Chevron

July 14, 1997

**Chevron Products Company**
6001 Bollinger Canyon Road
Building L
San Ramon, CA 94583
P.O. Box 6004
San Ramon, CA 94583-0904

**Marketing – Sales West**
Phone 510 842 9500

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

**Re: Chevron Service Station #9-3322**
**7225 Bancroft Avenue, Oakland, California**

Dear Ms. Shin:

Enclosed is the Product Piping Removal Soil Sampling Report, that was prepared by our consultant Touchstone Developments, for the above noted site. This report documents the soil sampling that was conducted at the time of the removal and replacement of the gasoline piping system at this site.

Soil samples were collected from beneath the dispensers at a depth of approximately 2-3 feet and collected from the pipeline trenches at depths of approximately 2 to 4 feet below grade. The collection of these samples by our consultant was directed and observed by you.

All soil samples were analyzed for the TPH-g, BTEX, MtBE and lead constituents. Of the twelve soil samples taken, the benzene constituent was observed in only five of the samples, with the highest concentration detected in sample P7. This sample was in the pipeline trench located near the middle dispenser island. TPH-g was detected in only five soil samples also, with the highest concentration detected in sample P6, which is also in the pipeline trench located near the middle dispenser island.

The petroleum impacted soil detected appears to be minimal and any further impact from petroleum hydrocarbons is not expected, with the installation of overspill protection underneath the dispensers and upgrading the piping system. Also, any additional soil excavation was not practical at this time, since the structural integrity of the existing canopy columns could have been effected. If the station facilities are removed in the future, any residual petroleum hydrocarbons remaining in the soil could be addressed at that time. In the meantime, natural attenuation would be expected to reduce the petroleum hydrocarbons in the soil.

Therefore, Chevron is not proposing to do any further action at this location.

I apologize for the late submittal of this report. It was one report that was both overlooked by the consultant and Chevron. I can insure you that any future reports will be handled in a timely manner.

If you have any questions or comments, call me at (510) 842-9136.

Sincerely,
**CHEVRON PRODUCTS COMPANY**

Philip R. Briggs
Site Assessment and Remediation Project Manager

Enclosure

cc. Mr. Bill Scudder, Chevron

Touchstone Developments
Environmental Management



# Product Piping Removal Soil Sampling Report

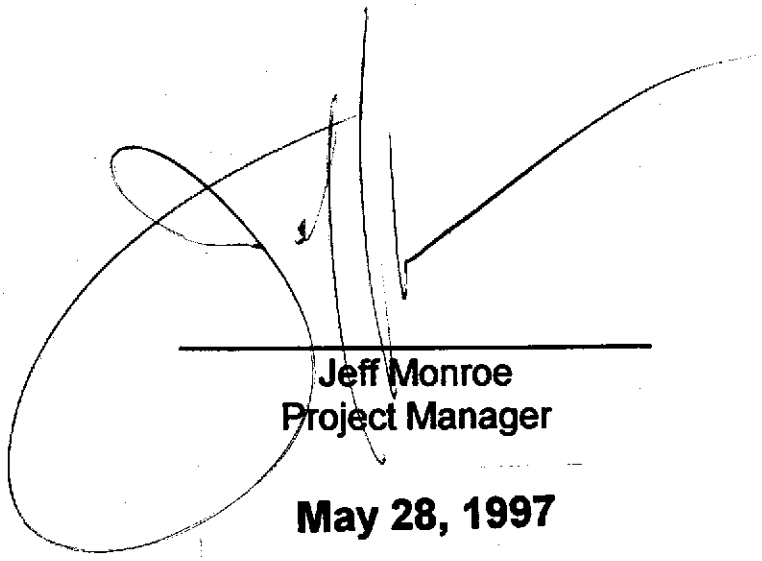
## Chevron Service Station Number 9-3322
## 7225 Bancroft Avenue
## Oakland, California

prepared for

**Chevron Products Company**
**6001 Bollinger Canyon Road**
**San Ramon, California**

prepared by

**Touchstone Developments**



Jeff Monroe
Project Manager

**May 28, 1997**

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

## INTRODUCTION

This report prepared by Touchstone Developments (Touchstone) documents the removal of product piping at 7225 Bancroft Avenue, Oakland, California (Figure 1). In addition, this report documents the disposal of soil generated at this location. Soil samples collected from beneath the dispensers, product piping and soil stockpile was performed on August 27, 1996.

## SITE CONDITIONS

Facilities at this service station site consist of three 10,000-gallon double wall fiberglass gasoline underground storage tanks (USTs), associated product piping, three dispenser islands, and a Island markerter (conveyance store). Groundwater was not encountered in any excavation observed by Touchstone at this location.

## SERVICE STATION FIELD ACTIVITIES

Product piping removal and replacement, excavation, and backfill were performed by Gettler-Ryan Inc. of Dublin, California. A Touchstone representative was on-site to collect soil samples from the trench excavations and soil stockpiles. Juliet Shin from the Alameda County Health Agency, Department of Environmental Health (ACDEH), directed and observed Touchstones' collection of twelve (12) soil samples. Transportation and disposal of product piping was accomplished by Erickson, Inc. of Richmond, California.

### Product Piping Sampling

Soil samples P-1-2.0', P-4-2.0', P-8-3.0', P-11-3.0', and P-12-3.0' were collected from beneath the dispensers at depths of approximately 2 to 3 feet below ground surface (bgs). Soil samples P2-2.0', P-3-2.0', P-5-3.0', P-6-4.0', P-7-3.0', P-9-4.0', and P-10-4.0' were collected from the trenches beneath the former product piping at depths of approximately 2 to 4 feet (bgs). Soil sample locations are shown on Figure 2 and soil sample analytical results are summarized in Table A.

## STOCKPILE SAMPLING AND DISPOSAL

Soil stockpiles SP-1(A-D), SP-2(A-D), and SP-3(A-D) represents approximately 300 cubic yards (cy) of pea gravel and soil excavated to replace product piping on-site. One soil sample was collected and analyzed for approximately every 100 cy of stockpiled material. Upon receipt of chemical analytical data, soil represented by stockpile samples SP-1(A-D) SP-2(A-D), and SP-3(A-D) were

transported by Allwaste Transportation and Remediation, Inc. (Allwaste) to Redwood Landfill located in Novato, California. Soil stockpile locations are shown on Figure 3 and soil stockpile sample analytical results are summarized in Table B.

## 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 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 100 cy of material generated at the site. 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 into the soil until completely full. The samples were sealed, labeled and handled as described above.

