Edd Clark & Associates, Inc.
Environmental Consultants
*Serving the North Bay for 20 Years*

July 2, 2014



Mark Detterman
Program Manager
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

**Re: Report-Soil Disposal Documentation**
Salles's Paint & Auto Body
1049 9th Avenue
Oakland, CA
RO #0000308

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached is/are true and correct.

Sincerely,

Edd Clark

Edd Clark, President

P.O. Box 3039, Rohnert Park, CA 94927-3039
Telephone (707) 792-9500
Fax (707) 792-9504
corpmail@ecaenviron.com

Edd Clark & Associates, Inc.
Environmental Consultants
*Serving the North Bay for 20 Years*

June 27, 2014
**Job No.: 0459,001.03**

Mr. Dick Cochran
C&C Property Management
499 Embarcadero, Post 3, Box 16
Oakland, CA 94606

**Soil Disposal Documentation**
**Salle's Paint & Auto Body**
**1049 9th Avenue**
**Oakland, CA**
**Fuel Leak Case No.: RO0000308**

Dear Mr. Cochran:

Please accept this as Edd Clark & Associates, Inc.'s (EC&A's) response to Alameda County Environmental Health Services Agency's (ACEHSA) letter of April 7, 2014, that requested a *Focused Conceptual Model* and a *Data Gap Work Plan* for Salle's Paint and Auto Body located at 1049 9th Avenue (site) in Oakland, California. The site location is shown on Figure 1; general site features are shown on Figure 2

The primary concerns expressed by ACEHSA were that free product may be present in the gasoline and/or waste-oil UST excavations because highly impacted soil may have been used to backfill the excavations.

**Gasoline UST Removal**
On December 29, 1993, a 1000-gallon UST for gasoline was removed from beneath the sidewalk by Walker's Hydraulics Inc. (Walker's) of Concord, California. The gasoline UST was located on the East 11th Street side of the shop about 50 ft northwest of the corner of 9th Avenue and 11th Street and about 150 ft north of the waste-oil UST (Figure 1 in Appendix B).

Field logs of daily activities during the UST removal are provided in Appendix A. The UST removal report is provided in Appendix B. During and after the UST removal, thirty cubic yards (cu yds) of excavated impacted soil was hauled to a vacant lot located at 8th Avenue and East 11th Street for aeration under permit from the Bay Area Air Quality Management District (BAAQMD) (Appendix C). On December 30, 1993, the excavation was backfilled with 30 tons of pea gravel (Appendices A and B).

Five discrete soil samples were collected from the excavation and one composite sample was collected from the soil stockpile. Low concentrations of petroleum hydrocarbons were detected in sample TS from the excavation; the other samples were non-detect (ND) for petroleum hydrocarbons (Table 1). Of primary concern in sample TS was the detection of 0.086 milligrams per kilogram (mg/kg) benzene at 5 feet (ft) below grade (bg). This value is close to the 0.044 mg/kg San

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Francisco Bay Regional Water Quality Control Board Environmental Screening Level (ESL) for shallow soil at sites where groundwater is a potential source of drinking water.

Given that sample TS was collected over 20 years ago in December 1993, it is very unlikely that a volatile compound like benzene would be found in soil samples collected in 2014. In addition, because the gasoline UST was located outside the body shop building, at this date there is no potential for vapor intrusion into the building.

The impacted soil was aerated and turned every three weeks on a nearby lot located at 8th Avenue and 11th Street. Analytical results for three composite samples showing that the spoil pile was ND for gasoline were submitted to Alameda County Public Health Agency on September 1, 1994 (Table 1 and Appendix C).

**Waste-oil UST Removal**

On July 15, 1994, approximately 280 gallons of oily water was pumped from the waste-oil UST and disposed of by Evergreen Environmental Services.

On July 20, 1994, Walker's removed a 280-gallon UST for waste oil from the site (Figure 2). Barney Chan of the Alameda County Health Care Services Agency witnessed the removal. Approximately ten cu yds (~15 tons) of excavated soil was hauled to the vacant lot at 8th Avenue and East 11th (Stock Pile #2 in Appendix E). Two discrete soil samples were collected from the excavation and a four-into-one composite sample was collected from the stockpiled soil. Analytical results for the excavation soil samples are summarized in Table 2. The UST removal report is provided in Appendix D. Unfortunately, a detailed description of backfilling procedures is missing from the client's copy of the UST removal report. It is very likely that the waste-oil UST excavation was backfilled with pea gravel as was the case of the gasoline UST excavation.

On February 15, 1995, 19 tons of contaminated soil was hauled to, and disposed at, the Remedial Environmental Marketing Co. (Remco) in Richmond, California. The Remco weight tickets in Appendix E indicate that the soil was hauled in two loads, one of 24,850 lbs, the other of 13,480 lbs. Documents pertaining to the soil disposal are provided in Appendix E. Presumably, either four tons of the gasoline UST soil was included in the 19 tons, or the actual quantity of soil removed from the waste-oil excavation was about 12 cubic yards.

**Hydrogeology**

The site is situated at an elevation of 18 ft above Mean Sea Level (MSL) in an area of apartment buildings and small businesses. The Oakland Inner Harbor (part of San Francisco Bay) lies 1100 ft to the south. Late Pleistocene age alluvial fan deposits of the Temescal Formation underlie the site. These materials have moderate permeability and consist primarily of inter-fingering lenses of clayey gravel and sand-silt-clay mixtures.

From September 2000 to December 2011, the depth to static groundwater in MW-1, which is located on the downgradient side of the former waste-oil UST location, ranged from 9.35 ft to 11.65 ft below top-of-casing (TOC). The water table gradient has ranged from 0.019 ft/ft to 0.033 ft/ft; the gradient ranged from S77°W to S35°E; four of the five measured gradients were to the southeast toward

MW-3 (Figure 3); MW-3 has been ND for all analytes since it was installed in September 2000 (Table 4).

**Discussion**

In the fourteen years since groundwater monitoring was first conducted at the site, natural attenuation has removed all benzene, toluene, ethylbenzene and xylenes (BTEX) in MW-1 groundwater. Benzene was last detected in MW-1 groundwater in May 2001. No analytes have been detected in MW-2 and MW-3 (Table 4).

Because the waste-oil UST was located outside the body shop building, there is no potential for significant vapor intrusion into the building from residual impacted soil. Benzene was not detected in the 3 ft bg sample from the excavation, and TPHg was detected at only 34 mg/kg (Table 2). Although benzene was detected at 0.91 mg/kg and TPHg was detected at 590 mg/kg in the 8.5 ft bg sample, in the 20 years since this sample was taken, natural attenuation likely has entirely degraded this material. Impacted soil appears to have been confined to the immediate vicinity of the former UST excavation. The soil samples from the MW-1 boring, located next to the former UST location on the downgradient side, were ND for all analytes (Table 1), and groundwater samples from MW-1 had only low (<100 micrograms per liter [µg/l]) concentrations of TPHg and TPHd when tested in 2011 (Table 4).

TPHg and TPHd concentrations in MW-1 have declined to below their Environmental Screening Level (ESL) of 100 µg/l (Table 4). The TPHd range hydrocarbons reported from MW-1 were flagged by the analytical laboratories as having chromatograms that are not typical of diesel; these hydrocarbons may be weathered gasoline. Figure 4 shows the distribution of TPHg in groundwater near the site. Graph A is a time-series graph of FHC concentrations in MW-1.

Two VOCs, chlorobenzene and isopropylbenzene, have been detected at trace concentrations in MW-1 (up to 1.1 µg/l and 0.57 µg/l, respectively) (Table 4). Isopropylbenzene is a common constituent of gasoline; no ESL has been established for this compound. Chlorobenzene is used in the manufacture of certain pesticides, as an intermediate in the production of commodities such as herbicides, dyestuffs, and rubber, and as a high-boiling solvent in many industrial applications. The ESL for chlorobenzene is 25 µg/l. Napthalene has not been detected in soil and groundwater samples from MW-1.

**Recommendations**

EC&A recommends that the site be considered for closure.

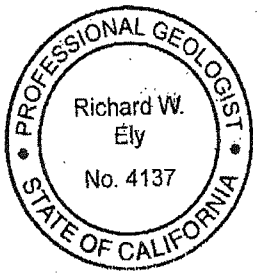
**Limitations**

The conclusions presented in this report are professional opinions based on the data presented in this report, including data generated by others. Whereas EC&A does not guarantee the accuracy of information supplied by third parties, we reserve the right to use this information in formulating our professional opinions. They are intended only for the indicated purpose and project site. Conclusions and recommendations presented herein apply to site conditions existing at the time of our study. Changes in the conditions of the site property can occur with time because of natural processes or the works of man on the site or adjacent properties. Changes in applicable standards

can also occur as the result of legislation or from the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond our control.

Thank you for allowing EC&A to provide environmental services to you on this project. Please call Richard Ely, Project Manager, at (707) 792-9500 if you have any questions.

Sincerely,




Richard Ely, PG #4137
Senior Geologist

**Attachments**

Figure 1 - Site Location Map
Figure 2 - Site Plan
Figure 3 - Groundwater Elevation Map, 08 December 2011
Figure 4 - TPHg Concentration in Groundwater, 08 December 2011

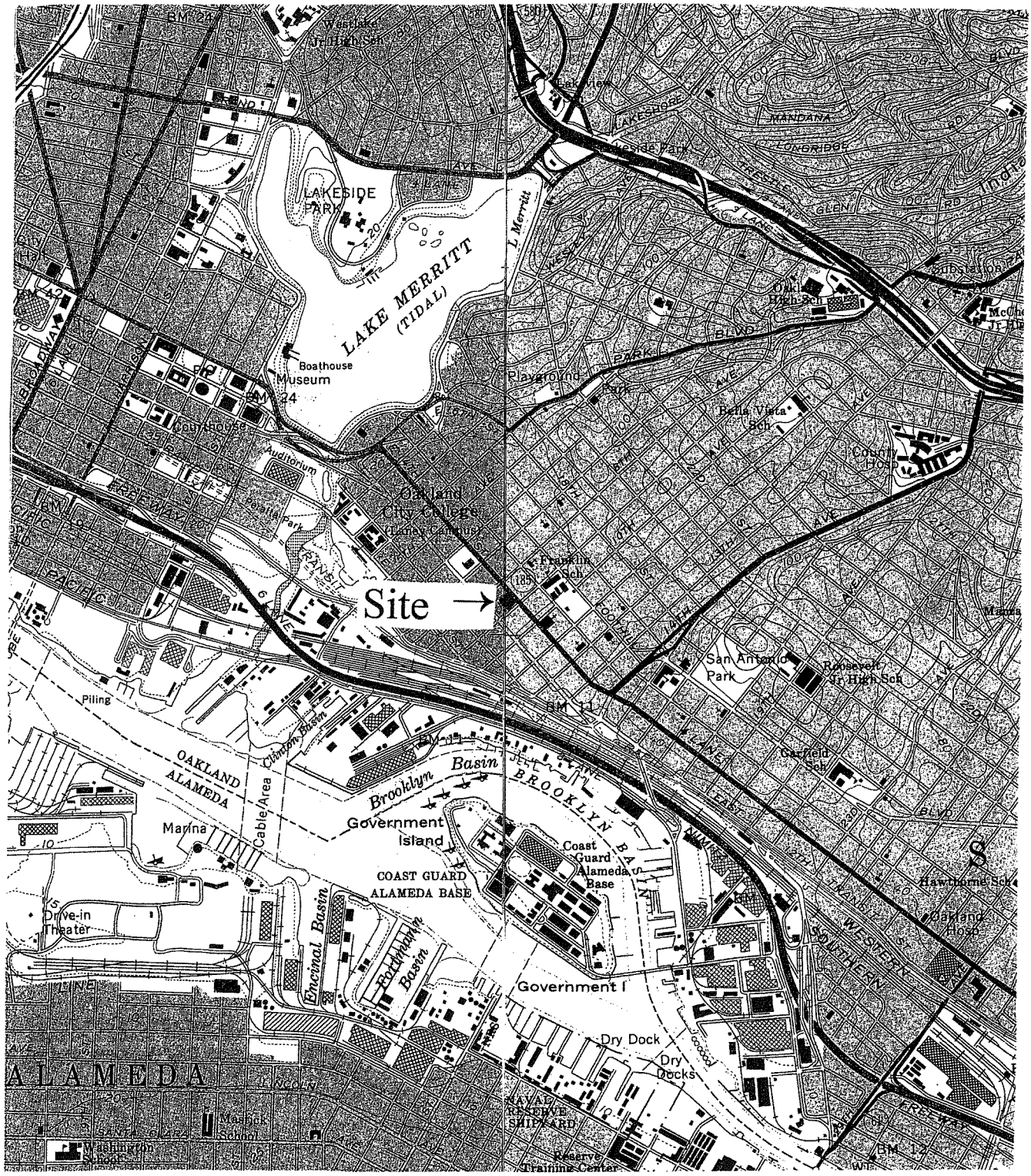
Graph A - TPHg, TPHd & Benzene Concentrations & Groundwater Elevation vs Time - MW-1

Table 1 - Analytical Results - Soil Samples from Gasoline UST Excavation & Well Borings
Table 2 - Analytical Results - Soil Samples for UST for Waste Oil Removal - July 20, 1994
Table 3 - Groundwater Elevation Data
Table 4 - Analytical Results - Groundwater Samples from Monitoring Wells

Appendix A - Gasoline UST Removal Field Logs
Appendix B - Gasoline UST Removal Report
Appendix C - Gasoline UST Excavation Soil Stockpile Management
Appendix D - Waste Oil UST Removal Report
Appendix E - Waste Oil UST Soil Disposal

cc: Mark Detterman, Alameda County Environmental Health Services Agency (electronic copy)
Leroy Griffin, Oakland Fire Department

0459\Soil Disposal Documentation




From USGS 1:24,000 Topographic map series, Oakland West & East Quadrangles

**EDD CLARK & ASSOCIATES, INC.**
ENVIRONMENTAL CONSULTANTS

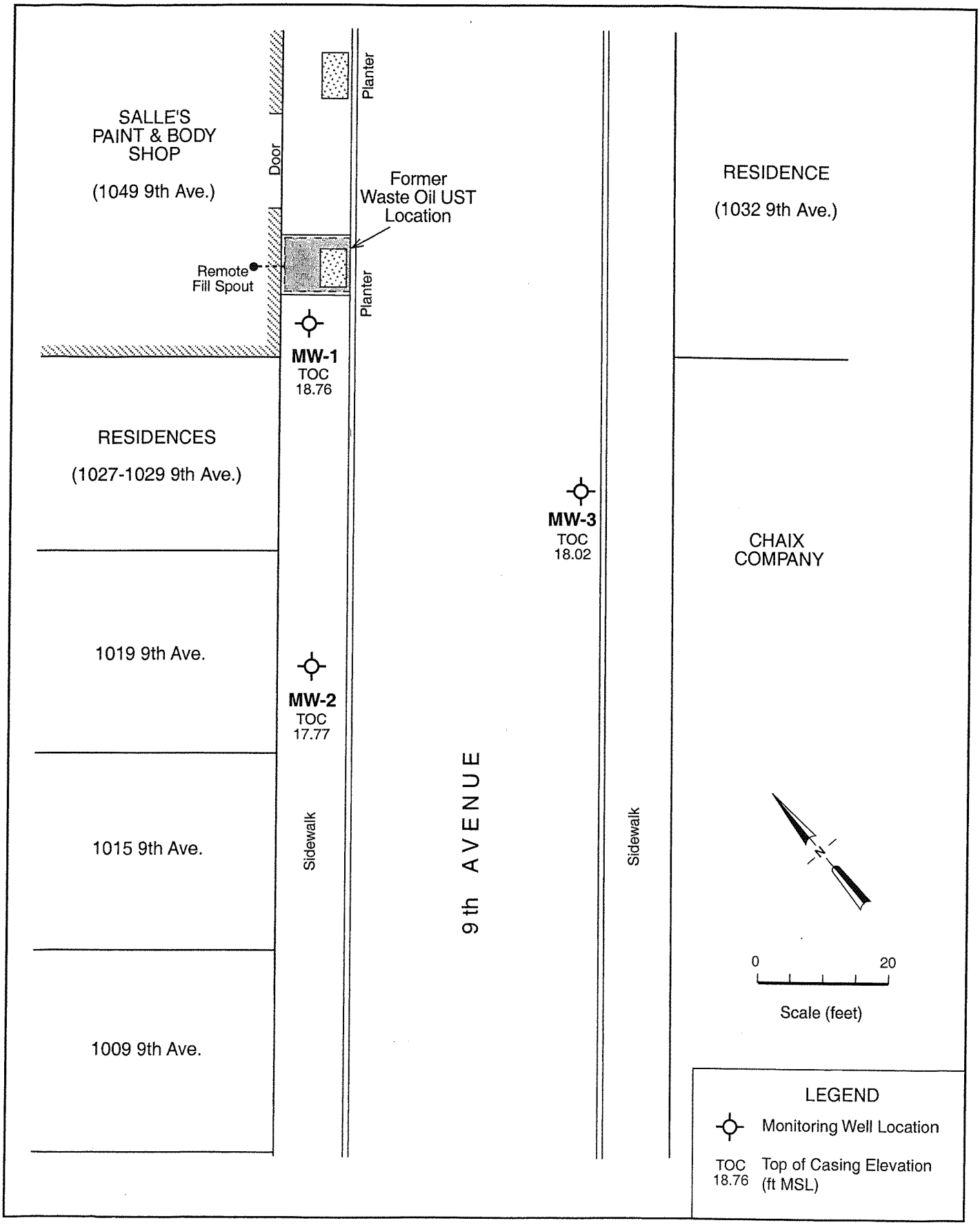
# SITE LOCATION MAP

1049 9th Avenue
Oakland, California

PLATE
1

| JOB NUMBER | REVIEWED BY | DATE | REVISED | SHEET NO. |
|---|---|---|---|---|
| 0459, 001.03 | EC&A, Richard Ely | June 2003 | | 1 of 1 |

