Number: 30-189
Contract Number: N46CWC0244-9-X
Facility Number: 93356
Work Order Number: C009734
Report Issue Date: October 4, 1990

Table 4c
SURROGATE COMPOUND RECOVERY
d4-1,2-Dichloroethane
Purgeable Hydrocarbons in Water
EPA Method 624

Recovery Acceptability Limits¹: 76 - 114 %

GTEL No.	Expected Result, ug/L	Surrogate Result, ug/L	Surrogate Recovery, %
Blank	50	44	88
01	50	45	90
MS	50	44	88
MSD	50	45	90

MS = Matrix spike

MSD = Matrix spike duplicate

1 = Acceptability limits are derived from USEPA Contract Laboratory Program (CLP) requirements.

Project Number: SFB-175-0204.72
 Consultant Project Number: 30-189
 Contract Number: N46CWC0244-9-X
 Facility Number: 93356
 Work Order Number: C009734
 Report Issue Date: October 4, 1990

Table 5

MATRIX SPIKE (MS) AND MATRIX SPIKE DUPLICATE (MSD)
RECOVERY AND RELATIVE PERCENT DEVIATION (RPD) REPORT

Purgeable Hydrocarbons in Water
EPA Method 624

Date of Analysis: 10/02/90

Units: ug/L

Analyte	Concentration Added	MS Result	MS, % Recovery	MSD Result	MSD, % Recovery
1,1-Dichloroethene	50	38	76	42	84
Trichloroethene	50	41	82	45	90
Benzene	50	44	88	42	84
Toluene	50	42	84	38	76
Chlorobenzene	50	44	88	42	84

Analyte	RPD, %	Acceptability Limits ¹	
		Maximum RPD, %	% Recovery
1,1-Dichloroethene	10	14	61 - 145
Trichloroethene	9	14	71 - 120
Benzene	5	11	76 - 127
Toluene	10	13	76 - 125
Chlorobenzene	5	13	75 - 130

1 = Acceptability limits are derived from USEPA Contract Laboratory Program (CLP) requirements. S

Chain-of-Custody Record

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

Chevron Facility Number 93350
Consultant Consultant
Release Number 3446960 Project Number 30-189
Consultant Name Alton Neuroscience
Address 1000 Burnett Ave #140 Concord CA
Fax Number 415 682 8921
Project Contact (Name) Stephen Rosen
(Phone) 415 682 1582

John Randall
413 842 9625
GTEL
2612-5200
Bennett
092790

Sample Number	Lab Number	Number of Containers	Analyses To Be Performed										Remarks		
			Matrix S = Soil W = Water	A = Air C = Charcoal	Type G = Grab C = Composite	Time	Sample Preservation	Iced	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline	Modified EPA 8015 Total Petro. Hydrocarb. as Gasoline + Diesel	503 Oil and Grease	Arom. Volatiles - BTXE Soil: 8020/Wtr.: 602	Arom. Volatiles - BTXE Soil: 8240/Wtr.: 624	Total Lead DHS-Luft	EDB DHS-AB 1803
MW1		3	C			1853			X	X					(5) 40 ml
MW2		3	G			1920			X	X					(3) 40 ml
MW3		5				1940			X	X					(6) 40ml (2) Liter
MW3D		3				1940			X	X					(3) 40ml (5) Liter
Rinsate		1	V						X	X					(3) 40 ml
Trip Blank		1	V						X	X					(1) 40ml

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Turn Around Time (Circle Choice)
<u>MBennet</u>	Aaron Heesien 092800	1325	<u>Tiff Wilson</u>	Concord Courier	9-28 1:25	24 Hrs 48 Hrs 5 Days <u>10 Days</u>
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	