## SAMPLE ANALYSIS

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

## List of Attachments

| | |
|---|---|
| Table A | Soil Sampling Analytical Summary |
| Figure 1 | Site Plan |
| Figure 2 | Soil Sampling Location Map |
| Appendix A | Chemical Analytical Reports and Chain-of-Custody forms |

# TABLE A

## SOIL SAMPLING SUMMARY

## Chevron Service Station No. 9-3322

## 7225 Bancroft Avenue, Oakland, California

Results in mg/Kg - parts per million (ppm), unless otherwise noted

### DISPENSER AND PRODUCT PIPING SAMPLING RESULTS

| SAMPLE ID | DEPTH (ft.) | DATE | TPH-Gasoline | Benzene | Toluene | Ethyl-Benzene | Xylenes | MTBE | Lead |
|---|---|---|---|---|---|---|---|---|---|
| P1-2' | 2 | 27-Aug-96 | ND | 0.011 | ND | ND | 0.022 | 0.65 | ND |
| P2-2' | 2 | 27-Aug-96 | ND | ND | ND | ND | 0.024 | 0.47 | ND |
| P3-2' | 2 | 27-Aug-96 | ND | ND | ND | ND | 0.0074 | 0.15 | ND |
| P4-2' | 2 | 27-Aug-96 | ND | ND | ND | ND | 0.011 | 0.19 | ND |
| P5-3' | 3 | 27-Aug-96 | ND | ND | 0.0095 | ND | 0.0072 | ND | ND |
| P6-4' | 4 | 27-Aug-96 | 500 | ND | 8.1 | 7.3 | 59 | ND | ND |
| P7-3' | 3 | 27-Aug-96 | 200 | 4.2 | 13 | 4.5 | 31 | ND | ND |
| P8-3' | 3 | 27-Aug-96 | 250 | 1.6 | 10 | 5.3 | 32 | ND | ND |
| P9-4' | 4 | 27-Aug-96 | ND | ND | ND | ND | ND | ND | ND |
| P10-4' | 4 | 27-Aug-96 | 40 | 0.33 | 1.8 | 0.56 | 1.7 | 1.1 | 6.1 |
| P11-3' | 3 | 27-Aug-96 | ND | ND | ND | ND | 0.0082 | 0.092 | ND |
| P12-3' | 3 | 27-Aug-96 | 6.0 | 0.059 | 0.011 | 0.015 | 0.35 | 0.65 | ND |

### SOIL STOCKPILE SAMPLING RESULTS

| SAMPLE ID | DATE | TPH-Gasoline | Benzene | Toluene | Ethyl-Benzene | Xylenes | Lead |
|---|---|---|---|---|---|---|---|
| SP-1(A-D) | 27-Aug-96 | 2.3 | ND | 0.02 | 0.01 | 0.33 | 10 |
| SP-2(A-D) | 27-Aug-96 | ND | ND | ND | ND | 0.0066 | 7.6 |
| SP-3(A-D) | 27-Aug-96 | 2.5 | 0.012 | 0.024 | 0.01 | 0.047 | 7.4 |

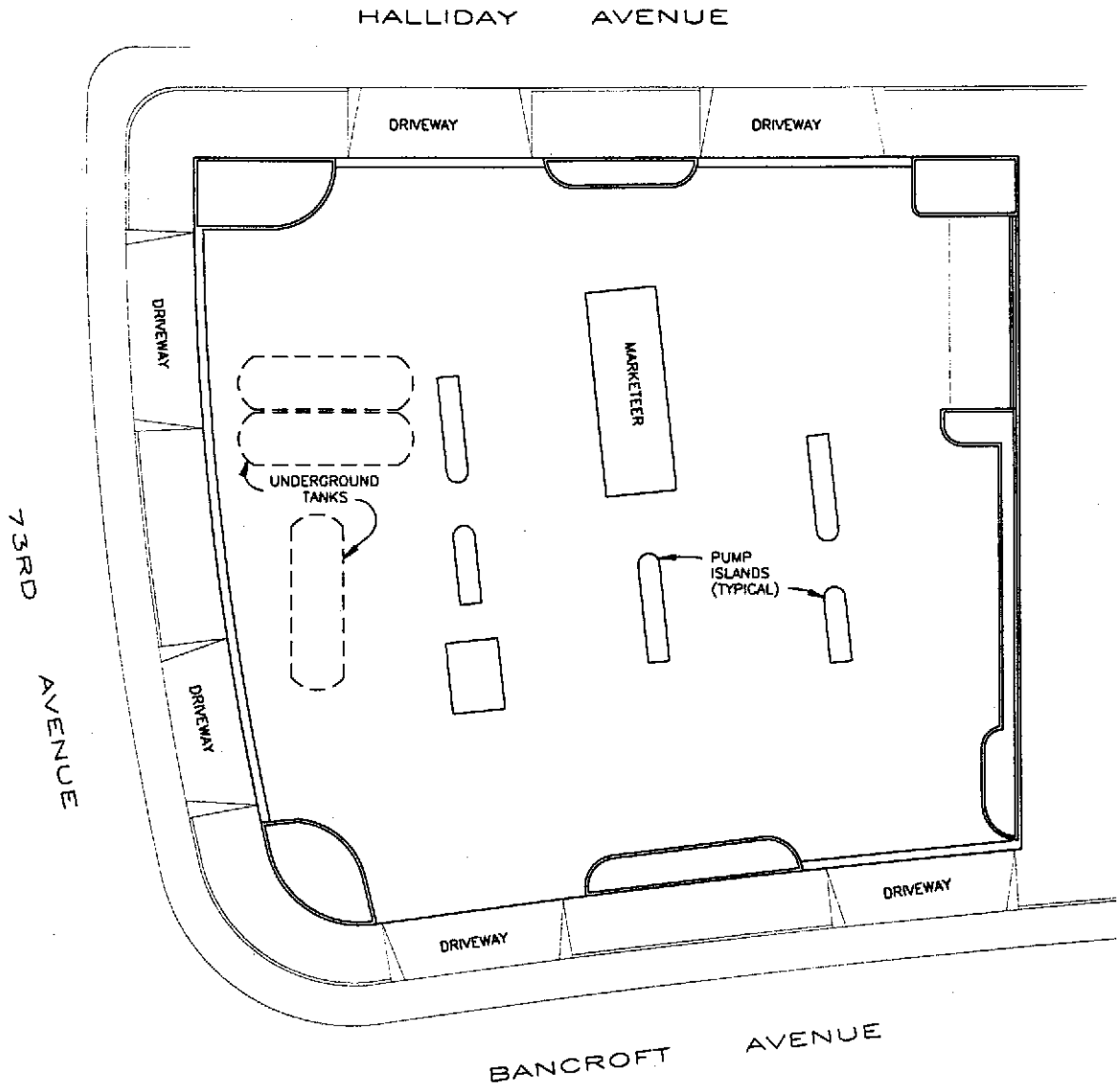
**NOTES:**

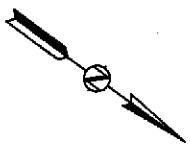
TPH-Gasoline = Total Petroleum Hydrocarbons calculated as gasoline.