[TRACE #983/RG/24Jun03]




**EDD CLARK & ASSOCIATES, INC.**
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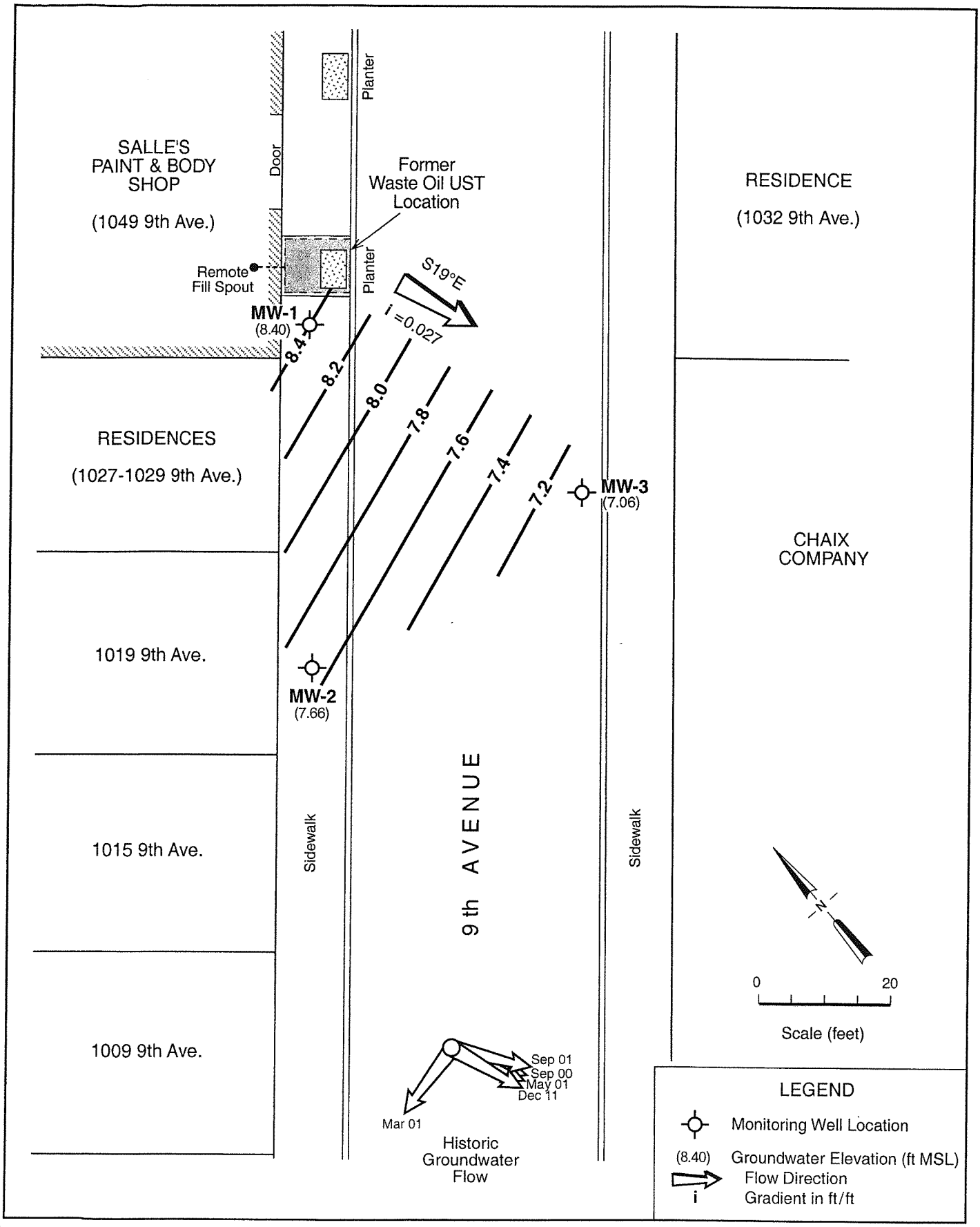
# SITE PLAN
1049 9th Avenue
Oakland, California

FIGURE
2

(TRACE #383/RG/20Dec11)

| JOB NUMBER | REVIEWED BY | DATE | REVISED | SHEET NO. |
|---|---|---|---|---|
| 0459, 001.03 | EC&A, Richard Ely | October 2000 | December 2011 | 1 of 1 |




(TRACE #383/RG/20Dec11)

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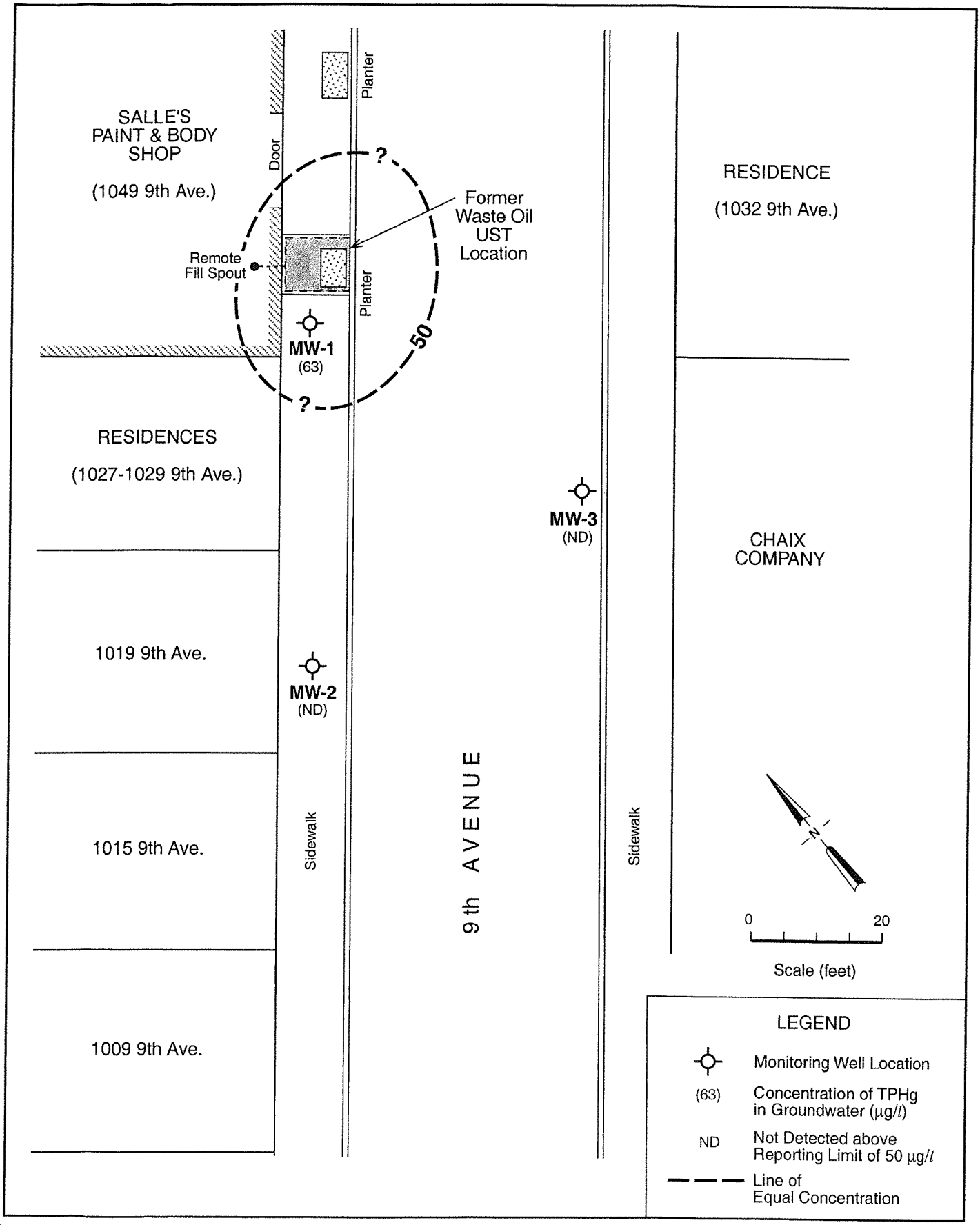
GROUNDWATER ELEVATION MAP,
08 December 2011
1049 9th Avenue
Oakland, California

FIGURE
3

| JOB NUMBER | REVIEWED BY | DATE | REVISED | SHEET NO. |
|---|---|---|---|---|
| 0459, 001.03 | EC&A, Richard Ely | April 2001 | December 2011 | 1 of 1 |

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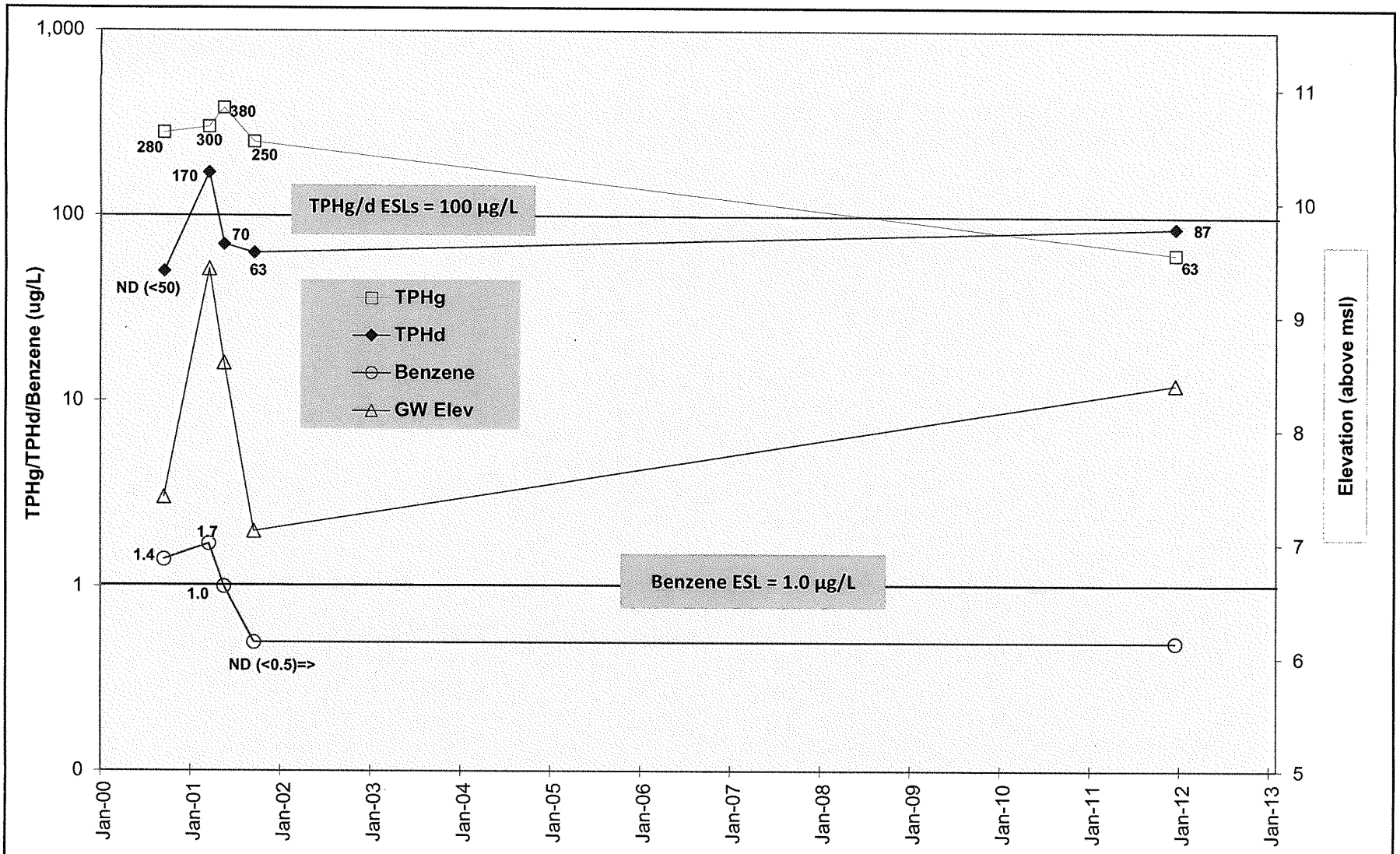
# TPHg CONCENTRATION IN GROUNDWATER, 08 December 2011

1049 9th Avenue
Oakland, California

FIGURE 4

(TRACE #383/RG/20Dec11)

| JOB NUMBER | REVIEWED BY | DATE | REVISED | SHEET NO. |
|---|---|---|---|---|
| 0459, 001.03 | EC&A, Richard Ely | October 2000 | December 2011 | 1 of 1 |




| | | |
|---|---|---|
| **Edd Clark & Associates, Inc.** | **TPHg, TPHd & BENZENE CONCENTRATIONS & GROUNDWATER ELEVATIONS vs TIME - MW-1** | **GRAPH** |
| Edd Clark & Associates, Inc.<br>320 Professional Center Drive, Suite #215<br>Rohnert Park, California | Salle's Paint & Auto Body<br>1049 9th Avenue<br>Oakland, California | **A** |
| Drawn By: KLC / File Name: 0459.MW-1 | Job Number: 0459,001.03 | Date: 05/30/14 |

**Table 1.** **Analytical Results - Soil Samples from Gasoline UST Excavation & Well Borings**
**1049 9th Avenue, Oakland, California**



| Sample ID (Excavation) | Date | TPHg mg/kg | TPHd mg/kg | Benzene mg/kg | Toluene mg/kg | Ethylbenzene mg/kg | Xylenes mg/kg | Total Lead mg/kg |
|---|---|---|---|---|---|---|---|---|
| TS 5.5' | 12/29/93 | **1.0** | NA | **0.086** | **0.16** | **0.016** | **0.11** | ND<5.0 |
| TN 5.5' | 12/29/93 | ND<1.0 | NA | ND<0.005 | ND<0.005 | ND<0.005 | ND<0.005 | ND<5.0 |
| TE 5.5' | 12/29/93 | ND<1.0 | NA | ND<0.005 | ND<0.005 | ND<0.005 | ND<0.005 | **6.0** |
| TW 5.5' | 12/29/93 | ND<1.0 | NA | ND<0.005 | ND<0.005 | ND<0.005 | ND<0.005 | ND<5.0 |
| TB 13.5' | 12/29/93 | ND<1.0 | NA | ND<0.005 | ND<0.005 | ND<0.005 | ND<0.005 | ND<5.0 |
| SP-1* | 12/29/93 | **550** | NA | ND<0.5 | **0.69** | **3.9** | **14** | ND<2.0† |
| P1+P2+P3* | 08/23/94 | ND<1.0 | NA | NA | NA | NA | NA | NA |
| P4+P5+P6* | 08/23/94 | ND<1.0 | NA | NA | NA | NA | NA | NA |
| P7+P8* | 08/23/94 | ND<1.0 | NA | NA | NA | NA | NA | NA |
| ESLs | Dec 2013 | 100 | 100 | 0.044 | 2.9 | 3.3 | 2.3 | 80 |

| Sample ID (Monitoring Wells) | Date | TPHg mg/kg | TPHd mg/kg | O&G mg/kg | BTEX mg/kg | MTBE mg/kg | Chlorinated Solvents mg/kg | SVOCs mg/kg |
|---|---|---|---|---|---|---|---|---|
| MW-1-6' | 09/08/00 | ND<1.0 | ND<5.0 | ND<10 | ND<0.005 | ND<0.025 | ND<1.0 | ND |
| MW-1-11' | 09/08/00 | ND<1.0 | ND<5.0 | ND<10 | ND<0.005 | ND<0.025 | ND<1.0 | ND |
| MW-1-16' | 09/08/00 | ND<1.0 | ND<5.0 | ND<10 | ND<0.005 | ND<0.025 | ND<1.0 | ND |
| MW-2-6' | 09/08/00 | ND<1.0 | ND<5.0 | ND<10 | ND<0.005 | ND<0.025 | ND<1.0 | ND |
| MW-2-11' | 09/08/00 | ND<1.0 | ND<5.0 | ND<10 | ND<0.005 | ND<0.025 | ND<1.0 | ND |
| MW-3-16' | 09/08/00 | ND<1.0 | ND<5.0 | ND<10 | ND<0.005 | ND<0.025 | ND<1.0 | ND |
| MW-3-6' | 09/08/00 | ND<1.0 | ND<5.0 | ND<10 | ND<0.005 | ND<0.025 | ND<1.0 | ND |
| MW-3-11' | 09/08/00 | ND<1.0 | ND<5.0 | ND<10 | ND<0.005 | ND<0.025 | ND<1.0 | ND |
| MW-3-16' | 09/08/00 | ND<1.0 | ND<5.0 | ND<10 | ND<0.005 | ND<0.025 | ND<1.0 | ND |