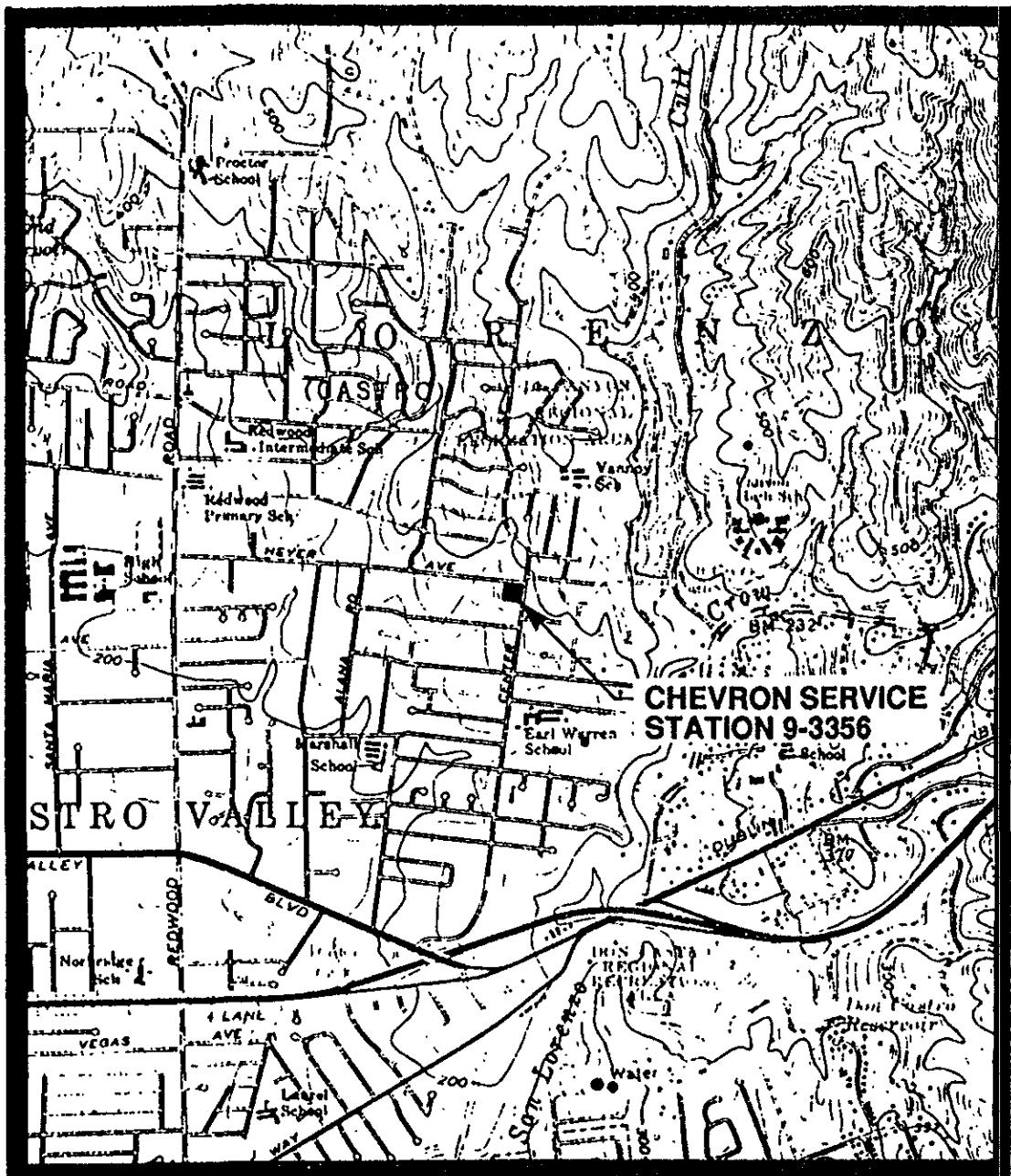


FIGURE 1: SITE VICINITY MAP

**CHEVRON SERVICE STATION NO. 9 - 3356
19201 CENTER STREET
CASTRO VALLEY, CALIFORNIA**

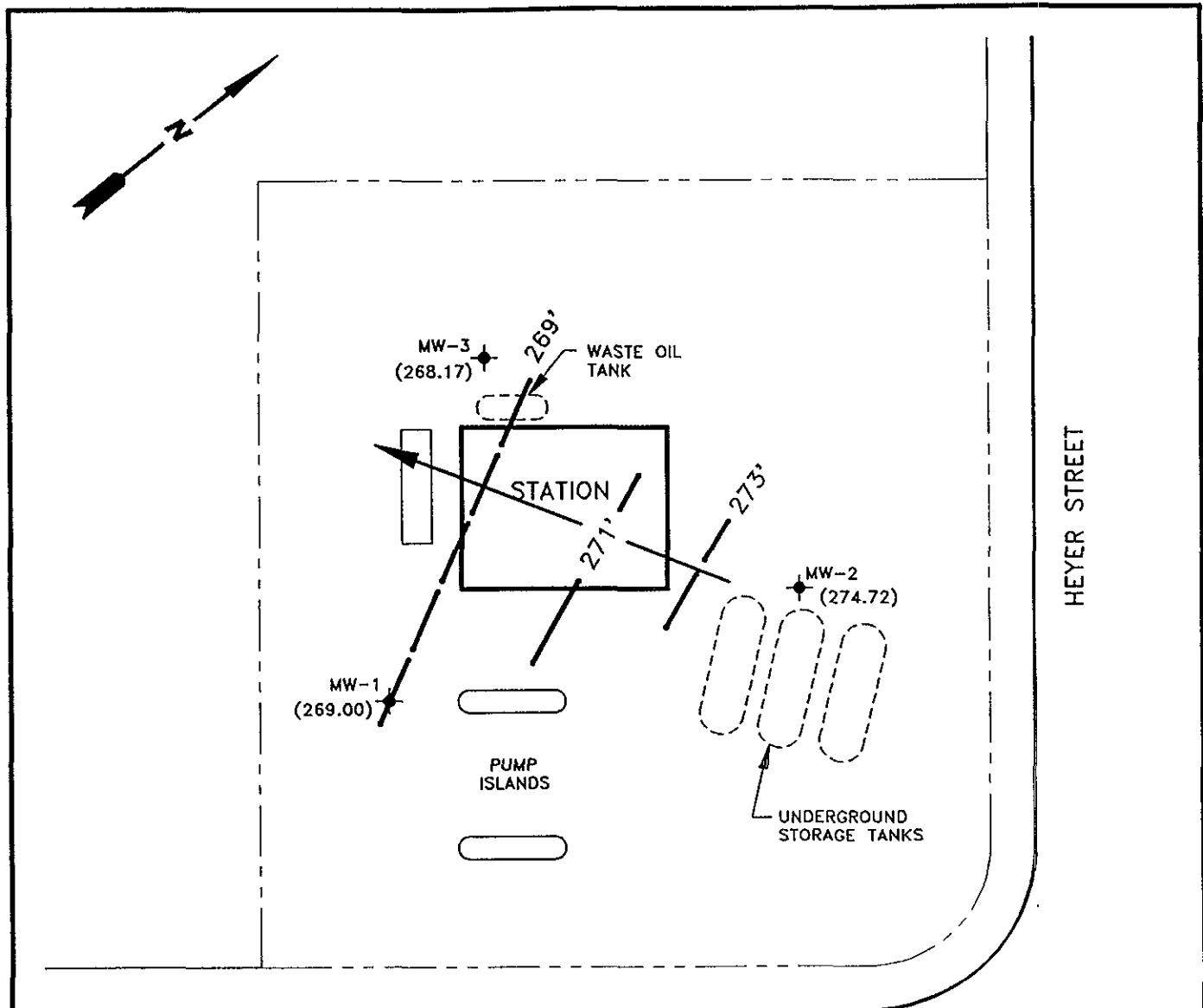
PROJECT NO. 30 - 299

0 2000
APPROXIMATE SCALE IN FEET

SOURCE: U.S.G.S. MAP, HAYWARD QUADRANGLE,
CALIFORNIA 7.5 MINUTE SERIES (TOPOGRAPHIC)
PHOTOED 1959. PHOTOREVISED 1980.



ALTON GEOSCIENCE
1000 Burnett Ave., Ste. 140
Concord, CA 94520



LEGEND

- ◆ MONITORING WELL
- () POTENIOMETRIC SURFACE ELEVATION (FT MSL)
- POTENIOMETRIC SURFACE CONTOUR
- GROUNDWATER FLOW DIRECTION