MTBE = Methyl t-Butyl Ether

ND = Not detected at or above the laboratory detection limits.

ppm = Parts per Million, results reported in mg/Kg by the laboratory.



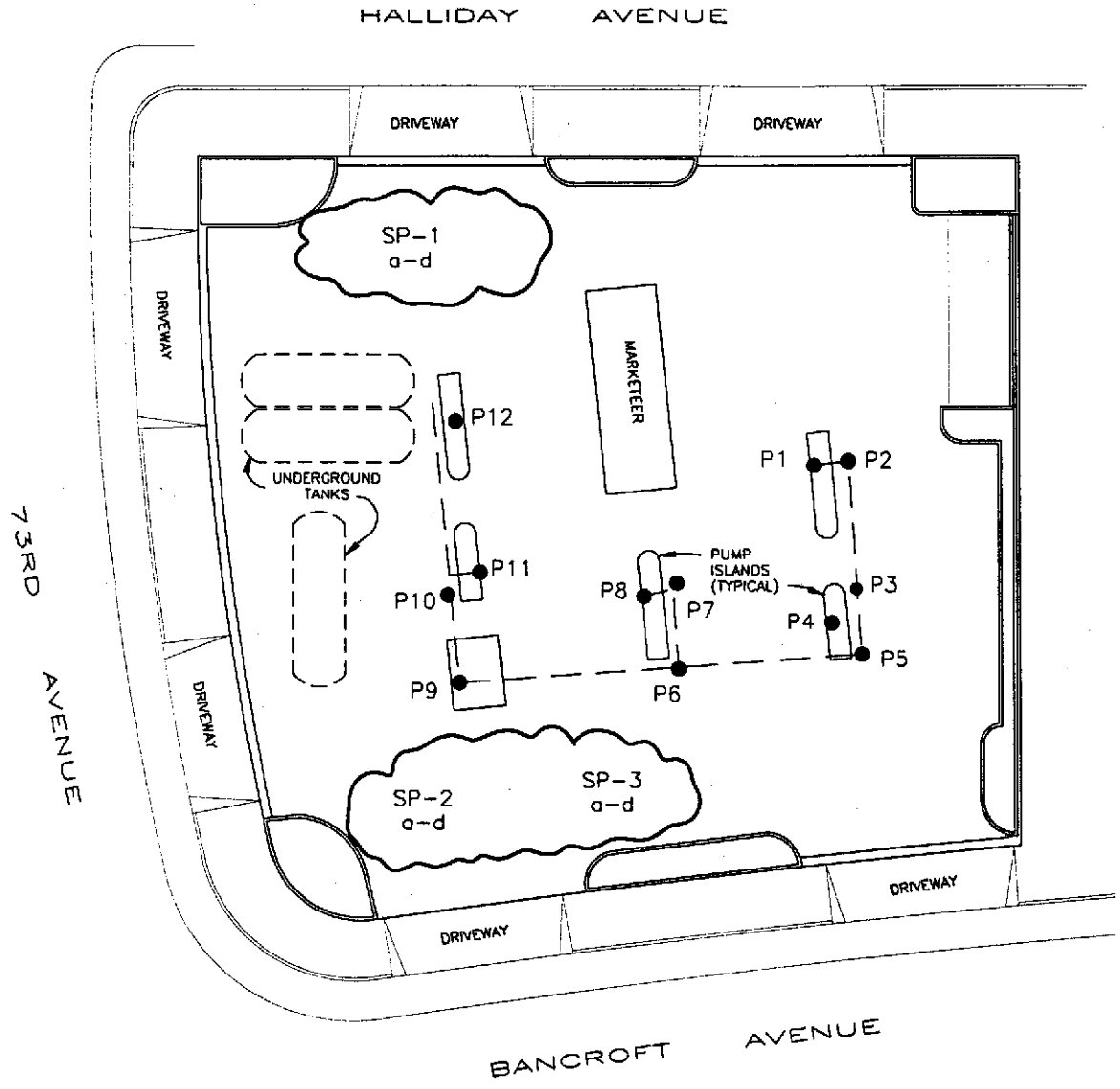



30 15 0 30

scale feet

Reference: Site Plan by Getler-Ryan Inc.

| | | | |
|---|---|---|---|
| Touchstone Developments<br>Environmental Management | Job. No: 97-3322<br>Appr:<br>Drwn: CD<br>Date: JUN 1997 | SITE PLAN<br>Chevron Station #9-3322<br>7225 Bancroft Avenue<br>Oakland, California | FIGURE<br>1 |




LEGEND

P1 — SAMPLE ID & LOCATION

STOCKPILE

PRODUCT PIPING

30 15 0 30

scale feet

Reference: Site Plan by Getler-Ryan Inc.

| | | | |
|---|---|---|---|
| Touchstone Developments<br>Environmental Management | Job. No: 97-3322<br>Appr:<br>Drwn: CD<br>Date: JUN 1997 | SITE PLAN W/SAMPLE LOCATIONS<br>Chevron Station #9-3322<br>7225 Bancroft Avenue<br>Oakland, California | FIGURE<br>2 |

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: Chevron 9-3322, 3322-1

Lab Proj. ID: 9608G39

Sampled: 08/27/96
Received: 08/27/96
Analyzed: see below

Reported: 09/11/96

## LABORATORY ANALYSIS

| Analyte | Units | Date Analyzed | Detection Limit | Sample Results |
|---|---|---|---|---|
| Lab No: 9608G39-01<br>Sample Desc : **SOIL,P1-2** | | | | |
| Lead | mg/Kg | 09/29/96 | 5.0 | N.D. |
| Lab No: 9608G39-02<br>Sample Desc : **SOIL,P2-2** | | | | |
| Lead | mg/Kg | 08/29/96 | 5.0 | N.D. |
| Lab No: 9608G39-03<br>Sample Desc : **SOIL,P3-2** | | | | |
| Lead | mg/Kg | 09/29/96 | 5.0 | N.D. |
| Lab No: 9608G39-04<br>Sample Desc : **SOIL,P4-2** | | | | |
| Lead | mg/Kg | 09/29/96 | 5.0 | N.D. |
| Lab No: 9608G39-05<br>Sample Desc : **SOIL,P5-3** | | | | |
| Lead | mg/Kg | 09/29/96 | 5.0 | N.D. |
| Lab No: 9608G39-06<br>Sample Desc : **SOIL,P6-4** | | | | |
| Lead | mg/Kg | 09/29/96 | 5.0 | N.D. |
| Lab No: 9608G39-07<br>Sample Desc : **SOIL,P7-3** | | | | |
| Lead | mg/Kg | 09/29/96 | 5.0 | N.D. |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Touchstone Developments
P.O. Box 2554
Santa Rosa, CA 95405