**Table 1.** **Analytical Results - Soil Samples from Gasoline UST Excavation & Well Borings**
**1049 9th Avenue, Oakland, California**



Notes:
Second number in Sample ID is sample depth in feet below ground surface

| | |
|---|---|
| TPHg: | Total petroleum hydrocarbons as gasoline |
| TPHd: | Total petroleum hydrocarbons as diesel |
| O&G: | Oil and grease |
| BTEX: | Benzene, toluene, ethylbenzene and xylenes; reporting limit for xylenes is 0.015 mg/kg |
| MTBE: | Methyl tert-butyl ether |
| SVOCs: | Semi-volatile organics; reporting limits are 0.33 mg/kg and 1.6 mg/kg |
| mg/kg: | Milligrams per kilogram |
| ND: | Not detected above the respective reporting limit |
| ESL: | San Francisco Bay Regional Water Quality Control Board Environmental Screening Level for soils where groundwater IS a potential drinking water source, December 2013. |
| † | Organic lead |
| * | Spoil pile sample |

**Table 2. Analytical Results - Soil Samples for UST for Waste Oil Removal - July 20, 1994**
**1049 9th Avenue, Oakland, California**

| Sample ID | TPHg | TPHd | O&G | TPH | Benzene | Toluene | Ethylbenzene | Xylenes | Napthalene | 2-methylnapthalene | Trichloroethene | Tetrachloroethene | Chlorobenzene | Cadmium | Chromium | Nickel | Lead | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Results reported in mg/kg* | | | | | | | | | | | | | | | | | | |
| WO-1-8.5' | **590** [1] | **3400** [2] | **6000** | NA | **0.91** | **2.8** | **3.0** | **26** | **9** | **12** | **0.016** | **0.058** | **0.48** | ND<0.5 | **42** | **37** | **13** | **23** |
| RF-3' | **34** [1] | **210** [2] | **770** | NA | ND<0.025 | **0.16** | **0.093** | **1.9** | ND<3 | ND<3 | ND<0.005 | ND<0.005 | ND<0.005 | ND<0.5 | **54** | **35** | **16** | **31** |
| WSP-1 (A-D) | **200** [1] | NA | NA | **12,000** | **0.08** | **0.31** | **0.52** | **3.9** | NA | NA | NA | NA | NA | ND<0.5 | **34** | **31** | **110** | **58** |
| ESLs 12/2013 | 100 | 100 | --- | --- | 0.044 | 2.9 | 3.3 | 2.3 | 1.2 | 0.25 | 46 | 55 | 1.5 | --- | 1000 | 150 | 80 | 600 |

TPHg: Total petroleum hydrocarbons as gasoline
TPHd: Total petroleum hydrocarbons as diesel
O&G: Oil and grease
TPH: Total petroleum hydrocarbons
mg/kg: Milligrams per kilogram
ND: Not detected above the respective reporting limit
NA: Not analyzed
WSP Soil Stockpile #2
ESL: San Francisco Bay Regional Water Quality Control Board Environmental Screening Level for soils where groundwater IS a potential drinking water source, December 2013.
1: Does not match typical gasoline pattern. Pattern is typical of mineral spirits
2: Does not match typical diesel pattern. Pattern is typical of a mixture of mineral spirits
Second number in Sample ID is sample depth in feet below ground surface

**Table 3. Groundwater Elevation Data**
**1049 9th Avenue, Oakland, California**

| Sample ID | Date | TOC Elevation feet | DTW feet | Groundwater Elevation feet |
|---|---|---|---|---|
| MW-1 | 09/29/00 | 18.76 | 11.35 | 7.41 |
| MW-2 | | 17.77 | 10.92 | 6.85 |
| MW-3 | | 18.02 | 12.09 | 5.93 |
| Gradient: S30°E, 0.033 ft/ft | | | | |
| MW-1 | 03/05/01 | 18.76 | 9.35 | 9.41 |
| MW-2 | | 17.77 | 9.13 | 8.64 |
| MW-3 | | 18.02 | 8.54 | 9.48 |
| Gradient: S77°W, 0.019 ft/ft | | | | |
| MW-1 | 05/31/01 | 18.76 | 10.18 | 8.58 |
| MW-2 | | 17.77 | 9.83 | 7.94 |
| MW-3 | | 18.02 | 10.91 | 7.11 |
| Gradient: S24°E, 0.031 ft/ft | | | | |
| MW-1 | 09/18/01 | 18.76 | 11.65 | 7.11 |
| MW-2 | | 17.77 | 11.13 | 6.64 |
| MW-3 | | 18.02 | 12.50 | 5.52 |
| Gradient: S35°E, 0.031 ft/ft | | | | |
| MW-1 | 12/08/11 | 18.76 | 10.36 | 8.40 |
| MW-2 | | 17.77 | 10.11 | 7.66 |
| MW-3 | | 18.02 | 10.96 | 7.06 |
| Gradient: S19°E, 0.027 ft/ft | | | | |

September 2000 through September 2001 data from Harris & Lee's October 25, 2000, *Soil and Groundwater Investigation Report. Table 1 Groundwater Elevations*. December 2011 data by Edd Clark & Associates, Inc.

TOC: Top of casing elevation measured relative to mean sea level (msl)
DTW: Depth to water from TOC

**Table 4. Analytical Results - Groundwater Samples from Monitoring Wells**
**1049 9th Avenue, Oakland, California**

| Sample ID | Date | TPHg µg/l | TPHd µg/l | O&G µg/l | Benzene µg/l | Toluene µg/l | Ethyl-benzene µg/l | Xylenes µg/l | MTBE µg/l | VOCs µg/l | SVOCs µg/l |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 09/29/00 | **280** | ND<50 | ND<500 | **1.4** | ND<0.5 | **2.5** | **4.5** | ND<2.5 | **1.1** (1) | ND |
| | 03/05/01 | **300** | **170** (2) | NA | **1.7** | **2.1** | **1.4** | **2.6** | ND<2.5 | ND<0.5 | NA |
| | 05/31/01 | **380** | **70** (2) | NA | **1.0** | **4.5** | **3.5** | **9.8** | ND<2.5 | ND<0.5 | NA |
| | 09/18/01 | **250** | **63** | NA | ND<0.5 | **3.1** | **3.3** | **3.4** | ND<2.5 | **0.82** (1) | NA |
| | 12/08/11 (3) ji | **63** d7 | **87** e2 | ND<5000 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | **0.57** (4) | ND<10 to <50 |
| MW-2 | 09/29/00 | ND<50 | ND<50 | ND<500 | ND<0.5 | ND<0.5 | ND<0.5 | ND<1.5 | ND<2.5 | ND<0.5 | ND |
| | 03/05/01 | ND<50 | ND<50 | NA | ND<0.5 | ND<0.5 | ND<0.5 | ND<1.5 | ND<2.5 | ND<0.5 | NA |
| | 12/08/11 (3) ji | ND<50 | ND<50 | ND<5000 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 to <500 | ND<10 to <50 |
| MW-3 | 09/29/00 | ND<50 | ND<50 | ND<500 | ND<0.5 | ND<0.5 | ND<0.5 | ND<1.5 | ND<2.5 | ND<0.5 | ND |
| | 03/05/01 | ND<50 | ND<50 | NA | ND<0.5 | ND<0.5 | ND<0.5 | ND<1.5 | ND<2.5 | ND<0.5 | NA |
| | 12/08/11 (3) ji | ND<50 | ND<50 | ND<5000 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 | ND<0.5 to <500 | ND<10 to <50 |
| ESL | Dec 2013 | 100 | 100 | 100 | 1.0 | 40 | 30 | 20 | 5.0 | 25 (1) | --- |

Data from September 2000 through September 2001 from Harris & Lee's October 25, 2000, *Soil and Groundwater Investigation Report, Table 2 Groundwater Sample Analytical Results.* December 2011 data by Edd Clark & Associates, Inc.

TPHg: Total petroleum hydrocarbons as gasoline
TPHd: Total petroleum hydrocarbons as diesel
O&G: Oil and grease
MTBE: Methyl tert-butyl ether
VOCs: Volatile organic compounds
SVOCs: Semi-volatile organic compounds
µg/l: Micrograms per liter
ND: Not detected above the respective reporting limit
NA: Not analyzed
ESL: SFBRWQCB Environmental Screening Level for shallow soils where groundwater IS a potential drinking water resource, revised December 2013
(1): Chlorobenzene; all other Method 8010 compounds were ND
(2): Analytical Sciences annotated the result as follows: "the chromatogram does not exhibit a chromatic pattern characteristic of diesel. Higher boiling point components of gasoline are present in the early boiling range for diesel."
(3): Samples collected on 12/08/11 also were analyzed for VOCs, basic target list including benzene, toluene, ethylbenzene and xylenes (BTEX), by Method SW8260B and for SVOCs by Method SW8270C. All results not reported above were ND.
(4): Isopropylbenzene; no ESL has been established for this compound
d7: Strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
e2: Diesel range compounds are significant; no recognizable pattern
ji: Reporting limit raised for methylene chloride due to a suspected elevated concentration in the sample container

0459\table 4 MWs

# Appendix A

# Gasoline UST Removal Field Logs

P 7/15

# WALKER'S HYDRAULICS, INC.

2322-N Bates Avenue Concord, CA 94520 (510) 798-1217

*** MAINTENANCE CHECK LIST ***

CUSTOMER: SALLY'S AUTO BODY

LOCATION OAKLAND

WORK COVERED BY P.O. # _____ DATE PERFORMED _____ BY _____

**HOIST SERVICE:**

- Air Control Valve ☐ OK Serviced _____
- Oil Control Valve ☐ OK Serviced _____
- Pressure Test Oil Storage Tank ☐ OK Serviced _____
- Pressure Test Cylinder ☐ OK Serviced _____
- Piston Sealing Gland ☐ OK Serviced _____
- Safety Leg ☐ OK Serviced _____
- Low Oil Float ☐ OK Serviced _____
- Check Cylinder Oil Level ☐ OK Serviced _____
- Add Oil ☐ OK Serviced _____
- Lube Equipment
  - Pump _____
  - Reel _____
  - Meter _____

**COMPRESSOR SERVICE:**

- Oil Level ☐ OK Serviced _____
- Pressure Relief Valve ☐ OK Serviced _____
- Low Oil Safety Switch ☐ OK Serviced _____
- Pressure Check Cylinder Head ☐ OK Serviced _____
- Magnetic Starter ☐ OK Serviced _____
- Pressure Switch ☐ OK Serviced _____
- Motor ☐ OK Serviced _____
- Check Belts ☐ OK Serviced _____
- Air Filter ☐ Cleaned Replaced _____
- Water Trap ☐ OK Serviced _____
- Check Valve ☐ OK Serviced _____
- Pressure Gauge ☐ OK Replaced _____

**SUPPLIES USED:** AUSTIN

RECOMMENDED REPAIRS: PUMPED OUT GAS TANK CHECKED TO MAKE IT WAS EMPTY

Received by: _____ Date _____

Time In 9:30AM Time Out 10:30 AM

Number of Men 2 Total Time on Job 1.0 Travel Time .75

5106539928 >

2014-04-29 08:08

# WALKER'S HYDRAULICS, INC.

2322-N Bates Avenue Concord, CA 94520 (510) 798-1217

*** MAINTENANCE CHECK LIST ***

CUSTOMER: Sally's Body & Paint

LOCATION _____

WORK COVERED BY P.O. # _____ DATE PERFORMED 12-7-93 BY Dan

**HOIST SERVICE:**

- Air Control Valve ☐ OK Serviced _____
- Oil Control Valve ☐ OK Serviced _____
- Pressure Test Oil Storage Tank ☐ OK Serviced _____
- Pressure Test Cylinder ☐ OK Serviced _____
- Piston Sealing Gland ☐ OK Serviced _____
- Safety Leg ☐ OK Serviced _____
- Low Oil Float ☐ OK Serviced _____
- Check Cylinder Oil Level ☐ OK Serviced _____
- Add Oil ☐ OK Serviced _____
- Lube Equipment
  - Pump _____
  - Reel _____
  - Meter _____

**COMPRESSOR SERVICE:**

- Oil Level ☐ OK Serviced _____
- Pressure Relief Valve ☐ OK Serviced _____
- Low Oil Safety Switch ☐ OK Serviced _____
- Pressure Check Cylinder Head ☐ OK Serviced _____
- Magnetic Starter ☐ OK Serviced _____
- Pressure Switch ☐ OK Serviced _____
- Motor ☐ OK Serviced _____
- Check Belts ☐ OK Serviced _____
- Air Filter ☐ Cleaned Replaced _____
- Water Trap ☐ OK Serviced _____
- Check Valve ☐ OK Serviced _____
- Pressure Gauge ☐ OK Replaced _____

**SUPPLIES USED:**

Busted Concrete around fuel Tank. Will Return when weather is finish.

RECOMMENDED REPAIRS: _____

Received by: _____ Date _____

Time In 10:45 Time Out 1:15

Number of Men 2 Total Time on Job 2½ hrs. Travel Time 1

P 6/15

# WALKER'S HYDRAULICS, INC.

2322-N Bates Avenue Concord, CA 94520 (510) 798-1217

## *** MAINTENANCE CHECK LIST ***

CUSTOMER: SALLYS AUTO BODY

LOCATION: OAKLAND

WORK COVERED BY P.O. # _____ DATE PERFORMED 12/28/93 BY: [signature]

**HOIST SERVICE:**

- Air Control Valve ☐ OK Serviced _____
- Oil Control Valve ☐ OK Serviced _____
- Pressure Test Oil Storage Tank ☐ OK Serviced _____
- Pressure Test Cylinder ☐ OK Serviced _____
- Piston Sealing Gland ☐ OK Serviced _____
- Safety Leg ☐ OK Serviced _____
- Low Oil Float ☐ OK Serviced _____
- Check Cylinder Oil Level ☐ OK Serviced _____
- Add Oil ☐ OK Serviced _____
- Lube Equipment
  - Pump _____
  - Reel _____
  - Meter _____

**COMPRESSOR SERVICE:**

- Oil Level ☐ OK Serviced _____
- Pressure Relief Valve ☐ OK Serviced _____
- Low Oil Safety Switch ☐ OK Serviced _____
- Pressure Check Cylinder Head ☐ OK Serviced _____
- Magnetic Starter ☐ OK Serviced _____
- Pressure Switch ☐ OK Serviced _____
- Motor ☐ OK Serviced _____
- Check Belts ☐ OK Serviced _____
- Air Filter ☐ Cleaned ☐ Replaced _____
- Water Trap ☐ OK Serviced _____
- Check Valve ☐ OK Serviced _____
- Pressure Gauge ☐ OK ☐ Replaced _____

**SUPPLIES USED:** AUSTIN

RECOMMENDED REPAIRS: CLEANED UP DIRT AROUND ANK HOLE CLEANED OFF TOP OF TANK SET UP AND READY TO PULL

Received by: _____ Date _____

Time In 11:45 Time Out 3:00PM

Number of Men 5 Total Time on Job 3.25 Travel Time .75

# WALKER'S HYDRAULICS, INC.

2322-N Bates Avenue Concord, CA 94520 (510) 798-1217

## *** MAINTENANCE CHECK LIST ***

CUSTOMER: SALLY'S AUTO BODY

LOCATION: OAKLAND

WORK COVERED BY P.O. # _____ DATE PERFORMED 12/29/93 BY: [signature]

**HOIST SERVICE:**

- Air Control Valve ☐ OK Serviced _____
- Oil Control Valve ☐ OK Serviced _____
- Pressure Test Oil Storage Tank ☐ OK Serviced _____
- Pressure Test Cylinder ☐ OK Serviced _____
- Piston Sealing Gland ☐ OK Serviced _____
- Safety Leg ☐ OK Serviced _____
- Low Oil Float ☐ OK Serviced _____
- Check Cylinder Oil Level ☐ OK Serviced _____
- Add Oil ☐ OK Serviced _____
- Lube Equipment
  - Pump _____
  - Reel _____
  - Meter _____