0 FEET 30
SCALE

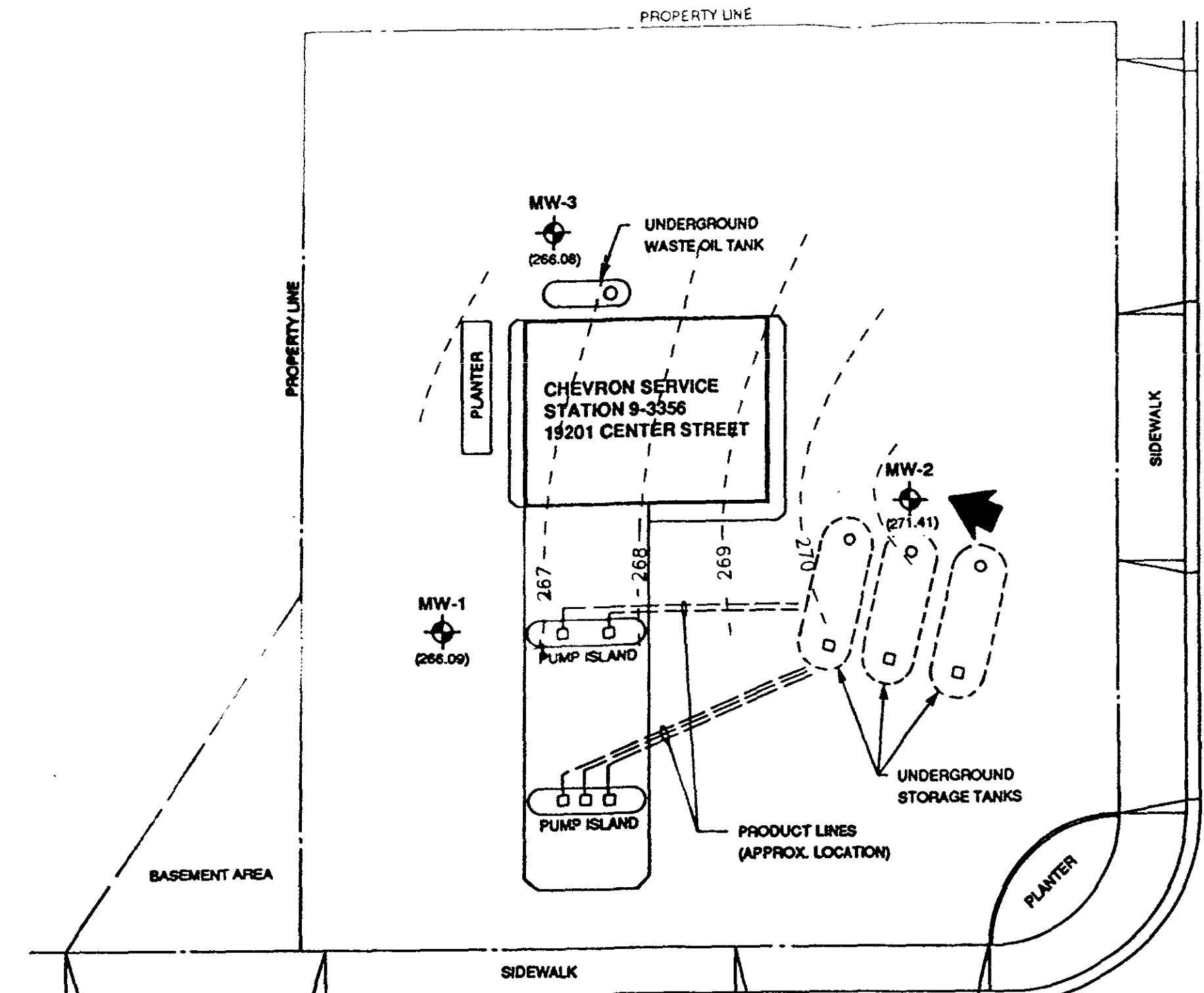


GROUNDWATER
TECHNOLOGY

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(510) 671-2387

POTENIOMETRIC SURFACE MAP (10/25/93)

CLIENT:	CHEVRON U.S.A PRODUCTS CO. SERVICE STATION No. 9-3356	LOCATION:	19201 CENTER STREET CASTRO VALLEY, CALIFORNIA	REV. NO.:	DATE:
PM	PE/RG	DESIGNED	DETAILED	ACAD FILE:	PROJECT NO.:
<i>[Signature]</i>	i110	TW	CY	PSMN93	020204115



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APPROXIMATE SCALE IN FEET

LEGEND:

- GROUND WATER MONITORING WELL
- GROUND WATER ELEVATION (FEET ABOVE MEAN SEA LEVEL [NGVD-1929])
- GROUND WATER ELEVATION CONTOUR
- GENERAL DIRECTION OF GROUND WATER FLOW

Note:
Contour lines are interpretive based on fluid levels in monitoring wells measured on 09/27/90.

FIGURE 2. GROUND WATER ELEVATION CONTOUR MAP

CHEVRON SERVICE STATION NO. 9 - 3356
19201 CENTER STREET
CASTRO VALLEY, CALIFORNIA

SOURCE: CHEVRON U.S.A.

PROJECT NO. 30 - 299

ALTON GEOSCIENCE
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