Attention: Jeff Monroe

Client Proj. ID: Chevron 9-3322, 3322-1

Lab Proj. ID: 9608G39

Sampled: 08/27/96
Received: 08/27/96
Analyzed: see below

Reported: 09/11/96

## LABORATORY ANALYSIS

| Analyte | Units | Date Analyzed | Detection Limit | Sample Results |
|---|---|---|---|---|
| Lab No: 9608G39-08<br>Sample Desc : **SOIL,P8-3** | | | | |
| Lead | mg/Kg | 08/29/96 | 5.0 | N.D. |
| Lab No: 9608G39-09<br>Sample Desc : **SOIL,P9-4** | | | | |
| Lead | mg/Kg | 09/29/96 | 5.0 | N.D. |
| Lab No: 9608G39-10<br>Sample Desc : **SOIL,P10-4** | | | | |
| **Lead** | **mg/Kg** | **09/29/96** | **5.0** | **6.1** |
| Lab No: 9608G39-11<br>Sample Desc : **SOIL,P11-3** | | | | |
| Lead | mg/Kg | 09/29/96 | 5.0 | N.D. |
| Lab No: 9608G39-12<br>Sample Desc : **SOIL,P12-3** | | | | |
| Lead | mg/Kg | 09/29/96 | 5.0 | N.D. |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Kevin Follett
Project Manager

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| | | |
|---|---|---|
| Touchstone Developments | Client Proj. ID: Chevron 9-3322, 3322-1 | Sampled: 08/27/96 |
| P.O. Box 2554 | Sample Descript: P1-2 | Received: 08/27/96 |
| Santa Rosa, CA 95405 | Matrix: SOIL | Extracted: 09/29/96 |
| | Analysis Method: 8015Mod/8020 | Analyzed: 09/06/96 |
| Attention: Jeff Monroe | Lab Number: 9608G39-01 | Reported: 09/11/96 |

QC Batch Number: GC082996BTEXEXA
Instrument ID: GCHP18

## Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

| Analyte | Detection Limit mg/Kg | Sample Results mg/Kg |
|---|---|---|
| TPPH as Gas | 1.0 | N.D. |
| **Methyl t-Butyl Ether** | **0.025** | **0.65** |
| **Benzene** | **0.0050** | **0.011** |
| Toluene | 0.0050 | N.D. |
| Ethyl Benzene | 0.0050 | N.D. |
| **Xylenes (Total)** | **0.0050** | **0.022** |
| Chromatogram Pattern: | | |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| Trifluorotoluene | 70 | 130 | 91 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Kevin Follett
Project Manager

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| | | |
|---|---|---|
| Touchstone Developments | Client Proj. ID: Chevron 9-3322, 3322-1 | Sampled: 08/27/96 |
| P.O. Box 2554 | Sample Descript: P2-2 | Received: 08/27/96 |
| Santa Rosa, CA 95405 | Matrix: SOIL | Extracted: 08/29/96 |
| | Analysis Method: 8015Mod/8020 | Analyzed: 09/06/96 |
| Attention: Jeff Monroe | Lab Number: 9608G39-02 | Reported: 09/11/96 |

QC Batch Number: GC082996BTEXEXA
Instrument ID: GCHP18

## Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

| Analyte | Detection Limit mg/Kg | Sample Results mg/Kg |
|---|---|---|
| TPPH as Gas | 1.0 | N.D. |
| **Methyl t-Butyl Ether** | **0.025** | **0.47** |
| 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 | Control Limits % | | % Recovery |
|---|---|---|---|
| Trifluorotoluene | 70 | 130 | 96 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Kevin Follett
Project Manager

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| | | |
|---|---|---|
| Touchstone Developments | Client Proj. ID: Chevron 9-3322, 3322-1 | Sampled: 08/27/96 |
| P.O. Box 2554 | Sample Descript: P3-2 | Received: 08/27/96 |
| Santa Rosa, CA 95405 | Matrix: SOIL | Extracted: 08/29/96 |
| | Analysis Method: 8015Mod/8020 | Analyzed: 09/09/96 |
| Attention: Jeff Monroe | Lab Number: 9608G39-03 | Reported: 09/11/96 |

QC Batch Number: GC082996BTEXEXA
Instrument ID: GCHP07

## Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

| Analyte | Detection Limit mg/Kg | Sample Results mg/Kg |
|---|---|---|
| TPPH as Gas | 1.0 | N.D. |
| **Methyl t-Butyl Ether** | **0.025** | **0.15** |
| Benzene | 0.0050 | N.D. |
| Toluene | 0.0050 | N.D. |
| Ethyl Benzene | 0.0050 | N.D. |
| **Xylenes (Total)** | **0.0050** | **0.0074** |
| 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

Kevin Follett
Project Manager

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| | | |
|---|---|---|
| Touchstone Developments | Client Proj. ID: Chevron 9-3322, 3322-1 | Sampled: 08/27/96 |
| P.O. Box 2554 | Sample Descript: P4-2 | Received: 08/27/96 |
| Santa Rosa, CA 95405 | Matrix: SOIL | Extracted: 08/29/96 |
| | Analysis Method: 8015Mod/8020 | Analyzed: 09/09/96 |
| Attention: Jeff Monroe | Lab Number: 9608G39-04 | Reported: 09/11/96 |

QC Batch Number: GC082996BTEXEXA
Instrument ID: GCHP07

## Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

| Analyte | Detection Limit mg/Kg | Sample Results mg/Kg |
|---|---|---|
| TPPH as Gas | 1.0 | N.D. |
| **Methyl t-Butyl Ether** | **0.025** | **0.19** |
| Benzene | 0.0050 | N.D. |
| Toluene | 0.0050 | N.D. |
| Ethyl Benzene | 0.0050 | N.D. |
| **Xylenes (Total)** | **0.0050** | **0.011** |
| 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

Kevin Follett
Project Manager

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| | | |
|---|---|---|
| Touchstone Developments | Client Proj. ID: Chevron 9-3322, 3322-1 | Sampled: 08/27/96 |
| P.O. Box 2554 | Sample Descript: P5-3 | Received: 08/27/96 |
| Santa Rosa, CA 95405 | Matrix: SOIL | Extracted: 08/29/96 |
| | Analysis Method: 8015Mod/8020 | Analyzed: 09/09/96 |
| Attention: Jeff Monroe | Lab Number: 9608G39-05 | Reported: 09/11/96 |

QC Batch Number: GC082996BTEXEXA
Instrument ID: GCHP07

## Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

| Analyte | Detection Limit mg/Kg | Sample Results mg/Kg |
|---|---|---|
| TPPH as Gas | 1.0 | N.D. |
| Methyl t-Butyl Ether | 0.025 | N.D. |
| Benzene | 0.0050 | N.D. |
| **Toluene** | **0.0050** | **0.0095** |
| Ethyl Benzene | 0.0050 | N.D. |
| **Xylenes (Total)** | **0.0050** | **0.0072** |
| Chromatogram Pattern: | | |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| Trifluorotoluene | 70 | 130 | 107 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Kevin Follett
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 | Client Proj. ID: Chevron 9-3322, 3322-1 | Sampled: 08/27/96 |
| P.O. Box 2554 | Sample Descript: P6-4 | Received: 08/27/96 |
| Santa Rosa, CA 95405 | Matrix: SOIL | Extracted: 08/29/96 |
| | Analysis Method: 8015Mod/8020 | Analyzed: 09/06/96 |
| Attention: Jeff Monroe | Lab Number: 9608G39-06 | Reported: 09/11/96 |