**COMPRESSOR SERVICE:**

- Oil Level ☐ OK Serviced _____
- Pressure Relief Valve ☐ OK Serviced _____
- Low Oil Safety Switch ☐ OK Serviced _____
- Pressure Check Cylinder Head ☐ OK Serviced _____
- Magnetic Starter ☐ OK Serviced _____
- Pressure Switch ☐ OK Serviced _____
- Motor ☐ OK Serviced _____
- Check Belts ☐ OK Serviced _____
- Air Filter ☐ Cleaned ☐ Replaced _____
- Water Trap ☐ OK Serviced _____
- Check Valve ☐ OK Serviced _____
- Pressure Gauge ☐ OK ☐ Replaced _____

**SUPPLIES USED:** AUSTIN

250 lbs

DRY ICE

RECOMMENDED REPAIRS: ICED TANK PULLED LOADED ON TRUCK TOOK SAMPLES STARTED REMOVIN DIRTY DIRT AND STOCKPILING DOWN TAKE

Received by: STREET Date 12/29/93

Time In 9:00AM Time Out 4:00 PM

Number of Men 2 Total Time on Job 7.0 Travel Time .75

5106539928 >>

2014-04-29 08:08

P 8/15

# WALKER'S HYDRAULICS, INC.

2322-N Bates Avenue Concord, CA 94520 (510) 798-1217

## *** MAINTENANCE CHECK LIST ***

CUSTOMER: SALLY'S AUTO BODY

LOCATION OAKLAND

WORK COVERED BY P.O. # _____ DATE PERFORMED 12/30/93 BY [signature]

**HOIST SERVICE:**

- Air Control Valve ☐ OK Serviced _____
- Oil Control Valve ☐ OK Serviced _____
- Pressure Test Oil Storage Tank ☐ OK Serviced _____
- Pressure Test Cylinder ☐ OK Serviced _____
- Piston Sealing Gland ☐ OK Serviced _____
- Safety Leg ☐ OK Serviced _____
- Low Oil Float ☐ OK Serviced _____
- Check Cylinder Oil Level ☐ OK Serviced _____
- Add Oil ☐ OK Serviced _____
- Lube Equipment
  - Pump _____
  - Reel _____
  - Motor _____

**COMPRESSOR SERVICE:**

- Oil Level ☐ OK Serviced _____
- Pressure Relief Valve ☐ OK Serviced _____
- Low Oil Safety Switch ☐ OK Serviced _____
- Pressure Check Cylinder Head ☐ OK Serviced _____
- Magnetic Starter ☐ OK Serviced _____
- Pressure Switch ☐ OK Serviced _____
- Motor ☐ OK Serviced _____
- Check Belts ☐ OK Serviced _____
- Air Filter ☐ Cleaned Replaced _____
- Water Trap ☐ OK Serviced _____
- Check Valve ☐ OK Serviced _____
- Pressure Gauge ☐ OK Replaced _____

**SUPPLIES USED:** AUSTIN

30 TONS

PEA GRAVIEL

RECOMMENDED REPAIRS: FINISHED CLEANING OUT HOLE TO 3'-6" DEEP FILLED W/PEA GRAVIEL CLEANED PATRICK GT INSPECTION ON SIDEWALK

Received by: _____ Date 12/30/93

Time In 9:00 AM Time Out 3:00 PM

Number of Men 2 Total Time on Job 6.0 Travel Time .75

5106539928 >>

2014-04-29 08:09


# WALKER'S HYDRAULICS, INC.

2322-N Bates Avenue Concord, CA 94520 (510) 798-1217

## *** MAINTENANCE CHECK LIST ***


CUSTOMER: SALLY'S AUTO BODY

LOCATION OAKLAND

WORK COVERED BY P.O. # _____ DATE PERFORMED 12/31/93 BY [signature]


**HOIST SERVICE:**

- Air Control Valve ☐ OK Serviced _____
- Oil Control Valve ☐ OK Serviced _____
- Pressure Test Oil Storage Tank ☐ OK Serviced _____
- Pressure Test Cylinder ☐ OK Serviced _____
- Piston Sealing Gland ☐ OK Serviced _____
- Safety Leg ☐ OK Serviced _____
- Low Oil Float ☐ OK Serviced _____
- Check Cylinder Oil Level ☐ OK Serviced _____
- Add Oil ☐ OK Serviced _____
- Lube Equipment
  - Pump _____
  - Reel _____
  - Motor _____

**COMPRESSOR SERVICE:**

- Oil Level ☐ OK Serviced _____
- Pressure Relief Valve ☐ OK Serviced _____
- Low Oil Safety Switch ☐ OK Serviced _____
- Pressure Check Cylinder Head ☐ OK Serviced _____
- Magnetic Starter ☐ OK Serviced _____
- Pressure Switch ☐ OK Serviced _____
- Motor ☐ OK Serviced _____
- Check Belts ☐ OK Serviced _____
- Air Filter ☐ Cleaned Replaced _____
- Water Trap ☐ OK Serviced _____
- Check Valve ☐ OK Serviced _____
- Pressure Gauge ☐ OK Replaced _____

**SUPPLIES USED:** AUSTIN


1 1/4 yds

CONCRETE

RECOMMENDED REPAIRS: CONCRETED SIDEWALK BROOM FINISHED AND CLEANED UP.

Received by: _____ Date 12/31/93

Time In 9:00 AM Time Out 2:30 PM

Number of Men 3 Total Time on Job 5.5 Travel Time .45

# Appendix B

# Gasoline UST Removal Report

Touchstone Developments
Environmental Management

February 8, 1994

Salle's Auto Body Shop
1049 Nineth Avenue
Oakland, California

Reference: Underground Fuel Tank Removal
1049 - 9th Ave. @ East 11th Street
Oakland, California

Gentlemen:

This report summarizes sampling activities performed at the above referenced location (figure 1) after the removal of an underground storage tank (UST). The excavation and tank removal was performed by Walker hydraulics and the transportation of the tank for disposal was performed by H & H Ship Service Company. The sampling activities described in this report were performed on December 29, 1993 to comply with the current Tri-Regional Water Quality Control Board Guidelines and Alameda County Environmental Health Department.

SITE DESCRIPTION

The site is occupied by Salle's Auto Body Shop. Much of the surrounding properties are commercial. The contractor Walker Hydraulics had already excavated around the tank to uncover it prior to Touchstone Developments arrival. The fuel tank was located east of the Auto Body Shop building in the sidewalk approximately 50 feet south of the southeast corner of the building (Figure 1).

The tank was a 1000 gallon single wall steel tank used for storing gasoline fuel. It is not known to Touchstone Developments when the tank was installed. A couple of holes were observed on the top of the tank near the fill piping (south end of the tank) approximately 1/4 to 2 inches in diameter. No holes were observed on the tank sides or bottom.

Tank removal and sampling were performed December 29, 1993 and observed by both inspectors Eva Chu and Madhulla Logan representing Alameda County Public Health Department, Hazardous Materials Division.

SOIL SAMPLING

Soil samples were collected in clean two inch by six inch brass tubes, covered at both ends with aluminum foil and sealed with plastic end caps. The soil samples were labeled, entered on a Chain-of-Custody form, put in a cooler with ice and transported to Superior Precision Analytical, Inc., a State-certified laboratory in Martinez, California.

UST Excavation Sampling

Soil samples TS, TN, TE and TW were collected after the tank was removed from the sidewalls of the tank excavation (figure 1). Soil samples were collected approximately 5 1/2 feet below grade below in the center of each sidewall due to the presence of water at 6 feet below grade. Soil samples were collected from a backhoe bucket by removing the top few inches of soil before pushing the brass tubes into the soil until completely full.

Water samples were bailed from the bottom of the excavation but it was unclear whether the water was collected from the recent rains or groundwater.

After sidewall samples were collected the excavation was dug down to 13 1/2 feet below grade to clean out the suspected hydrocarbon contaminated soil. Soil sample TB was then collected from the bottom center of the excavation approximately 13 1/2 feet below grade. This excavation was left open over night before backfilling and no recharge of water was observed in the excavation the following morning.

Touchstone Developments notified Eva Chu that groundwater may not have been encountered during the tank removal sampling. Eva Chu informed TD that the water samples (Labeled H2O) collected could then be discarded at the laboratory.

The final excavation dimensions were 6 feet wide by 13 feet long by 13 1/2 feet in depth. Approximately 30 cubic yards of soil was generated from the excavation activities and stockpiled. Soil sample SP-1 was collected from this material. The stockpile was placed on and covered with visqueen.

ANALYTICAL RESULTS

Excavation soil samples were analyzed for Total Petroleum Hydrocarbons calculated as Gasoline (TPH-Gas) according to EPA Method 8015 Modified, Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) according to EPA Method 8020 and Total

Lead according to EPA Method 6010. The stockpile sample was analyzed for TPH-gas, BTEX and Organic Lead.

Excavation samples were not detected (ND) at or above the laboratory detection limits for either TPH-Gas or BTEX with the exception of sample TS which was found to have 1 part per million (ppm) of TPH-gasoline, 0.086 ppm Benzene, 0.16 ppm Toluene, 0.016 ppm Ethylbenzene and 0.11 ppm Xylenes. Certified Analytical Reports are attached in Appendix A.

Please do not hesitate to call if you have questions, my telephone number is (707) 538-8818.

Touchstone Developments by,

Jeff L. Monroe
Project Manager

JLM/jlm

Figure 1: Site Plan with Sample Locations
Appendix A:Analytical Laboratory Report and Chain-of-Custody Form

**WALKER'S HYDRAULICS, INC.**
**2322-N BATES AVENUE**
**CONCORD, CALIFORNIA 94520**
**(510) 798-1217**

February 10, 1994

Mr. Richard S. Cochran
499 Embarcadero
Oakland, Ca 94606

Re: Tank at 1049 - 9th Avenue

Dear Dick:

Attached please find the final report on the tank removal. As you can see, the report for the excavation is clean. The over-excavation and clean-up as directed by Touchstone has provided a clean one-shot removal and will close this site.

I will send a copy of this report to Alameda County Environmental Health along with the clean-up proposal (stock pile only).

Please advise should you want us to get rid of your dirt pile. This should be put off until late spring or early summer to get the hot weather it will take to volatilize the gasoline.

Enclosed is our invoice for the additional sampling and project management by Touchstone.

Thank you for using Walker's Hydraulics.

Sincerely,

Raymond E. Walker
President

Enclosures

Touchstone Developments
Environmental Management

# UNDERGROUND STORAGE TANK REMOVAL REPORT

for

**Salle's Auto Body Shop**
**1049 Nineth Avenue**
**Oakland, California**

Prepared for

**Walker's Hydraulics Inc.**
**2322 North Bates Avenue**
**Concord, California 94520**

by

**Touchstone Developments**

**February 8, 1994**

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

Touchstone Developments
Environmental Management

February 8, 1994

Salle's Auto Body Shop
1049 Nineth Avenue
Oakland, California

Reference: Underground Fuel Tank Removal
1049 - 9th Ave. @ East 11th Street
Oakland, California

Gentlemen:

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Tank removal and sampling were performed December 29, 1993 and observed by both inspectors Eva Chu and Madhulla Logan representing Alameda County Public Health Department, Hazardous Materials Division.

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

SOIL SAMPLING

Soil samples were collected in clean two inch by six inch brass tubes, covered at both ends with aluminum foil and sealed with plastic end caps. The soil samples were labeled, entered on a Chain-of-Custody form, put in a cooler with ice and transported to Superior Precision Analytical, Inc., a State-certified laboratory in Martinez, California.

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Lead according to EPA Method 6010. The stockpile sample was analyzed for TPH-gas, BTEX and Organic Lead.

Excavation samples were not detected (ND) at or above the laboratory detection limits for either TPH-Gas or BTEX with the exception of sample TS which was found to have 1 part per million (ppm) of TPH-gasoline, 0.086 ppm Benzene, 0.16 ppm Toluene, 0.016 ppm Ethylbenzene and 0.11 ppm Xylenes. Certified Analytical Reports are attached in Appendix A.

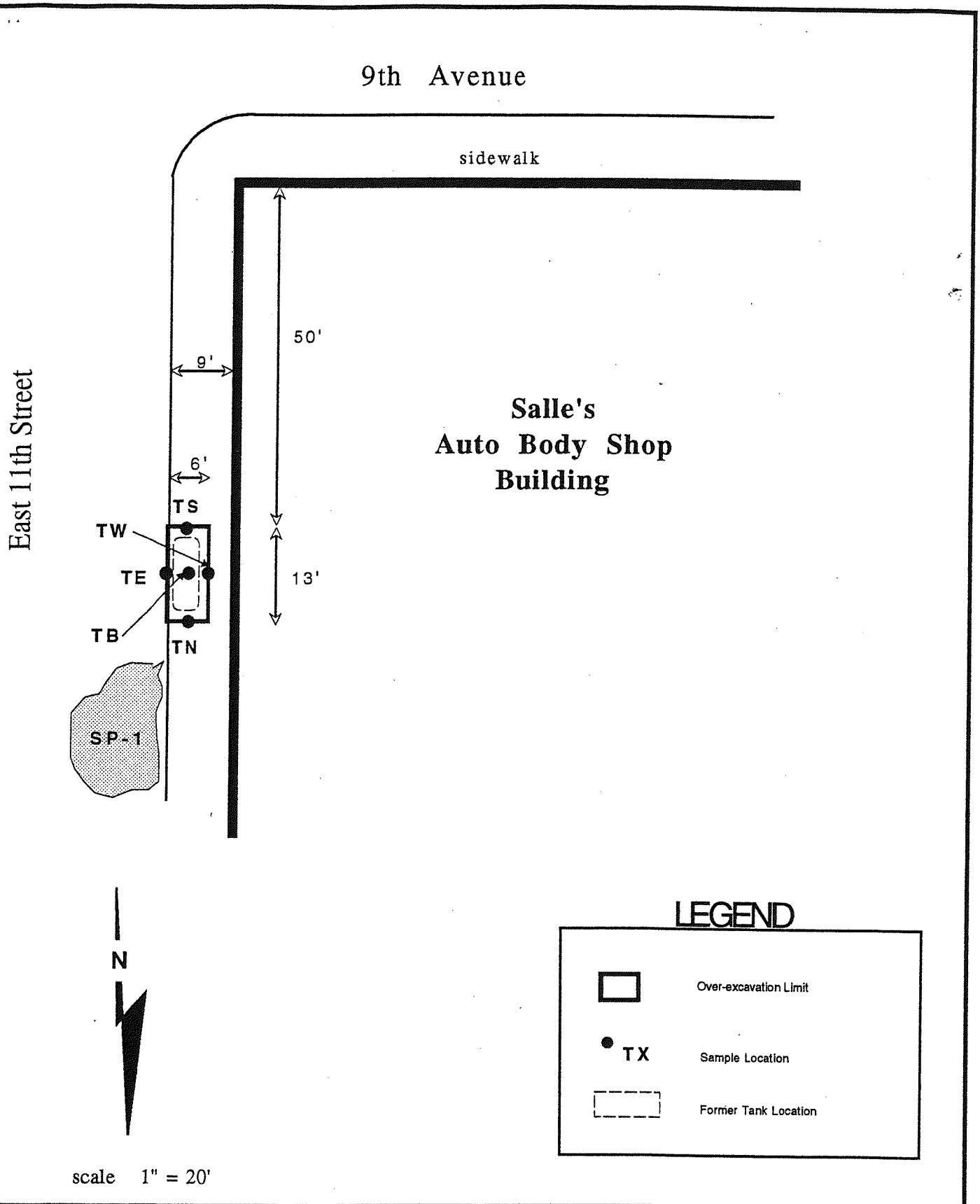
Please do not hesitate to call if you have questions, my telephone number is (707) 538-8818.