QC Batch Number: GC082996BTEXEXA
Instrument ID: GCHP18

## Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

| Analyte | Detection Limit mg/Kg | Sample Results mg/Kg |
|---|---|---|
| **TPPH as Gas** | **200** | **500** |
| Methyl t-Butyl Ether | 5.0 | N.D. |
| Benzene | 1.0 | N.D. |
| **Toluene** | **1.0** | **8.1** |
| **Ethyl Benzene** | **1.0** | **7.3** |
| **Xylenes (Total)** | **1.0** | **59** |
| **Chromatogram Pattern:** | | **Gas** |

| 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

Kevin Follett
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 | Client Proj. ID: Chevron 9-3322, 3322-1 | Sampled: 08/27/96 |
| P.O. Box 2554 | Sample Descript: P7-3 | Received: 08/27/96 |
| Santa Rosa, CA 95405 | Matrix: SOIL | Extracted: 08/29/96 |
| | Analysis Method: 8015Mod/8020 | Analyzed: 09/06/96 |
| Attention: Jeff Monroe | Lab Number: 9608G39-07 | Reported: 09/11/96 |

QC Batch Number: GC082996BTEXEXA
Instrument ID: GCHP18

## Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

| Analyte | Detection Limit mg/Kg | Sample Results mg/Kg |
|---|---|---|
| **TPPH as Gas** | **200** | **200** |
| Methyl t-Butyl Ether | 5.0 | N.D. |
| **Benzene** | **1.0** | **4.2** |
| **Toluene** | **1.0** | **13** |
| **Ethyl Benzene** | **1.0** | **4.5** |
| **Xylenes (Total)** | **1.0** | **31** |
| **Chromatogram Pattern:** | | **Gas** |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| Trifluorotoluene | 70 | 130 | 89 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Kevin Follett
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 | Client Proj. ID: Chevron 9-3322, 3322-1 | Sampled: 08/27/96 |
| P.O. Box 2554 | Sample Descript: P8-3 | Received: 08/27/96 |
| Santa Rosa, CA 95405 | Matrix: SOIL | Extracted: 08/29/96 |
| | Analysis Method: 8015Mod/8020 | Analyzed: 09/06/96 |
| Attention: Jeff Monroe | Lab Number: 9608G39-08 | Reported: 09/11/96 |

QC Batch Number: GC082996BTEXEXA
Instrument ID: GCHP18

## Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

| Analyte | Detection Limit mg/Kg | Sample Results mg/Kg |
|---|---|---|
| **TPPH as Gas** | **200** | **250** |
| Methyl t-Butyl Ether | 5.0 | N.D. |
| **Benzene** | **1.0** | **1.6** |
| **Toluene** | **1.0** | **10** |
| **Ethyl Benzene** | **1.0** | **5.3** |
| **Xylenes (Total)** | **1.0** | **32** |
| **Chromatogram Pattern:** | | **Gas** |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| Trifluorotoluene | 70 | 130 | 85 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Kevin Follett
Project Manager

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

| | | |
|---|---|---|
| Touchstone Developments | Client Proj. ID: Chevron 9-3322, 3322-1 | Sampled: 08/27/96 |
| P.O. Box 2554 | Sample Descript: P9-4 | Received: 08/27/96 |
| Santa Rosa, CA 95405 | Matrix: SOIL | Extracted: 08/29/96 |
| | Analysis Method: 8015Mod/8020 | Analyzed: 09/09/96 |
| Attention: Jeff Monroe | Lab Number: 9608G39-09 | Reported: 09/11/96 |

QC Batch Number: GC082996BTEXEXA
Instrument ID: GCHP07

## Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

| Analyte | Detection Limit mg/Kg | Sample Results mg/Kg |
|---|---|---|
| TPPH as Gas | 1.0 | N.D. |
| Methyl t-Butyl Ether | 0.025 | 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 | 107 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Kevin Follett
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 | Client Proj. ID: Chevron 9-3322, 3322-1 | Sampled: 08/27/96 |
| P.O. Box 2554 | Sample Descript: P10-4 | Received: 08/27/96 |
| Santa Rosa, CA 95405 | Matrix: SOIL | Extracted: 08/29/96 |
| | Analysis Method: 8015Mod/8020 | Analyzed: 09/09/96 |
| Attention: Jeff Monroe | Lab Number: 9608G39-10 | Reported: 09/11/96 |

QC Batch Number: GC082996BTEXEXA
Instrument ID: GCHP07

## Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

| Analyte | Detection Limit mg/Kg | Sample Results mg/Kg |
|---|---|---|
| **TPPH as Gas** | **10** | **40** |
| **Methyl t-Butyl Ether** | **0.25** | **1.1** |
| **Benzene** | **0.050** | **0.33** |
| **Toluene** | **0.050** | **1.8** |
| **Ethyl Benzene** | **0.050** | **0.56** |
| **Xylenes (Total)** | **0.050** | **1.7** |
| **Chromatogram Pattern:** | | **Gas** |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| Trifluorotoluene | 70 | 130 | 95 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

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

| | | |
|---|---|---|
| Touchstone Developments | Client Proj. ID: Chevron 9-3322, 3322-1 | Sampled: 08/27/96 |
| P.O. Box 2554 | Sample Descript: P11-3 | Received: 08/27/96 |
| Santa Rosa, CA 95405 | Matrix: SOIL | Extracted: 08/29/96 |
| | Analysis Method: 8015Mod/8020 | Analyzed: 09/09/96 |
| Attention: Jeff Monroe | Lab Number: 9608G39-11 | Reported: 09/11/96 |

QC Batch Number: GC082996BTEXEXA
Instrument ID: GCHP07

## Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

| Analyte | Detection Limit mg/Kg | Sample Results mg/Kg |
|---|---|---|
| TPPH as Gas | 1.0 | N.D. |
| **Methyl t-Butyl Ether** | **0.025** | **0.092** |
| Benzene | 0.0050 | N.D. |
| Toluene | 0.0050 | N.D. |
| Ethyl Benzene | 0.0050 | N.D. |
| **Xylenes (Total)** | **0.0050** | **0.0082** |
| Chromatogram Pattern: | | |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| Trifluorotoluene | 70 | 130 | 91 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Kevin Follett
Project Manager