Touchstone Developments by,

Jeff L. Monroe
Project Manager

JLM/jlm

Figure 1: Site Plan with Sample Locations
Appendix A:Analytical Laboratory Report and Chain-of-Custody Form




| | | |
|---|---|---|
| Touchstone Developments<br>Environmental Management | **Site Plan / Sampling Locations**<br>1049 9th Avenue<br>Oakland, California | **Figure 1**<br>2-1-94 mjt<br>Project Number 93-25 |

# APPENDIX A:

Certified Analytical Reports and Chain-of-Custody forms

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 ▪ Martinez, California 94553 ▪ (510) 229-1512 / fax (510) 229-1526

TOUCHSTONE
Attn: JEFF MONROE

Project 93-25
Reported 06-January-1994

ANALYSIS FOR TOTAL LEAD
by EPA Method SW-846 6010

Chronology

Laboratory Number 90878

| Identification | Sampled | Received | Extracted | Analyzed | Run # | Lab # |
|---|---|---|---|---|---|---|
| TS | 12/29/93 | 12/29/93 | 01/04/94 | 01/04/94 | | 1 |
| TN | 12/29/93 | 12/29/93 | 01/04/94 | 01/04/94 | | 2 |
| TE | 12/29/93 | 12/29/93 | 01/04/94 | 01/04/94 | | 3 |
| TW | 12/29/93 | 12/29/93 | 01/04/94 | 01/04/94 | | 4 |
| TB | 12/29/93 | 12/29/93 | 01/04/94 | 01/04/94 | | 7 |

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 ▪ Martinez, California 94553 ▪ (510) 229-1512 / fax (510) 229-1526

TOUCHSTONE
Attn: JEFF MONROE

Project 93-25
Reported 06-January-1994

## ANALYSIS FOR TOTAL LEAD

| Laboratory Number | Sample Identification | Matrix |
|---|---|---|
| 90878- 1 | TS | Soil |
| 90878- 2 | TN | Soil |
| 90878- 3 | TE | Soil |
| 90878- 4 | TW | Soil |
| 90878- 7 | TB | Soil |

RESULTS OF ANALYSIS

| Laboratory Number: | 90878- 1 | 90878- 2 | 90878- 3 | 90878- 4 | 90878- 7 |
|---|---|---|---|---|---|
| TOTAL LEAD: | ND<5 | ND<5 | 6 | ND<5 | ND<5 |
| Concentration: | mg/Kg | mg/Kg | mg/Kg | mg/Kg | mg/Kg |

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 ▪ Martinez, California 94553 ▪ (510) 229-1512 / fax (510) 229-1526

# ANALYSIS FOR TOTAL LEAD
## Quality Assurance and Control Data - Soil

Laboratory Number 90878

| Compound | Method Blank (mg/Kg) | RL (mg/Kg) | Spike Recovery (%) | Limits (%) | RPD (%) |
|---|---|---|---|---|---|
| TOTAL LEAD: | ND<5 | 5 | 92/95 | 75-125 | 3% |

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
mg/Kg = Parts per million (ppm)
QC File No. 90878

Michael R. Veron
Senior Chemist
Account Manager

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 ▪ Martinez, California 94553 ▪ (510) 229-1512 / fax (510) 229-1526

TOUCHSTONE
Attn: JEFF MONROE

Project 93-25
Reported 06-January-1994

ORGANIC LEAD
SW-846 METHOD 7000 SERIES METALS BY GFAA AND AA

Chronology

Laboratory Number 90878

| Identification | Sampled | Received | Extracted | Analyzed | Run # | Lab # |
|---|---|---|---|---|---|---|
| SP-1 | 12/29/93 | 12/29/93 | 01/05/94 | 01/05/94 | | 6 |

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 ▪ Martinez, California 94553 ▪ (510) 229-1512 / fax (510) 229-1526

TOUCHSTONE
Attn: JEFF MONROE

Project 93-25
Reported 06-January-1994

ORGANIC LEAD
SW-846 METHOD 7000 SERIES METALS BY GFAA AND AA

| Laboratory Number | Sample Identification | Matrix |
|---|---|---|
| 90878- 6 | SP-1 | Soil |

RESULTS OF ANALYSIS

Laboratory Number: 90878- 6

| | |
|---|---|
| ORGANIC LEAD: | ND<2 |
| Concentration: | mg/Kg |

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 ▪ Martinez, California 94553 ▪ (510) 229-1512 / fax (510) 229-1526

ORGANIC LEAD
SW-846 METHOD 7000 SERIES METALS BY GFAA AND AA

Quality Assurance and Control Data - Soil

Laboratory Number 90878

| Compound | Method Blank (mg/Kg) | RL (mg/Kg) | Spike Recovery (%) | Limits (%) | RPD (%) |
|---|---|---|---|---|---|
| ORGANIC LEAD: | ND<2 | 2 | 104/103 | 75-125 | 1% |

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
mg/Kg = Parts per million (ppm)
QC File No. 90878

Senior Chemist
Account Manager

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 ▪ Martinez, California 94553 ▪ (510) 229-1512 / fax (510) 229-1526

TOUCHSTONE
Attn: JEFF MONROE

Project 93-25
Reported 01/06/94

## TOTAL PETROLEUM HYDROCARBONS

| Lab # | Sample Identification | Sampled | Analyzed | Matrix |
|---|---|---|---|---|
| 90878- 1 | TS | 12/29/93 | 01/05/94 | Soil |
| 90878- 2 | TN | 12/29/93 | 01/04/94 | Soil |
| 90878- 3 | TE | 12/29/93 | 01/04/94 | Soil |
| 90878- 4 | TW | 12/29/93 | 01/04/94 | Soil |
| 90878- 6 | SP-1 | 12/29/93 | 01/04/94 | Soil |
| 90878- 7 | TB | 12/29/93 | 01/04/94 | Soil |

## RESULTS OF ANALYSIS

| Laboratory Number: | 90878- 1 | 90878- 2 | 90878- 3 | 90878- 4 | 90878- 6 |
|---|---|---|---|---|---|
| Gasoline: | 1 | ND<1 | ND<1 | ND<1 | 550 |
| Benzene: | 0.086 | ND<.005 | ND<.005 | ND<.005 | ND<0.5 |
| Toluene: | 0.16 | ND<.005 | ND<.005 | ND<.005 | 0.69 |
| Ethyl Benzene: | 0.016 | ND<.005 | ND<.005 | ND<.005 | 3.9 |
| Total Xylenes: | 0.11 | ND<.005 | ND<.005 | ND<.005 | 14 |
| Concentration: | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |

| Laboratory Number: | 90878- 7 |
|---|---|
| Gasoline: | ND<1 |
| Benzene: | ND<.005 |
| Toluene: | ND<.005 |
| Ethyl Benzene: | ND<.005 |
| Total Xylenes: | ND<.005 |
| Concentration: | mg/kg |

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 ▪ Martinez, California 94553 ▪ (510) 229-1512 / fax (510) 229-1526

# C E R T I F I C A T E  O F  A N A L Y S I S

## ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS



QA/QC INFORMATION
SET: 90878

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

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

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

| ANALYTE | MS/MSD RECOVERY | RPD | CONTROL LIMIT |
|---|---|---|---|
| Gasoline: | 124/116 | 7% | 70-130 |
| Benzene: | 112/109 | 3% | 70-130 |
| Toluene: | 109/106 | 3% | 70-130 |
| Ethyl Benzene: | 106/103 | 3% | 70-130 |
| Total Xylenes: | 111/107 | 4% | 70-130 |

Michael R. Veroy
Senior Chemist

90818

# Chain of Custody and Analysis Request

Page 1 of 1

Touchstone Developments
Address: 684 30th Avenue
City : San Francisco, CA 94121
Phone: (415) 386-8791 Fax: (415) 386-8791
Project Manager: ~~Michael J. Tambroni~~
Alternate Contact:
Project No.: 93-25 P.O. No. 93-25

**TURN AROUND TIME**
(circle one)
Same Day 72 Hrs.
24 Hrs. 48 Hrs.
Normal 5 Day

**Superior Precision Analytical Inc.**
**P.O. Box 1545**
**Martinez, California 94553**

**Martinez I: (510) 229-1512**
**Martinez II: (510) 229-0166**
**San Francisco: (415) 647-2081**

**Section II: Analysis Request**

Sampler: Jeff Monroe
Regulatory Agency: ACEHD

| Sample Identification | S = Soil A = Air W = Water Matrix | 8010 (Cl. Hydro) | 8015M (Gas) | 8015M (Diesel) | 8015M/8020 (Gas/BTEX) | 8240 (VOCs) | 8270 (SVOCs) | 5520F (TOG) | Organic Pb | Total Pb | | | | Date Sampled | Time Sampled | # of Containers | Preservatives (yes or no) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 TS 1 | S | | | | X | | | | | X | | | | 12/29 | 11:00 | 1 | ICE |
| 2 TN 2 | | | | | | | | | | | | | | | 11:03 | | |
| 3 TE 3 | | | | | | | | | | | | | | | 11:10 | | |
| 4 TW 4 | | | | | | | | | | | | | | | 11:15 | | |
| 5 $H_2O$ 5 | W | | | | | | | | | | | | | | 10:55 | 5 | Hcl |
| 6 SP-1 6 | S | | | | X | | | | | X | | | | | 11:15 | 1 | ICE |
| 7 TB 7 | S | | | | | | | | | | | | | 12/29/93 | 11:30 | 1 | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | |

Please Initial:
Samples Stored in ice.
Appropriate containers
Samples preserved
VOA's without headspace
Comments:

COMMENTS:
From Sale's Autobody
1049 9th Ave.
Oakland CA

| | | | |
|---|---|---|---|
| Relinquished By: Jeff Monroe | Date/Time 12-29-93 14:15 | Received By: | Date/Time |
| Organization: TD | | Organization: | |
| Reliquished By: | Date/Time | Received By: | Date/Time |
| Organization: | | Organization: | |
| Relinquished By: | Date/Time | Received By: Nicki Heath | Date/Time 2:15 pm 12/29/93 |
| Organization: | | Laboratory: Superior | |

**Lab: Please initial the following:**

| | |
|---|---|
| Samples Stored in Ice: | NH |
| Appropriate Containers: | ✓ |
| Samples Preserved: | NA |
| VOAs without headspace: | NA |
| Comments: | 6° |

# Appendix C

# Gasoline UST Excavation Soil Stockpile Management

**WALKER'S HYDRAULICS, INC.**
2322-N BATES AVENUE
CONCORD, CALIFORNIA 94520
(510) 798-1217

February 10, 1994

Ms. Madhulla Logan, M.S.
Hazardous Materials Specialist
Alameda County Public Health Agency
Division of Hazardous Materials
Department of Environmental Health
80 Swan Way, Room 200
Oakland, Ca 94621

Re: Tank Closure for Salle's Paint and Body Shop, 1049 - 9th Ave. 1117th ST

Dear Ms. Logan:

Enclosed please find the report by Touchstone Developments for the above tank removal.

As you can see, there is no further remedial action required on this tank site. The excavation has been back-filled with pea gravel, compacted, the sidewalk replaced, and signed off by the city of Oakland.

Enclosed is a copy of the closure plan for you to sign off as being closed. Please return the signed plan to our office so we can copy it and forward to the property owner.

Also is a map showing the area the soil stockpile has been move to.

In a timely fashion, we will apply to the Bay Area Air Quality Control Board for a permit to aerate the soil. We will then place 6 mil. visqueen on the ground and spread the soil to obtain maximum exposure. In a timely manner, we will turn the soil to allow volatilization of the gasoline.

A composite sample will be taken for analysis, with a copy of the report sent to you. Please advise if you want to see the sampling process.

Thank you for your help with this project.

Sincerely,

Raymond E. Walker
President

Enclosures

483 Dispatched 6 44 4/21/94 1100

P.02 93% APR-20-1994 09:02

N. Lee

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT**
939 ELLIS STREET
SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

REGULATION 8, RULE 40
X Aeration of Contaminated Soil and
Removal of Underground Storage Tanks

NOTIFICATION FORM
___ Removal or Replacement of Tanks
X Excavation of Contaminated Soil

## SITE INFORMATION

SITE ADDRESS Corner of 8th Avenue & 11th Street
CITY, STATE Oakland, CA ZIP 94606
OWNER NAME Richard S. Cochran
SPECIFIC LOCATION OF PROJECT On the corner south of 8th Ave. & west of 11th Street

**TANK REMOVAL**

SCHEDULED STARTUP DATE _____
VAPORS REMOVED BY:
[ ] WATER WASH
[ ] VAPOR FREEING ($CO^2$)
[ ] VENTILATION

**CONTAMINATED SOIL EXCAVATION**

SCHEDULED STARTUP DATE 04-20-94
STOCKPILES WILL BE COVERED? YES ____ NO ____
ALTERNATIVE METHOD OF AERATION (DESCRIBE BELOW):
_____ (MAY REQUIRE PERMIT)
Turning over dirt for continuing aeration.

## CONTRACTOR INFORMATION

NAME Walker's Hydraulics, Inc. CONTACT Ray Walker
ADDRESS 2322-N Bates Avenue PHONE ( 510 ) 798-1217
CITY, STATE, ZIP Concord, CA 94520

## CONSULTANT INFORMATION
(IF APPLICABLE)

NAME Touchstone Developments CONTACT Mike Tambroni
ADDRESS 684 - 30th Avenue PHONE ( 415 ) 386-8791
CITY, STATE, ZIP San Francisco, CA 94121

**FOR OFFICE USE ONLY**

DATE RECEIVED FAX 4/20/94 BY BG (init.)
DATE POSTMARKED _____ BY _____ (init.)
CC: INSPECTOR NO. 483 DATE 4/21/94 BY BG (init.)
UPDATE: CONTACT NAME _____ DATE _____ BY _____ (init.)
BAAQMD N.# _____ DATA ENTRY 4/21/94

1/91 • See reverse for instructions

#3

**WALKER'S HYDRAULICS, INC.**
**2322-N BATES AVENUE**
**CONCORD, CALIFORNIA 94520**
**(510) 798-1217**

September 1, 1994

Ms. Madhulla Logan, M.S.
Hazardous Materials Specialist
Alameda County Public Health Agency
Department of Environmental Health

RE: Tank Closure for Salle's Body Shop, 1049-9th Ave

Dear Ms. Logan:

As per our letter of February 10,1994 we notified BAAQMD and proceeded with the aeration of the stock pile. the soil was turned every three weeks and on 8-23-94 samples were taken and submitted to Superior Precision Analytical, Inc. for analysis.

Attached pleas find copies of the report. As you can see the three composite samples are N/D.

The soil will be used in other projects C&C Management has underway or will be off hauled.

This will complete the closure of this site. I would appreciate you sending copies of closure to myself and Mr. Cochran.

I would like to thank you for your patience and help with this project.

Sincerely,

Raymond E. Walker

cc: Cochran

**Superior Precision Analytical, Inc.**
A member of ESSCON Environmental Support Service Consortium

WALKER'S HYDRAULICS, INC.
Attn: PROJECT MANAGER

Project STOCKPILE
Reported 08/31/94

## TOTAL PETROLEUM HYDROCARBONS

| Lab # | Sample Identification | Sampled | Analyzed | Matrix |
|---|---|---|---|---|
| 92420- 1 | P1+P2+P3 | 08/23/94 | 08/26/94 | Soil |
| 92420- 2 | P4+P5+P6 | 08/23/94 | 08/26/94 | Soil |
| 92420- 3 | P7+P8 | 08/23/94 | 08/26/94 | Soil |

## RESULTS OF ANALYSIS

| Laboratory Number: | 92420- 1 | 92420- 2 | 92420- 3 |
|---|---|---|---|
| Gasoline: | ND<1 | ND<1 | ND<1 |
| Concentration: | mg/Kg | mg/Kg | mg/Kg |

Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

# C E R T I F I C A T E  O F  A N A L Y S I S

## ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS



QA/QC INFORMATION
SET: 92420

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

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

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

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

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

| ANALYTE | MS/MSD RECOVERY | RPD | CONTROL LIMIT |
|---|---|---|---|
| Gasoline: | 114/121 | 6% | 70-130 |

Michael R. Veenma
Senior Chemist

ES AVENUE, SHOP 'N'
AD, CA 94520

Attn: DICK COCHRAN

Project name: SALLY'S AUTO BODY

Job number: STOCKPILE

Project manager: TAT CASHMAN

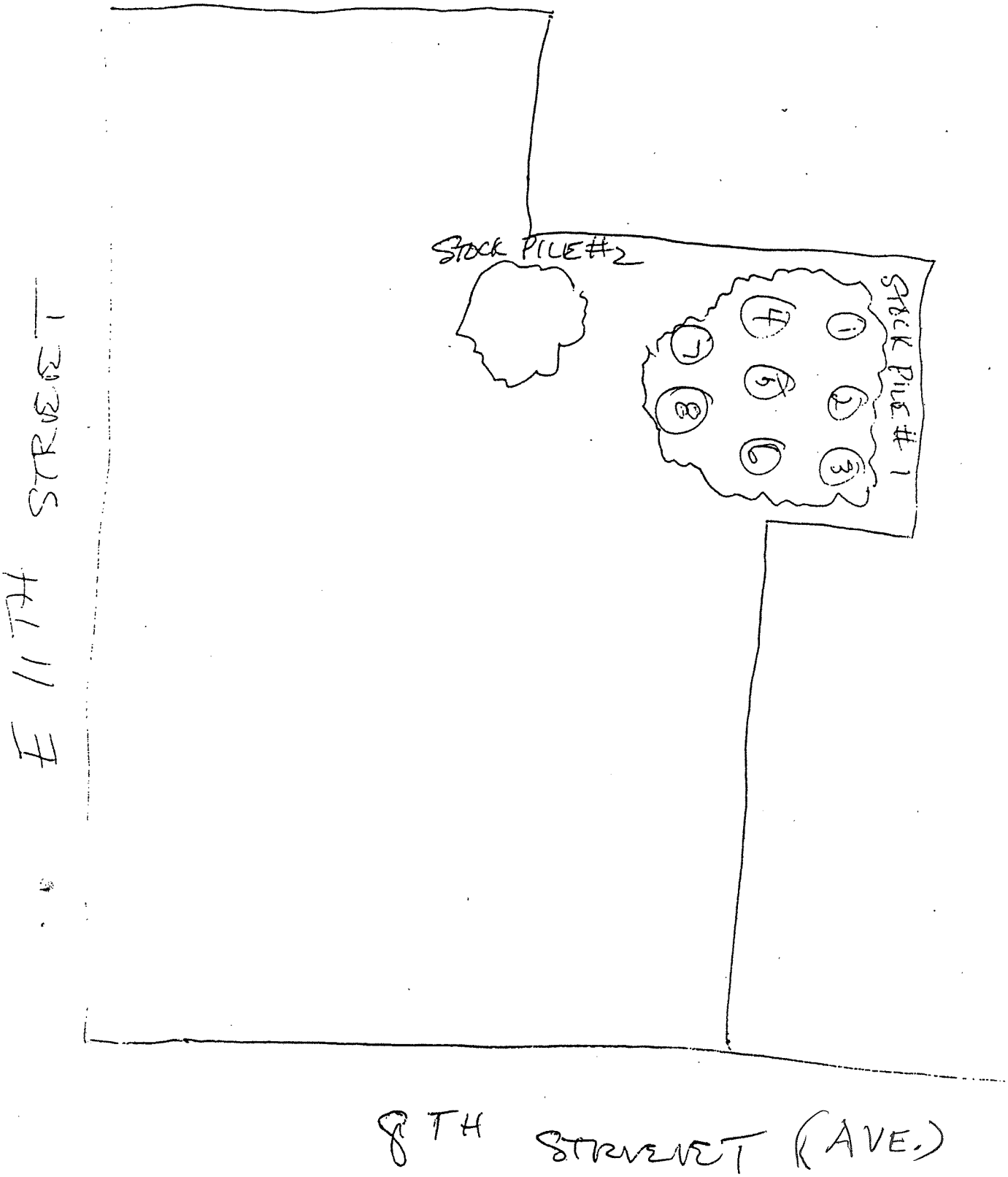
Sampler(s): WALKERS HYD

| Sample number | Date sampled | Time sampled | Type Composite or Grab | Sample description | Number of containers | TPH G | Hazardous sample Special handling required | Remarks |
|---|---|---|---|---|---|---|---|---|
| P1 | 8/23/94 | 4:00PM | GRAB | SANDY SOIL / DIRT | 1 | | | Normal TAT |
| P2 | | | | | 1 | X | | Composit 1-2-3 |
| P3 | | | | | 1 | | | |
| P4 | | | | | 1 | | | |
| P5 | | | | | 1 | X | | Composit 4-5-6 |
| P6 | | | | | 1 | | | |
| P7 | | | | | 1 | X | | Composit 7-8 |
| P8 | | 4:30PM | | | 1 | | | |

Please Initial: _____
Samples Stored in ice. ~2°C
Appropriate containers _____
Samples preserved N/A
VOA's without headspace _____

| Relinquished by | Signature | Company | Date | Time |
|---|---|---|---|---|
| | Brian Walker | Walkers Hydrotesting | | |
| Received by | | WALKERS HYD (IN ICEBOX OVERNIGHT) | | |
| Relinquished by | | | | |
| Received by | | | 8.24.94 | |
| Relinquished by | | | | |
| Received by | Val Ogamba | 08/24/94 | | |

Note: Samples are discarded 30 days after results are reported unless other arrangements


STOCK PILE #2
STOCK PILE #1
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E 11TH STREET
8TH STREET (AVE.)

BAAQMD
Bay Area Air Quality
Management District

Acknowledgment

Bay Area Air Quality Management District
acknowledges receipt of your Tank
Removal/Contaminated Soil Excavation
Notification Form received on

4/20/94 BG
& 4/22/94

BAAQMD
Bay Area Air Quality
Management District

Acknowledgment

Bay Area Air Quality Management District
acknowledges receipt of your Tank
Removal/Contaminated Soil Excavation
Notification Form received on

7/11/94 BG

# Appendix D

# Waste-Oil UST Removal Report

Touchstone Developments
Environmental Management

# Underground Storage Tank Removal Report

for the property located at

## 1049 9th Avenue, Oakland, California

prepared for

Walker's Hydraulics Inc.
2322-N Bates Avenue
Concord, California

prepared by

## Touchstone Developments

Michael J. Tambroni
Project Manager

August 3, 1994

684 30th Avenue • San Francisco, CA 94121 • Tel/Fax (415) 386-8791 • Mobile/Fax (707) 484-6557

## INTRODUCTION

This report summarizes the field activities performed at 1049 9th Avenue, Oakland, California during the recent removal of (1) 280 gallon underground waste oil tank (Figure 1). Excavation and removal activities were performed by Walker's Hydraulics, Inc., Concord, California. Touchstone Developments was present on-site to observe the tank removal and collect soil samples from the excavation and stockpiled soil. The soil sampling and analysis described in this report were performed on July 20, 1994.

## SITE DESCRIPTION

The site is currently occupied by Salle's Auto Body Shop. The tank containing waste oil, was formerly located beneath the sidewalk adjacent to 9th Avenue (Figure 1).

## FIELD EXCAVATION ACTIVITIES

The tank was removed on July 20,1994. Removal was witnessed by Barney Chan, from the Alameda County Department of Environmental Health. A representative from the Oakland Fire Department was notified of the removal, however, the Fire Department declined to appear. Coordination was made by the Fire Department to have Barney Chan measure the LEL and $O_2$ levels of the tank prior to removal. Following excavation and removal, the tank was loaded and transported to H & H Environmental Services, San Francisco for disposal. Transportation was performed by H & H Environmental Services. Groundwater was not observed during excavation.

### UST/Piping Samples

A soil sample, WO-1-8.5', was collected from the bottom excavation, approximately 2 feet below the formerly removed tank bottom at approximately 8.5 feet below ground surface (bgs). A second sample, RF-3', was collected from approximately 2 feet below the formerly removed remote fill piping which extended from inside the building to the tank at approximately 3 feet bgs (Figure 1). Analytical results are presented in Appendix A. The portion of the remote fill, extending from the floor inside the building, was capped.

The soil sample collected from the excavation bottom was obtained from the back hoe bucket by removing the top few inches of soil and pushing a clean, six-inch-long (two inches in diameter) brass sample tube into the soil until completely full. The soil sample collected from beneath the remote fill piping was obtained with a hand shovel in the same manner as previously described. The ends of the tubes were covered with aluminum foil and sealed with plastic end caps. The samples were labeled, placed in a cooler with ice, entered on a Chain-of Custody form and transported to Superior Precision Analytical Inc., San Francisco, a state certified laboratory.

## Stockpiled Soil

Approximately 10 cubic yards of material was removed and stockpiled during the waste oil tank removal. The soil was transported to a vacant lot on the northeast corner of East 11th Street and 8th Avenue, which is also owned by Salle's Auto Body. The soil was stockpiled and covered with visqueen pending analytical results.

## Stockpile Sampling

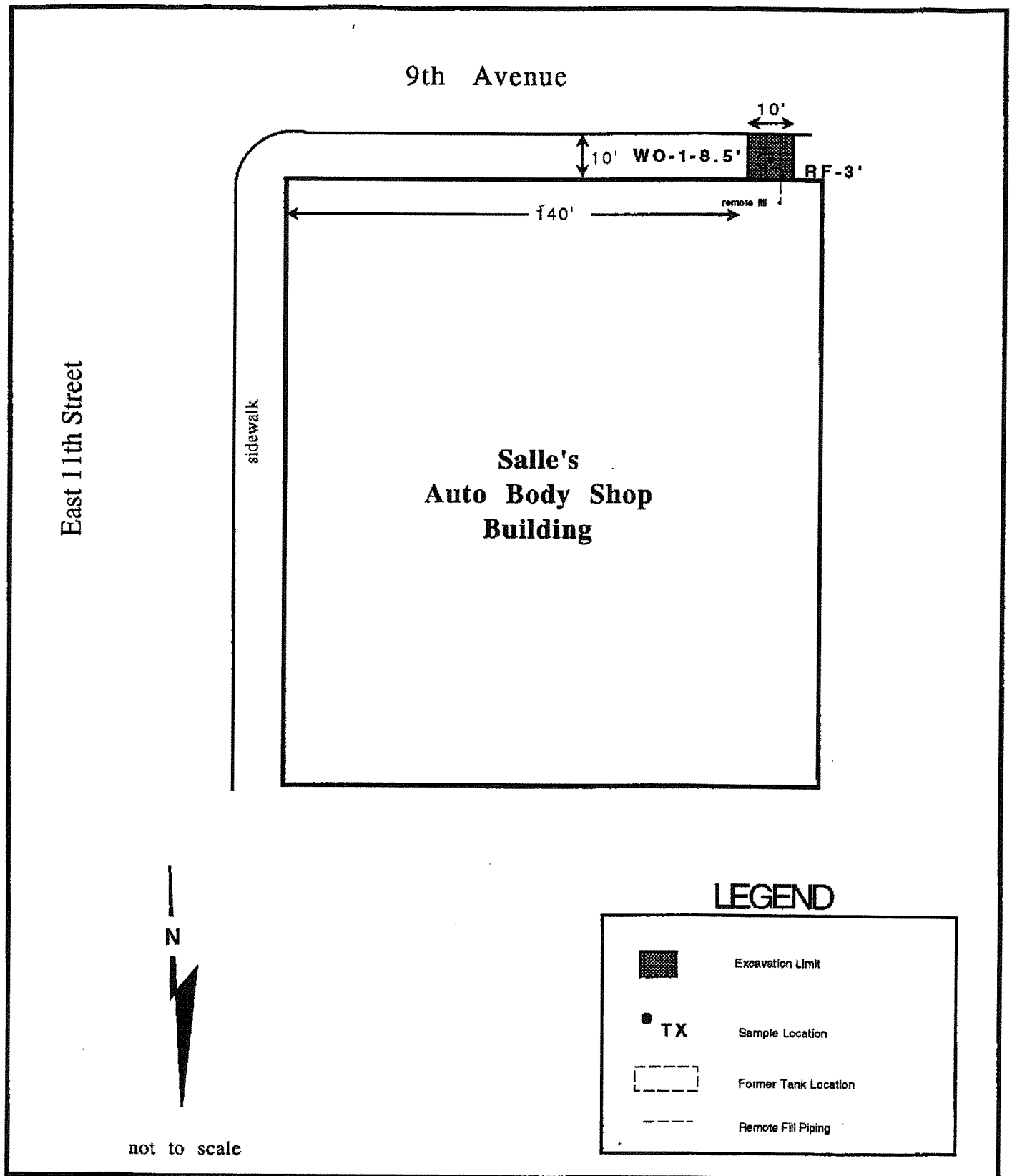
Four soil samples, WSP-1A-D, were collected from the soil stockpile. The samples were collected by removing the top 6 to 12 inches of soil, then pushing a sample tube into the soil until completely full. The samples were sealed, labeled and handled as previously mentioned. The four samples were composited in the laboratory for a representative of the stockpiled soil

## ANALYTICAL RESULTS

UST excavation and remote fill piping samples were analyzed for Total Petroleum Hydrocarbons calculated as Gasoline (TPH-Gas) according to EPA Method 8015 (Modified) and Benzene, Toluene, Ethyl Benzene, and Xylene (BTEX) according to EPA Method 8020, Total Petroleum Hydrocarbons calculated as Diesel (TPH-Diesel) according to EPA Method 8015 (Modified), Oil & Grease by Standard Methods 5520 F, Semivolatile Organics by GC/MS EPA SW-846 Method 8270, Halogenated Volatile Organics By EPA SW-846 Methods 5030/8010, and Cd, Cr, Pb, Zn, Ni by EPA Method SW-846 6010. The soil sample collected from the stockpiled soil was analyzed for Cd, Cr, Pb, Zn, Ni by EPA Method SW-846 6010, Total Petroleum Hydrocarbons by EPA Method 418.1, Total Petroleum Hydrocarbons calculated as Gasoline (TPH-Gas) according to EPA Method 8015 (Modified) and Benzene, Toluene, Ethyl Benzene, and Xylene (BTEX) according to EPA Method 8020, Corrosivity by Title 22, 66708, SW-846, EPA-9045, Ignitability by Title 22, 66702, SW-846, 7.1, and Reactivity by Title 22, 66705, SW-846, 7.1.4.2/7.3.3.2. Analytical results are presented in Appendix A.

**Figure 1**
Site Plan/Sampling Locations

**Appendix A**
Analytical Laboratory Reports and Chain-of-Custody



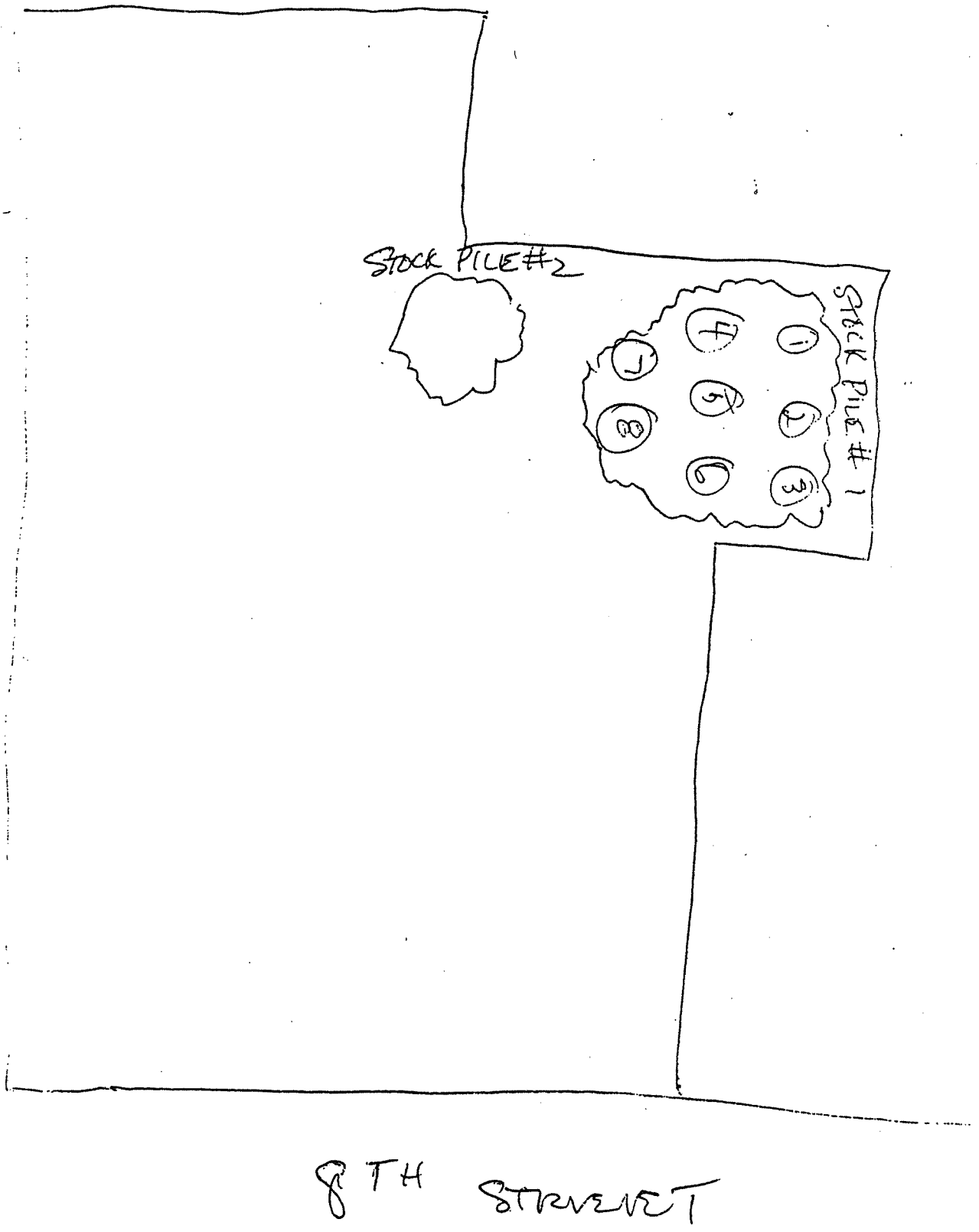

Touchstone Developments
Environmental Management

**Site Plan / Sampling Locations**
1049 9th Avenue
Oakland, California

**Figure 1**

7-22-94 | mjt

Project Number 94-13


STOCK PILE#2
STOCK PILE #1
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E 11TH STREET
8TH STREET