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| | | |
|---|---|---|
| Touchstone Developments | Client Proj. ID: Chevron 9-3322, 3322-1 | Sampled: 08/27/96 |
| P.O. Box 2554 | Sample Descript: P12-3 | Received: 08/27/96 |
| Santa Rosa, CA 95405 | Matrix: SOIL | Extracted: 08/29/96 |
| | Analysis Method: 8015Mod/8020 | Analyzed: 09/06/96 |
| Attention: Jeff Monroe | Lab Number: 9608G39-12 | Reported: 09/11/96 |

QC Batch Number: GC082996BTEXEXA
Instrument ID: GCHP18

## Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

| Analyte | Detection Limit mg/Kg | Sample Results mg/Kg |
|---|---|---|
| **TPPH as Gas** | **1.0** | **6.0** |
| **Methyl t-Butyl Ether** | **0.025** | **0.65** |
| **Benzene** | **0.0050** | **0.059** |
| **Toluene** | **0.0050** | **0.011** |
| **Ethyl Benzene** | **0.0050** | **0.015** |
| **Xylenes (Total)** | **0.0050** | **0.35** |
| **Chromatogram Pattern:** | | **Gas** |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| Trifluorotoluene | 70 | 130 | 92 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Kevin Follett
Project Manager

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

Client Proj. ID: Chevron 9-3322, 3322-1

Lab Proj. ID: 9608G39

Received: 08/27/96

Reported: 09/11/96

## LABORATORY NARRATIVE

TPPH note: sample 9608G39-06 was diluted 200 fold.
sample 9608G39-07 was diluted 200 fold.
sample 9608G39-08 was diluted 200 fold.
sample 9608G39-10 was diluted 10 fold.

**SEQUOIA ANALYTICAL**

Kevin Follett
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 | Client Project ID: | Chevron 9-3322, 3322-1 | |
| P.O. Box 2554 | Matrix: | Solid | |
| Santa Rosa, CA 95405 | | | |
| Attention: Jeff Monroe | Work Order #: | 9608G39 01-12 | Reported: Sep 11, 1996 |

# QUALITY CONTROL DATA REPORT

| Analyte: | Benzene | Toluene | Ethyl Benzene | Xylenes |
|---|---|---|---|---|
| QC Batch#: | GC082996BTEXEXA | GC082996BTEXEXA | GC082996BTEXEXA | GC082996BTEXEXA |
| Analy. Method: | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8020 |
| Prep. Method: | EPA 5030 | EPA 5030 | EPA 5030 | EPA 5030 |
| Analyst: | Porter | Porter | Porter | Porter |
| MS/MSD #: | 960864701 | 960864701 | 960864701 | 960864701 |
| Sample Conc.: | N.D. | N.D. | N.D. | N.D. |
| Prepared Date: | 8/29/96 | 8/29/96 | 8/29/96 | 8/29/96 |
| Analyzed Date: | 8/29/96 | 8/29/96 | 8/29/96 | 8/29/96 |
| 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 |
| Result: | 0.18 | 0.19 | 0.19 | 0.56 |
| MS % Recovery: | 90 | 95 | 95 | 93 |
| Dup. Result: | 0.19 | 0.19 | 0.19 | 0.56 |
| MSD % Recov.: | 95 | 95 | 95 | 92 |
| RPD: | 5.4 | 0.0 | 0.0 | 1.8 |
| RPD Limit: | 0-25 | 0-25 | 0-25 | 0-25 |

| | | | | |
|---|---|---|---|---|
| LCS #: | BLK082996 | BLK082996 | BLK082996 | BLK082996 |
| Prepared Date: | 8/29/96 | 8/29/96 | 8/29/96 | 8/29/96 |
| Analyzed Date: | 8/29/96 | 8/29/96 | 8/29/96 | 8/29/96 |
| 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: | 0.21 | 0.21 | 0.21 | 0.64 |
| LCS % Recov.: | 105 | 105 | 105 | 107 |

| | | | | |
|---|---|---|---|---|
| MS/MSD | 60-140 | 60-140 | 60-140 | 60-140 |
| LCS | 70-130 | 70-130 | 70-130 | 70-130 |
| Control Limits | | | | |

SEQUOIA ANALYTICAL

Kevin Follett
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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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 Project ID: Chevron 9-3322, 3322-1
Matrix: Solid
Work Order #: 9608G39 01-12

Reported: Sep 11, 1996

# QUALITY CONTROL DATA REPORT

| Analyte: | Beryllium | Cadmium | Chromium | Nickel |
|---|---|---|---|---|
| QC Batch#: | ME0829966010MDE | ME0829966010MDE | ME0829966010MDE | ME0829966010MDE |
| Analy. Method: | EPA 6010 | EPA 6010 | EPA 6010 | EPA 6010 |
| Prep. Method: | EPA 3050 | EPA 3050 | EPA 3050 | EPA 3050 |
| Analyst: | R. Butler | R. Butler | R. Butler | R. Butler |
| MS/MSD #: | 9608G3901 | 9608G3901 | 9608G3901 | 9608G3901 |
| Sample Conc.: | N.D. | N.D. | 46 | 47 |
| Prepared Date: | 8/29/96 | 8/29/96 | 8/29/96 | 8/29/96 |
| Analyzed Date: | 8/29/96 | 8/29/96 | 8/29/96 | 8/29/96 |
| Instrument I.D.#: | MTJA2 | MTJA2 | MTJA2 | MTJA2 |
| Conc. Spiked: | 100 mg/Kg | 100 mg/Kg | 100 mg/Kg | 100 mg/Kg |
| Result: | 97 | 91 | 130 | 140 |
| MS % Recovery: | 97 | 91 | 84 | 93 |
| Dup. Result: | 95 | 89 | 140 | 130 |
| MSD % Recov.: | 95 | 89 | 94 | 83 |
| RPD: | 2.1 | 2.2 | 7.4 | 7.4 |
| RPD Limit: | 0-20 | 0-20 | 0-20 | 0-20 |
| LCS #: | BLK082996 | BLK082996 | BLK082996 | BLK082996 |
| Prepared Date: | 8/29/96 | 8/29/96 | 8/29/96 | 8/29/96 |
| Analyzed Date: | 8/29/96 | 8/29/96 | 8/29/96 | 8/29/96 |
| 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 | 110 |
| MS/MSD LCS Control Limits | 80-120 | 80-120 | 80-120 | 80-120 |

SEQUOIA ANALYTICAL

Kevin Follett
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

Fax copy of Lab Report and COC to Chevron Contact: ☐ 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: 9-3322
Facility Address: 1225 Bancroft, Oakland
Consultant Project Number: 3322-1
Consultant Name: Quaterra Developments
Address: PO Box 2554, Santa Rosa
Project Contact (Name): Jeff Monroe
(Phone) 707 538-8818 (Fax Number) 538-8812