**Superior Precision Analytical, Inc.**
*A member of ESSCON Environmental Support Service Consortium*

TOUCHSTONE
Attn: MICHAEL TAMBRONI

Project WALKER'S HYDRAULIC
Reported 29-July-1994

## TOTAL PETROLEUM HYDROCARBONS BY EPA METHOD 418.1

Chronology

Laboratory Number 58468

| Identification | Sampled | Received | Extracted | Analyzed | Run # | Lab # |
|---|---|---|---|---|---|---|
| WSP-1(A-D) | 07/21/94 | 07/21/94 | 07/28/94 | 07/28/94 | | 3 |


Certified Laboratories
1555 Burke St., Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

**Superior Precision Analytical, Inc.**
*A member of ESSCON Environmental Support Service Consortium*

TOUCHSTONE
Attn: MICHAEL TAMBRONI

Project WALKER'S HYDRAULIC
Reported 29-July-1994

## TOTAL PETROLEUM HYDROCARBONS BY EPA METHOD 418.1

| Laboratory Number | Sample Identification | Matrix |
|---|---|---|
| 58468- 3 | WSP-1(A-D) | Soil |

### RESULTS OF ANALYSIS

Laboratory Number: 58468- 3

PETROLEUM HYDROCARBONS: 12000

Concentration: mg/kg


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**Superior Precision Analytical, Inc.**
*A member of ESSCON Environmental Support Service Consortium*

# OIL AND GREASE BY STANDARD METHODS 5520F
## Quality Assurance and Control Data - Soil

Laboratory Number 58468

| Compound | Method Blank (mg/kg) | RL (mg/kg) | Spike Recovery (%) | Limits (%) | RPD (%) |
|---|---|---|---|---|---|
| Oil and Grease: | ND<50 | 50 | 73/58 | 47-97 | 23% |

**Definitions:**
**ND = Not Detected**
**RPD = Relative Percent Difference**
**RL = Reporting Limit**
**mg/kg = Parts per million (ppm)**
**QC File No. 58468**

Cecilia G Joaquin 7/29/94
**Senior Chemist**
**Account Manager**



Certified Laboratories
1555 Burke St., Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

**Superior Precision Analytical, Inc.**
*A member of ESSCON Environmental Support Service Consortium*

TOUCHSTONE
Attn: MICHAEL TAMBRONI

Project WALKER'S HYDRAULIC
Reported 28-July-1994

## OIL AND GREASE BY STANDARD METHODS 5520F

Chronology

Laboratory Number 58468

| Identification | Sampled | Received | Extracted | Analyzed | Run # | Lab # |
|---|---|---|---|---|---|---|
| WO-1-8.5' | 07/21/94 | 07/21/94 | 07/28/94 | 07/28/94 | | 1 |
| RF-3' | 07/21/94 | 07/21/94 | 07/28/94 | 07/28/94 | | 2 |



Certified Laboratories
1555 Burke St. Unit 1 • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

TOUCHSTONE
Attn: MICHAEL TAMBRONI

Project WALKER'S HYDRAULIC
Reported 28-July-1994

OIL AND GREASE BY STANDARD METHODS 5520F

| Laboratory Number | Sample Identification | Matrix |
|---|---|---|
| 58468- 1 | WO-1-8.5' | Soil |
| 58468- 2 | RF-3' | Soil |

RESULTS OF ANALYSIS

| Laboratory Number: | 58468- 1 | 58468- 2 |
|---|---|---|
| Oil and Grease: | 6000 | 770 |
| Concentration: | mg/kg | mg/kg |


Certified Laboratories
1555 Burke St., Unit 1 • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

**Superior Precision Analytical, Inc.**
*A member of ESSCON Environmental Support Service Consortium*

TOTAL PETROLEUM HYDROCARBONS BY EPA METHOD 418.1
Quality Assurance and Control Data - Soil

Laboratory Number 58468

| Compound | Method Blank (mg/kg) | RL (mg/kg) | Spike Recovery (%) | Limits (%) | RPD (%) |
|---|---|---|---|---|---|
| PETROLEUM HYDROCARBONS: | ND<10 | 10 | 126/113 | 54-141 | 11% |

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
mg/kg = Parts per million (ppm)
QC File No. 58468

Cecilia G. Joaquin 7/29/94
Senior Chemist
Account Manager


Certified Laboratories
1555 Burke St., Unit 1 • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

**Superior Precision Analytical, Inc.**
*A member of ESSCON Environmental Support Service Consortium*

TOUCHSTONE
Attn: MICHAEL TAMBRONI

Project WALKER'S HYDRAULIC
Reported 26-July-1994

ANALYSIS FOR GASOLINE, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES
by EPA SW-846 Methods 5030/8015M/8020.

Chronology

Laboratory Number 58468

| Identification | Sampled | Received | Extracted | Analyzed | Run # | Lab # |
|---|---|---|---|---|---|---|
| WO-1-8.5' | 07/21/94 | 07/21/94 | 07/26/94 | 07/26/94 | | 1 |
| RF-3' | 07/21/94 | 07/21/94 | 07/25/94 | 07/25/94 | | 2 |
| WSP-1(A-D) | 07/21/94 | 07/21/94 | 07/23/94 | 07/23/94 | | 3 |



Certified Laboratories
1555 Burke St., Unit 1 • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

TOUCHSTONE
Attn: MICHAEL TAMBRONI

Project WALKER'S HYDRAULIC
Reported 26-July-1994

ANALYSIS FOR GASOLINE, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES

| Laboratory Number | Sample Identification | Matrix |
|---|---|---|
| 58468- 1 | WO-1-8.5' | Soil |
| 58468- 2 | RF-3' | Soil |
| 58468- 3 | WSP-1(A-D) | Soil |

RESULTS OF ANALYSIS

| Laboratory Number: | 58468- 1 | 58468- 2 | 58468- 3 |
|---|---|---|---|
| Gasoline Range: | 590* | 34* | 200* |
| Benzene: | 0.91 | ND<.025 | 0.08 |
| Toluene: | 2.8 | 0.16 | 0.31 |
| Ethyl Benzene: | 3.0 | 0.093 | 0.52 |
| Total Xylenes: | 26 | 1.9 | 3.9 |
| Concentration: | mg/kg | mg/kg | mg/kg |
| -- Surrogate % Recoveries -- | | | |
| Trifluorotoluene (SS): | 93 | 138 | 68 |

* Does not match typical gasoline pattern. Pattern is typical of mineral spirits.



Certified Laboratories
1555 Burke St., Unit 1 • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

**Superior Precision Analytical, Inc.**
*A member of ESSCON Environmental Support Service Consortium*

ANALYSIS FOR GASOLINE, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES
Quality Assurance and Control Data - Soil

Laboratory Number 58468

| Compound | Method Blank (mg/kg) | RL (mg/kg) | Spike Recovery (%) | Limits (%) | RPD (%) |
|---|---|---|---|---|---|
| Gasoline_Range: | ND<1 | 1 | 89/89 | 55-139 | 0% |
| Benzene: | ND<.005 | .005 | 90/90 | 67-141 | 0% |
| Toluene: | ND<.005 | .005 | 92/92 | 67-141 | 0% |
| Ethyl Benzene: | ND<.005 | .005 | 85/85 | 67-141 | 0% |
| Total Xylenes: | ND<.005 | .005 | 94/94 | 67-141 | 0% |

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
mg/kg = Parts per million (ppm)
QC File No. 58468

Cecilia G Joaquin 7/28/94
Senior Chemist
Account Manager



Certified Laboratories
1555 Burke St., Unit 1 • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

**Superior Precision Analytical, Inc.**
*A member of ESSCON Environmental Support Service Consortium*

TOUCHSTONE
Attn: MICHAEL TAMBRONI

Project WALKER'S HYDRAULIC
Reported 27-July-1994

## TOTAL PETROLEUM HYDROCARBONS AS DIESEL
## BY EPA METHOD 8015M

Chronology

Laboratory Number 58468

| Identification | Sampled | Received | Extracted | Analyzed | Run # | Lab # |
|---|---|---|---|---|---|---|
| WO-1-8.5' | 07/21/94 | 07/21/94 | 07/25/94 | 07/26/94 | | 1 |
| RF-3' | 07/21/94 | 07/21/94 | 07/26/94 | 07/26/94 | | 2 |



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TOUCHSTONE
Attn: MICHAEL TAMBRONI

Project WALKER'S HYDRAULIC
Reported 27-July-1994

TOTAL PETROLEUM HYDROCARBONS AS DIESEL

| Laboratory Number | Sample Identification | Matrix |
|---|---|---|
| 58468- 1 | WO-1-8.5' | Soil |
| 58468- 2 | RF-3' | Soil |

RESULTS OF ANALYSIS

| Laboratory Number: | 58468- 1 | 58468- 2 |
|---|---|---|
| Diesel Range: | 3400* | 210* |
| Concentration: | mg/kg | mg/kg |

Does not match typical Diesel pattern. Pattern is indicative of a mixture of mineral spirits and motor oil.



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# TOTAL PETROLEUM HYDROCARBONS AS DIESEL
## Quality Assurance and Control Data - Soil

Laboratory Number 58468

| Compound | Method Blank (mg/kg) | RL (mg/kg) | Spike Recovery (%) | Limits (%) | RPD (%) |
|---|---|---|---|---|---|
| Diesel Range: | ND<10 | 10 | 108/111 | 50-150 | 3% |

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
mg/kg = Parts per million (ppm)
QC File No. 58468

Cecilia G. Joaquin 7/29/94
Senior Chemist
Account Manager



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TOUCHSTONE
Attn: MICHAEL TAMBRONI

Project WALKER'S HYDRAULIC
Reported 27-July-1994

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

Chronology — Laboratory Number 58468

| Identification | Sampled | Received | Extracted | Analyzed | Run # | Lab # |
|---|---|---|---|---|---|---|
| WO-1-8.5' | 07/21/94 | 07/21/94 | 07/21/94 | 07/22/94 | | 1 |
| RF-3' | 07/21/94 | 07/21/94 | 07/21/94 | 07/22/94 | | 2 |


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Attn: MICHAEL TAMBRONI

Project WALKER'S HYDRAULIC
Reported 27-July-1994

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

| Laboratory Number | Sample Identification | Matrix |
|---|---|---|
| 58468- 1 | WO-1-8.5' | Soil |
| 58468- 2 | RF-3' | Soil |

RESULTS OF ANALYSIS

| Laboratory Number: | 58468- 1 | 58468- 2 |
|---|---|---|
| bis(2-chloroethyl)ethe: | ND<3000 | ND<3000 |
| aniline: | ND<3000 | ND<3000 |
| phenol: | ND<3000 | ND<3000 |
| 2-chlorophenol: | ND<3000 | ND<3000 |
| 1,3-dichlorobenzene: | ND<3000 | ND<3000 |
| 1,4-dichlorobenzene: | ND<3000 | ND<3000 |
| 1,2-dichlorobenzene: | ND<3000 | ND<3000 |
| benzyl alcohol: | ND<3000 | ND<3000 |
| bis-(2-chloroisopropyl: | ND<3000 | ND<3000 |
| 2-methylphenol: | ND<3000 | ND<3000 |
| hexachloroethane: | ND<3000 | ND<3000 |
| n-nitroso-di-n-propyla: | ND<3000 | ND<3000 |
| 4-methylphenol: | ND<3000 | ND<3000 |
| nitrobenzene: | ND<3000 | ND<3000 |
| isophorone: | ND<3000 | ND<3000 |
| 2-nitrophenol: | ND<3000 | ND<3000 |
| 2,4-dimethylphenol: | ND<3000 | ND<3000 |
| bis(2-chloroethoxy)met: | ND<3000 | ND<3000 |
| 2,4-dichlorophenol: | ND<3000 | ND<3000 |
| 1,2,4-trichlorobenzene: | ND<3000 | ND<3000 |
| naphthalene: | 9000 | ND<3000 |
| benzoic acid: | ND<3000 | ND<3000 |
| 4-chloroaniline: | ND<3000 | ND<3000 |
| hexachlorobutadiene: | ND<3000 | ND<3000 |
| 4-chloro-3-methylpheno: | ND<3000 | ND<3000 |
| 2-methyl-naphthalene: | 12000 | ND<3000 |
| hexachlorocyclopentadie: | ND<3000 | ND<3000 |
| 2,4,6-trichlorophenol: | ND<3000 | ND<3000 |
| 2,4,5-trichlorophenol: | ND<3000 | ND<3000 |
| Concentration: | ug/kg | ug/kg |



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Project WALKER'S HYDRAULIC
Reported 27-July-1994

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

| Laboratory Number | Sample Identification | Matrix |
|---|---|---|
| 58468- 1 | WO-1-8.5' | Soil |
| 58468- 2 | RF-3' | Soil |

RESULTS OF ANALYSIS

| Laboratory Number: | 58468- 1 | 58468- 2 |
|---|---|---|
| 2-chloronaphthalene: | ND<3000 | ND<3000 |
| 2-nitroaniline: | ND<3000 | ND<3000 |
| acenaphthylene: | ND<3000 | ND<3000 |
| dimethylphthlate: | ND<3000 | ND<3000 |
| 2,6-dinitrotoluene: | ND<3000 | ND<3000 |
| acenaphthene: | ND<3000 | ND<3000 |
| 3-nitroaniline: | ND<3000 | ND<3000 |
| 2,4-dinitrophenol: | ND<3000 | ND<3000 |
| dibenzofuran: | ND<3000 | ND<3000 |
| 2,4-dinitrotoluene: | ND<3000 | ND<3000 |
| 4-nitrophenol: | ND<3000 | ND<3000 |
| fluorene: | ND<3000 | ND<3000 |
| 4-chlorophenyl-phenyle: | ND<3000 | ND<3000 |
| diethylphthlate: | ND<3000 | ND<3000 |
| 4-nitroaniline: | ND<3000 | ND<3000 |
| 4,6-dinitro-2-methylph: | ND<3000 | ND<3000 |
| n-nitrosodiphenylamine: | ND<3000 | ND<3000 |
| 1,2-diphenylhydrazine: | ND<3000 | ND<3000 |
| 4-bromo-phenyl-phenyle: | ND<3000 | ND<3000 |
| hexachlorobenzene: | ND<3000 | ND<3000 |
| pentachlorophenol: | ND<3000 | ND<3000 |
| phenanthrene: | ND<3000 | ND<3000 |
| anthracene: | ND<3000 | ND<3000 |
| di-n-butylphthlate: | ND<3000 | ND<3000 |
| fluoranthene: | ND<3000 | ND<3000 |
| benzidine: | ND<3000 | ND<3000 |
| pyrene: | ND<3000 | ND<3000 |
| butylbenzylphthlate: | ND<3000 | ND<3000 |
| 3.3'-dichlorobenzidine: | ND<3000 | ND<3000 |
| Concentration: | ug/kg | ug/kg |



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Project WALKER'S HYDRAULIC
Reported 27-July-1994

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

| Laboratory Number | Sample Identification | Matrix |
|---|---|---|
| 58468- 1 | WO-1-8.5' | Soil |
| 58468- 2 | RF-3' | Soil |

RESULTS OF ANALYSIS

| Laboratory Number: | 58468- 1 | 58468- 2 |
|---|---|---|
| benzo[a]anthracene: | ND<3000 | ND<3000 |
| chrysene: | ND<3000 | ND<3000 |
| bis(2-ethylhexyl)phtha: | ND<3000 | ND<3000 |
| di-n-octylphthalate: | ND<3000 | ND<3000 |
| benzo(b,k)fluoranthene: | ND<3000 | ND<3000 |
| benzo[a]pyrene: | ND<3000 | ND<3000 |
| indeno[1,2,3-cd]pyrene: | ND<3000 | ND<3000 |
| dibenzo[a,h]anthracene: | ND<3000 | ND<3000 |
| benzo[g,h,i]perylene: | ND<3000 | ND<3000 |
| Concentration: | ug/kg | ug/kg |
| -- Surrogate % Recoveries -- | | |
| 2-fluorophenol: | 62 | 62 |
| phenol-d6: | 58 | 69 |
| nitrobenzene-d5: | 56 | 62 |
| 2-fluorobiphenyl: | 64 | 82 |
| 2,4,6-tribromophenol: | 68 | 82 |
| terphenyl-d14: | 70 | 86 |


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EPA SW-846 METHOD 8270 SEMIVOLATILE ORGANICS BY GC/MS
Quality Assurance and Control Data - Soil