Chevron Contact (Name): Pina Krakalovsky
(Phone) 510 842 9500
Laboratory Name: Sequoia
Laboratory Release Number: 450898
Samples Collected by (Name): Jeff Monroe
Collection Date: 8-27-96
Signature:

| Sample Number | Lab Sample Number | Number of Containers | Matrix S = Soil A = Air W = Water C = Charcoal | Type G = Grab C = Composite D = Discrete | Time | Sample Preservation | Iced (Yes or No) | Analyses To Be Performed: BTEX + TPH GAS (8020 + 8015) | TPH Diesel (8015) | Oil and Grease (5520) | Purgeable Halocarbons (8010) | Purgeable Aromatics (8020) | Purgeable Organics (8240) | Extractable Organics (8270) | Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA) | TOTAL Pb | MTBE | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P1-2 | | 1 | S | D | 9:10 | 1 | A | 1/3 | X | | | | | | | | X | X | | | |
| P2-2 | | | | | 9:11 | 2 | | | | | | | | | | | | | | | |
| P3-2 | | | | | 9:13 | 3 | | | | | | | | | | | | | | | |
| P4-2 | | | | | 9:15 | 4 | | | | | | | | | | | | | | | |
| P5-3 | | | | | 9:16 | 5 | | | | | | | | | | | | | | | |
| P6-4 | | | | | 9:14 | 6 | | | | | | | | | | | | | | | |
| P7-3 | | | | | 9:19 | 7 | | | | | | | | | | | | | | | |
| P8-3 | | | | | 9:21 | 8 | | | | | | | | | | | | | | | |
| P9-4 | | | | | 9:29 | 9 | | | | | | | | | | | | | | | |
| P10-4 | | | | | 9:25 | 10 | | | | | | | | | | | | | | | |
| P11-3 | | | | | 9:30 | 11 | | | | | | | | | | | | | | | |
| P12-3 | | | | | 9:35 | 12 | | | | | | | | | | | | | | | |

| Relinquished By (Signature) | Organization | Date/Time | Received By (Signature) | Organization | Date/Time |
|---|---|---|---|---|---|
| | | 8-27-96 15:05 | | | |
| 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 |
| | | | LDCardenas | | 8-27-96 1305 |

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

COC-3.DWG/03.R91/mCH

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

Attention: Jeff Monroe

Client Proj. ID: Chevron 9-3322, 3322-1

Lab Proj. ID: 9608F30

Sampled: 08/27/96
Received: 08/27/96
Analyzed: see below

Reported: 08/28/96

## LABORATORY ANALYSIS

| Analyte | Units | Date Analyzed | Detection Limit | Sample Results |
|---|---|---|---|---|
| Lab No: 9608F30-01<br>Sample Desc : **SOLID,SP-1 a,b,c,d COMP** | | | | |
| **Lead** | **mg/Kg** | **08/28/96** | **5.0** | **10** |
| Lab No: 9608F30-02<br>Sample Desc : **SOLID,SP-2 a,b,c,d COMP** | | | | |
| **Lead** | **mg/Kg** | **08/28/96** | **5.0** | **7.6** |
| Lab No: 9608F30-03<br>Sample Desc : **SOLID,SP-3 a,b,c,d COMP** | | | | |
| **Lead** | **mg/Kg** | **08/28/96** | **5.0** | **7.4** |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Kevin Follett
Project Manager

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

| | | |
|---|---|---|
| Touchstone Developments | Client Proj. ID: Chevron 9-3322, 3322-1 | Sampled: 08/27/96 |
| P.O. Box 2554 | Sample Descript: SP-1 a,b,c,d COMP | Received: 08/27/96 |
| Santa Rosa, CA 95405 | Matrix: SOLID | Extracted: 08/27/96 |
| | Analysis Method: 8015Mod/8020 | Analyzed: 08/27/96 |
| Attention: Jeff Monroe | Lab Number: 9608F30-01 | Reported: 08/28/96 |

QC Batch Number: GC082796BTEXEXA
Instrument ID: GCHP18

## Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

| Analyte | Detection Limit mg/Kg | Sample Results mg/Kg |
|---|---|---|
| **TPPH as Gas** | **1.0** | **2.3** |
| Benzene | 0.0050 | N.D. |
| **Toluene** | **0.0050** | **0.020** |
| **Ethyl Benzene** | **0.0050** | **0.010** |
| **Xylenes (Total)** | **0.0050** | **0.33** |
| Chromatogram Pattern: | | |
| **Weathered Gas** | | **C8-C12** |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| Trifluorotoluene | 70 | 130 | 88 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Kevin Follett
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 | Client Proj. ID: Chevron 9-3322, 3322-1 | Sampled: 08/27/96 |
| P.O. Box 2554 | Sample Descript: SP-2 a,b,c,d COMP | Received: 08/27/96 |
| Santa Rosa, CA 95405 | Matrix: SOLID | Extracted: 08/27/96 |
| | Analysis Method: 8015Mod/8020 | Analyzed: 08/27/96 |
| Attention: Jeff Monroe | Lab Number: 9608F30-02 | Reported: 08/28/96 |

QC Batch Number: GC082796BTEXEXA
Instrument ID: GCHP18

## 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** | **0.0066** |
| Chromatogram Pattern: | | |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| Trifluorotoluene | 70 | 130 | 78 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Kevin Follett
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 | Client Proj. ID: Chevron 9-3322, 3322-1 | Sampled: 08/27/96 |
| P.O. Box 2554 | Sample Descript: SP-3 a,b,c,d COMP | Received: 08/27/96 |
| Santa Rosa, CA 95405 | Matrix: SOLID | Extracted: 08/27/96 |
| | Analysis Method: 8015Mod/8020 | Analyzed: 08/27/96 |
| Attention: Jeff Monroe | Lab Number: 9608F30-03 | Reported: 08/28/96 |

QC Batch Number: GC082796BTEXEXA
Instrument ID: GCHP07

## Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

| Analyte | Detection Limit mg/Kg | Sample Results mg/Kg |
|---|---|---|
| **TPPH as Gas** | **1.0** | **2.5** |
| **Benzene** | **0.0050** | **0.012** |
| **Toluene** | **0.0050** | **0.024** |
| **Ethyl Benzene** | **0.0050** | **0.010** |
| **Xylenes (Total)** | **0.0050** | **0.047** |
| **Chromatogram Pattern:** | | **Gas** |

| Surrogates | Control Limits % | | % Recovery |
|---|---|---|---|
| Trifluorotoluene | 70 | 130 | 91 |

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

**SEQUOIA ANALYTICAL** - ELAP #1210

Kevin Follett
Project Manager

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

| | | |
|---|---|---|
| Touchstone Developments | Client Proj. ID: Chevron 9-3322, 3322-1 | Received: 08/27/96 |
| P.O. Box 2554 | | |
| Santa Rosa, CA 95405 | Lab Proj. ID: 9608F30 | Reported: 08/28/96 |
| Attention: Jeff Monroe | | |

## LABORATORY NARRATIVE

No issues.

**SEQUOIA ANALYTICAL**

Kevin Follett
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 Project ID: Chevron 9-3322, 3322-1
Matrix: Solid
Work Order #: 9608F30 01-03

Reported: Sep 9, 1996

# QUALITY CONTROL DATA REPORT

| Analyte: | Benzene | Toluene | Ethyl Benzene | Xylenes |
|---|---|---|---|---|
| QC Batch#: | GC082796BTEXEXA | GC082796BTEXEXA | GC082796BTEXEXA | GC082796BTEXEXA |
| Analy. Method: | EPA 8020 | EPA 8020 | EPA 8020 | EPA 8020 |
| Prep. Method: | EPA 5030 | EPA 5030 | EPA 5030 | EPA 5030 |
| Analyst: | Y. Arteaga | Y. Arteaga | Y. Arteaga | Y. Arteaga |
| MS/MSD #: | 9608B7205 | 9608B7205 | 9608B7205 | 9608B7205 |
| Sample Conc.: | N.D. | N.D. | N.D. | N.D. |
| Prepared Date: | 8/27/96 | 8/27/96 | 8/27/96 | 8/27/96 |
| Analyzed Date: | 8/27/96 | 8/27/96 | 8/27/96 | 8/27/96 |
| 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 |
| Result: | 0.18 | 0.19 | 0.19 | 0.57 |
| MS % Recovery: | 90 | 95 | 95 | 95 |
| Dup. Result: | 0.18 | 0.19 | 0.19 | 0.56 |
| MSD % Recov.: | 90 | 95 | 95 | 93 |
| RPD: | 0.0 | 0.0 | 0.0 | 1.8 |
| RPD Limit: | 0-25 | 0-25 | 0-25 | 0-25 |
| LCS #: | BLK082796 | BLK082796 | BLK082796 | BLK082796 |
| Prepared Date: | 8/27/96 | 8/27/96 | 8/27/96 | 8/27/96 |
| Analyzed Date: | 8/27/96 | 8/27/96 | 8/27/96 | 8/27/96 |
| 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: | 0.20 | 0.22 | 0.21 | 0.61 |
| LCS % Recov.: | 100 | 110 | 105 | 102 |
| MS/MSD Control Limits | 60-140 | 60-140 | 60-140 | 60-140 |
| LCS Control Limits | 70-130 | 70-130 | 70-130 | 70-130 |

SEQUOIA ANALYTICAL

Kevin Follett
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

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 Project ID: Chevron 9-3322, 3322-1
Matrix: Solid
Work Order #: 9608F30 01-03

Reported: Sep 9, 1996

# QUALITY CONTROL DATA REPORT

| Analyte: | Beryllium | Cadmium | Chromium | Nickel |
|---|---|---|---|---|
| QC Batch#: | ME0828966010MDE | ME0828966010MDE | ME0828966010MDE | ME0828966010MDE |
| Analy. Method: | EPA 6010 | EPA 6010 | EPA 6010 | EPA 6010 |
| Prep. Method: | EPA 3050 | EPA 3050 | EPA 3050 | EPA 3050 |
| Analyst: | R. Butler | R. Butler | R. Butler | R. Butler |
| MS/MSD #: | 9608C9002 | 9608C9002 | 9608C9002 | 9608C9002 |
| Sample Conc.: | N.D. | 1.7 | 27 | 24 |
| Prepared Date: | 8/28/96 | 8/28/96 | 8/28/96 | 8/28/96 |
| Analyzed Date: | 8/28/96 | 8/28/96 | 8/28/96 | 8/28/96 |
| Instrument I.D.#: | MTJA2 | MTJA2 | MTJA2 | MTJA2 |
| Conc. Spiked: | 100 mg/Kg | 100 mg/Kg | 100 mg/Kg | 100 mg/Kg |
| Result: | 95 | 90 | 110 | 110 |
| MS % Recovery: | 95 | 88 | 83 | 86 |
| Dup. Result: | 100 | 99 | 130 | 120 |
| MSD % Recov.: | 100 | 97 | 103 | 96 |
| RPD: | 5.1 | 9.5 | 17 | 8.7 |
| RPD Limit: | 0-20 | 0-20 | 0-20 | 0-20 |
| LCS #: | BLK082896 | BLK082896 | BLK082896 | BLK082896 |
| Prepared Date: | 8/28/96 | 8/28/96 | 8/28/96 | 8/28/96 |
| Analyzed Date: | 8/28/96 | 8/28/96 | 8/28/96 | 8/28/96 |
| Instrument I.D.#: | MTJA2 | MTJA2 | MTJA2 | MTJA2 |
| Conc. Spiked: | 100 mg/Kg | 100 mg/Kg | 100 mg/Kg | 100 mg/Kg |
| LCS Result: | 110 | 100 | 110 | 100 |
| LCS % Recov.: | 110 | 100 | 110 | 100 |
| MS/MSD LCS Control Limits | 80-120 | 80-120 | 80-120 | 80-120 |

SEQUOIA ANALYTICAL

Kevin Follett
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

Fax copy of Lab Report and COC to Chevron Contact: ☐ 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: 9-3322
Facility Address: 7225 Bancroft, Oakland
Consultant Project Number: 3322-1
Consultant Name: Touchstone Developments
Address: PO Box 2554 Santa Rosa
Project Contact (Name): Jeff Monroe
(Phone) 707 538 8818 (Fax Number) 538 8812

Chevron Contact (Name): Kay Krakowsky
(Phone) 510 842 9500
Laboratory Name: Sequoia
Laboratory Release Number: 4502898
Samples Collected by (Name): Jeff Monroe
Collection Date: 8-27-96
Signature:

9608F30

| Sample Number | Lab Sample Number | Number of Containers | Matrix S = Soil A = Air W = Water C = Charcoal | Type G = Grab C = Composite D = Discrete | Time | Sample Preservation | Iced (Yes or No) | BTEX + TPH GAS (8020 + 8015) | TPH Diesel (8015) | Oil and Grease (5520) | Purgeable Halocarbons (8010) | Purgeable Aromatics (8020) | Purgeable Organics (8240) | Extractable Organics (8270) | Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA) | Total Pb | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SP-1a-d | 01 | 4 | S | C | 9:45 | | Yes | X | | | | | | | | X | | | | Fax ASAP |
| SP-2a-d | 02 | ↓ | ↓ | ↓ | 9:50 | | ↓ | ↓ | | | | | | | | ↓ | | | | |
| SP-3a-d | 03 | ↓ | ↓ | ↓ | 9:55 | | ↓ | ↓ | | | | | | | | ↓ | | | | |

Relinquished By (Signature) — Organization — Date/Time 8/27/96 1305
Relinquished By (Signature) — Organization — Date/Time
Relinquished By (Signature) — Organization — Date/Time

Received By (Signature) — Organization — Date/Time
Received By (Signature) — Organization — Date/Time
Received For Laboratory By (Signature) J D Cardenas — Date/Time 8-27-96 1305

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