Laboratory Number 58468

| Compound | Method Blank (ug/kg) | RL (ug/kg) | Spike Recovery (%) | Limits (%) | RPD (%) |
|---|---|---|---|---|---|
| bis(2-chloroethyl)ethe: | ND<300 | 300 | | | |
| aniline: | ND<300 | 300 | | | |
| phenol: | ND<300 | 300 | 74/93 | 44-107 | 23% |
| 2-chlorophenol: | ND<300 | 300 | 71/90 | 44-107 | 24% |
| 1,3-dichlorobenzene: | ND<300 | 300 | | | |
| 1,4-dichlorobenzene: | ND<300 | 300 | 59/75 | 32-115 | 24% |
| 1,2-dichlorobenzene: | ND<300 | 300 | | | |
| benzyl alcohol: | ND<300 | 300 | | | |
| bis-(2-chloroisopropyl: | ND<300 | 300 | | | |
| 2-methylphenol: | ND<300 | 300 | | | |
| hexachloroethane: | ND<300 | 300 | | | |
| n-nitroso-di-n-propyla: | ND<300 | 300 | 68/85 | 40-123 | 22% |
| 4-methylphenol: | ND<300 | 300 | | | |
| nitrobenzene: | ND<300 | 300 | | | |
| isophorone: | ND<300 | 300 | | | |
| 2-nitrophenol: | ND<300 | 300 | | | |
| 2,4-dimethylphenol: | ND<300 | 300 | | | |
| bis(2-chloroethoxy)met: | ND<300 | 300 | | | |
| 2,4-dichlorophenol: | ND<300 | 300 | | | |
| 1,2,4-trichlorobenzene: | ND<300 | 300 | 76/92 | 40-104 | 19% |
| naphthalene: | ND<300 | 300 | | | |
| benzoic acid: | ND<300 | 300 | | | |
| 4-chloroaniline: | ND<300 | 300 | | | |
| hexachlorobutadiene: | ND<300 | 300 | | | |
| 4-chloro-3-methylpheno: | ND<300 | 300 | 77/97 | 47-113 | 23% |
| 2-methyl-naphthalene: | ND<300 | 300 | | | |
| hexaclorocyclopentadie: | ND<300 | 300 | | | |
| 2,4,6-trichlorophenol: | ND<300 | 300 | | | |
| 2,4,5-trichlorophenol: | ND<300 | 300 | | | |



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EPA SW-846 METHOD 8270 SEMIVOLATILE ORGANICS BY GC/MS
Quality Assurance and Control Data - Soil

Laboratory Number 58468

| Compound | Method Blank (ug/kg) | RL (ug/kg) | Spike Recovery (%) | Limits (%) | RPD (%) |
|---|---|---|---|---|---|
| 2-chloronaphthalene: | ND<300 | 300 | | | |
| 2-nitroaniline: | ND<300 | 300 | | | |
| acenaphthylene: | ND<300 | 300 | | | |
| dimethylphthlate: | ND<300 | 300 | | | |
| 2,6-dinitrotoluene: | ND<300 | 300 | | | |
| acenaphthene: | ND<300 | 300 | 70/82 | 43-110 | 16% |
| 3-nitroaniline: | ND<300 | 300 | | | |
| 2,4-dinitrophenol: | ND<300 | 300 | | | |
| dibenzofuran: | ND<300 | 300 | | | |
| 2,4-dinitrotoluene: | ND<300 | 300 | 72/89 | 35-100 | 21% |
| 4-nitrophenol: | ND<300 | 300 | 56/71 | 36-117 | 24% |
| fluorene: | ND<300 | 300 | | | |
| 4-chlorophenyl-phenyle: | ND<300 | 300 | | | |
| diethylphthlate: | ND<300 | 300 | | | |
| 4-nitroaniline: | ND<300 | 300 | | | |
| 4,6-dinitro-2-methylph: | ND<300 | 300 | | | |
| n-nitrosodiphenylamine: | ND<300 | 300 | | | |
| 1,2-diphenylhydrazine: | ND<300 | 300 | | | |
| 4-bromo-phenyl-phenyle: | ND<300 | 300 | | | |
| hexachlorobenzene: | ND<300 | 300 | | | |
| pentachlorophenol: | ND<300 | 300 | 76/96 | 20-122 | 23% |
| phenanthrene: | ND<300 | 300 | | | |
| anthracene: | ND<300 | 300 | | | |
| di-n-butylphthlate: | ND<300 | 300 | | | |
| fluoranthene: | ND<300 | 300 | | | |
| benzidine: | ND<300 | 300 | | | |
| pyrene: | ND<300 | 300 | 76/94 | 62-117 | 21% |
| butylbenzylphthlate: | ND<300 | 300 | | | |
| 3.3'-dichlorobenzidine: | ND<300 | 300 | | | |


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EPA SW-846 METHOD 8270 SEMIVOLATILE ORGANICS BY GC/MS
Quality Assurance and Control Data - Soil

Laboratory Number 58468

| Compound | Method Blank (ug/kg) | RL (ug/kg) | Spike Recovery (%) | Limits (%) | RPD (%) |
|---|---|---|---|---|---|
| benzo[a]anthracene: | ND<300 | 300 | | | |
| chrysene: | ND<300 | 300 | | | |
| bis(2-ethylhexyl)phtha: | ND<300 | 300 | | | |
| di-n-octylphthalate: | ND<300 | 300 | | | |
| benzo(b,k)fluoranthene: | ND<300 | 300 | | | |
| benzo[a]pyrene: | ND<300 | 300 | | | |
| indeno[1,2,3-cd]pyrene: | ND<300 | 300 | | | |
| dibenzo[a,h]anthracene: | ND<300 | 300 | | | |
| benzo[g,h,i]perylene: | ND<300 | 300 | | | |
| 2-fluorophenol: | 92 | | | 25-121 | |
| phenol-d6: | 102 | | | 24-113 | |
| nitrobenzene-d5: | 83 | | | 23-120 | |
| 2-fluorobiphenyl: | 91 | | | 30-115 | |
| 2,4,6-tribromophenol: | 120 | | | 19-122 | |
| terphenyl-d14: | 102 | | | 18-137 | |

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
ug/kg = Parts per billion (ppb)
QC File No. 58468

Cecilia G. Joaquin 7/28/94
Senior Chemist
Account Manager


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TOUCHSTONE
Attn: MICHAEL TAMBRONI

Project WALKER'S
Reported 29-July-1994

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

Chronology

Laboratory Number 58468

| Identification | Sampled | Received | Extracted | Analyzed | Run # | Lab # |
|---|---|---|---|---|---|---|
| WO-1-8.5' | 07/21/94 | 07/21/94 | 07/27/94 | 07/27/94 | | 1 |
| RF-3' | 07/21/94 | 07/21/94 | 07/27/94 | 07/27/94 | | 2 |



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TOUCHSTONE
Attn: MICHAEL TAMBRONI

Project WALKER'S
Reported 29-July-1994

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

| Laboratory Number | Sample Identification | Matrix |
|---|---|---|
| 58468- 1 | WO-1-8.5' | Soil |
| 58468- 2 | RF-3' | Soil |

RESULTS OF ANALYSIS

| Laboratory Number: | 58468- 1 | 58468- 2 |
|---|---|---|
| Chloromethane: | ND<5 | ND<5 |
| Vinyl Chloride: | ND<5 | ND<5 |
| Bromomethane: | ND<5 | ND<5 |
| Chloroethane: | ND<5 | ND<5 |
| Trichlorofluoromethane: | ND<5 | ND<5 |
| 1,1-Dichloroethene: | ND<5 | ND<5 |
| Dichloromethane: | ND<10 | ND<10 |
| t-1,2-Dichloroethene: | ND<5 | ND<5 |
| 1,1-Dichloroethane: | ND<5 | ND<5 |
| c-1,2-Dichloroethene: | ND<5 | ND<5 |
| Chloroform: | ND<5 | ND<5 |
| 1,1,1-Trichloroethane: | ND<5 | ND<5 |
| Carbon tetrachloride: | ND<5 | ND<5 |
| 1,2-Dichloroethane: | ND<5 | ND<5 |
| Trichloroethene: | 16 | ND<5 |
| c-1,3-Dichloropropene: | ND<5 | ND<5 |
| 1,2-Dichloropropane: | ND<5 | ND<5 |
| t-1,3-Dichloropropene: | ND<5 | ND<5 |
| Bromodichloromethane: | ND<5 | ND<5 |
| 1,1,2-Trichloroethane: | ND<5 | ND<5 |
| Tetrachloroethene: | 58 | ND<5 |
| Dibromochloromethane: | ND<5 | ND<5 |
| Chlorobenzene: | 480 | ND<5 |
| Bromoform: | ND<5 | ND<5 |
| 1,1,2,2-Tetrachloroeth: | ND<5 | ND<5 |
| 1,3-Dichlorobenzene: | ND<5 | ND<5 |
| 1,2-Dichlorobenzene: | ND<5 | ND<5 |
| 1,4-Dichlorobenzene: | ND<5 | ND<5 |
| Concentration: | ug/Kg | ug/Kg |



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

Laboratory Number 58468

| Compound | Method Blank (ug/Kg) | RL (ug/Kg) | Spike Recovery (%) | Limits (%) | RPD (%) |
|---|---|---|---|---|---|
| Chloromethane: | ND<5 | 5 | | | |
| Vinyl Chloride: | ND<5 | 5 | | | |
| Bromomethane: | ND<5 | 5 | | | |
| Chloroethane: | ND<5 | 5 | | | |
| Trichlorofluoromethane: | ND<5 | 5 | | | |
| 1,1-Dichloroethene: | ND<5 | 5 | 114/123 | 44-184 | 8% |
| Dichloromethane: | ND<10 | 10 | | | |
| t-1,2-Dichloroethene: | ND<5 | 5 | | | |
| 1,1-Dichloroethane: | ND<5 | 5 | | | |
| c-1,2-Dichloroethene: | ND<5 | 5 | | | |
| Chloroform: | ND<5 | 5 | | | |
| 1,1,1-Trichloroethane: | ND<5 | 5 | | | |
| Carbon tetrachloride: | ND<5 | 5 | | | |
| 1,2-Dichloroethane: | ND<5 | 5 | | | |
| Trichloroethene: | ND<5 | 5 | 89/96 | 55-141 | 8% |
| c-1,3-Dichloropropene: | ND<5 | 5 | | | |
| 1,2-Dichloropropane: | ND<5 | 5 | | | |
| t-1,3-Dichloropropene: | ND<5 | 5 | | | |
| Bromodichloromethane: | ND<5 | 5 | | | |
| 1,1,2-Trichloroethane: | ND<5 | 5 | | | |
| Tetrachloroethene: | ND<5 | 5 | | | |
| Dibromochloromethane: | ND<5 | 5 | | | |
| Chlorobenzene: | ND<5 | 5 | 74/88 | 63-158 | 17% |
| Bromoform: | ND<5 | 5 | | | |
| 1,1,2,2-Tetrachloroeth: | ND<5 | 5 | | | |
| 1,3-Dichlorobenzene: | ND<5 | 5 | | | |
| 1,2-Dichlorobenzene: | ND<5 | 5 | | | |
| 1,4-Dichlorobenzene: | ND<5 | 5 | | | |

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
ug/Kg = Parts per billion (ppb)
QC File No. 58468

Senior Chemist
Account Manager



Certified Laboratories
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TOUCHSTONE
Attn: MICHAEL TAMBRONI

Project WALKER'S
Reported 27-July-1994

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

Chronology

Laboratory Number 58468

| Identification | Sampled | Received | Extracted | Analyzed | Run # | Lab # |
|---|---|---|---|---|---|---|
| WO-1-8.5' | 07/21/94 | 07/21/94 | 07/25/94 | 07/26/94 | | 1 |
| RF-3' | 07/21/94 | 07/21/94 | 07/25/94 | 07/26/94 | | 2 |
| WSP-1(A-D) | 07/21/94 | 07/21/94 | 07/25/94 | 07/26/94 | | 3 |


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TOUCHSTONE
Attn: MICHAEL TAMBRONI

Project WALKER'S
Reported 27-July-1994

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

| Laboratory Number | Sample Identification | Matrix |
|---|---|---|
| 58468- 1 | WO-1-8.5' | Soil |
| 58468- 2 | RF-3' | Soil |
| 58468- 3 | WSP-1(A-D) | Soil |

RESULTS OF ANALYSIS

| Laboratory Number: | | 58468- 1 | 58468- 2 | 58468- 3 |
|---|---|---|---|---|
| Cadmium | (Cd): | ND<0.5 | ND<0.5 | ND<0.5 |
| Chromium | (Cr): | 42 | 54 | 34 |
| Lead | (Pb): | 13 | 16 | 110 |
| Nickel | (Ni): | 37 | 35 | 31 |
| Zinc | (Zn): | 23 | 31 | 58 |
| Concentration: | | mg/Kg | mg/Kg | mg/Kg |



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

Laboratory Number 58468

| Compound | | Method Blank (mg/Kg) | RL (mg/Kg) | Spike Recovery (%) | Limits (%) | RPD (%) |
|---|---|---|---|---|---|---|
| Cadmium | (Cd): | ND<0.5 | 0.5 | 85/82 | 75-125 | 4% |
| Chromium | (Cr): | ND<5 | 5 | 82/81 | 75-125 | 1% |
| Lead | (Pb): | ND<5 | 5 | 86/96 | 75-125 | 11% |
| Nickel | (Ni): | ND<5 | 5 | 83/83 | 75-125 | 0% |
| Zinc | (Zn): | ND<5 | 5 | 84/87 | 75-125 | 4% |

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
mg/Kg = Parts per million (ppm)
QC File No. 58468

Senior Chemist
Account Manager


Certified Laboratories
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Precision Analytical Laboratory, Inc.
4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (510) 222-3002 FAX (510) 222-1251

# CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Date Received: 07/22/94
Date Analyzed: 07/27/94
Date Reported: 07/28/94
Job #: 76033

Attn: Rich Phaler
Superior Precision Analytical
1555 Burke Street, Unit I
San Francisco, CA 94124

Project: Walkers Hydraulic
Matrix: Soil

## Corrosivity Criteria
Title 22, 66708, SW 846, EPA 9045

| Lab I.D. | Client I.D. | pH |
|---|---|---|
| 76033-1 | WSP-1(A-D) | 6.6 |

## Ignitability Criteria
Title 22, 66702, SW 846, 7.1

| Lab I.D. | Client I.D. | Ignitability |
|---|---|---|
| 76033-1 | WSP-1(A-D) | Negative |

## Reactivity Criteria
Title 22, 66705, SW 846, 7.3.4.2/7.3.3.2
mg/Kg

| Lab I.D. | Client I.D. | Sulfide | Cyanide | MDL |
|---|---|---|---|---|
| 76033-1 | WSP-1(A-D) | 2 | ND<1.0 | 1.0 |

QA/QC: Spike Recovery for Cyanide: 57%

Jaime Chow
Laboratory Director

JC/dvc

# Appendix E

# Waste-Oil UST Soil Disposal

U95658

# NON-HAZARDOUS

# MATERIALS MANIFEST

**GENERATOR** TOUCHSTONE

Site Address 1049 9th Ave Oakland

Mailing

Phone :( ) Contact:

**TRANSPORTER**

Address

Phone :( ) Contact:

PHONE NAME

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Name: Signature

Truck No. Ship Date:

Time of Pick-Up: Time of Delivery:

**Consultant/Owner** WALKER'S HYDRAULIC, INC.

Address 2322-N BATES AVE.
CONCORD, CA. 94520

Phone :( ) 510 798-1217 Contact: RAY WALKER

I herby certify that the above named material is consistent with the information presented in the Waste Characterization Form and Contaminated Soil Description Form, and has been properly described, classified and packaged, and is in proper condition for transport according to applicable regulation.

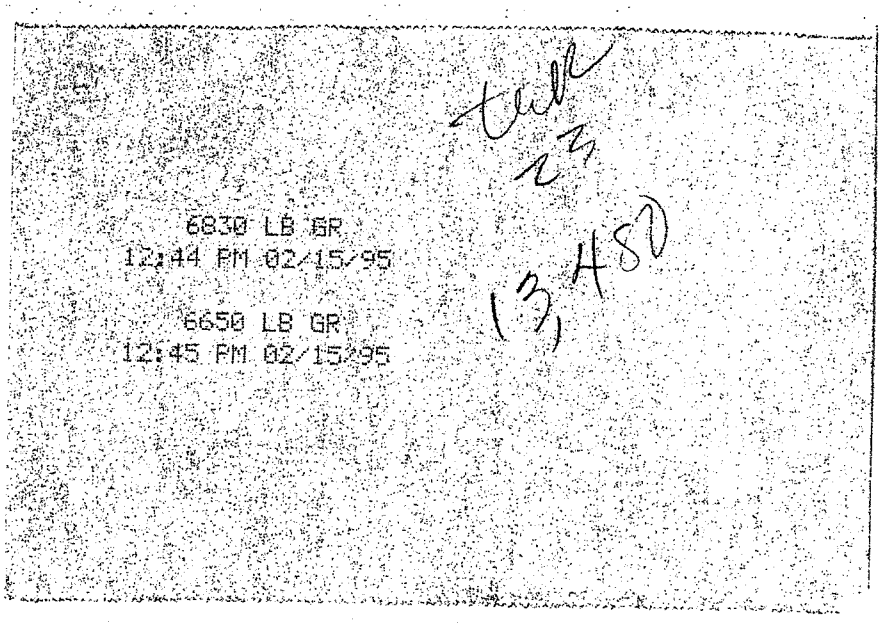
Name Date:

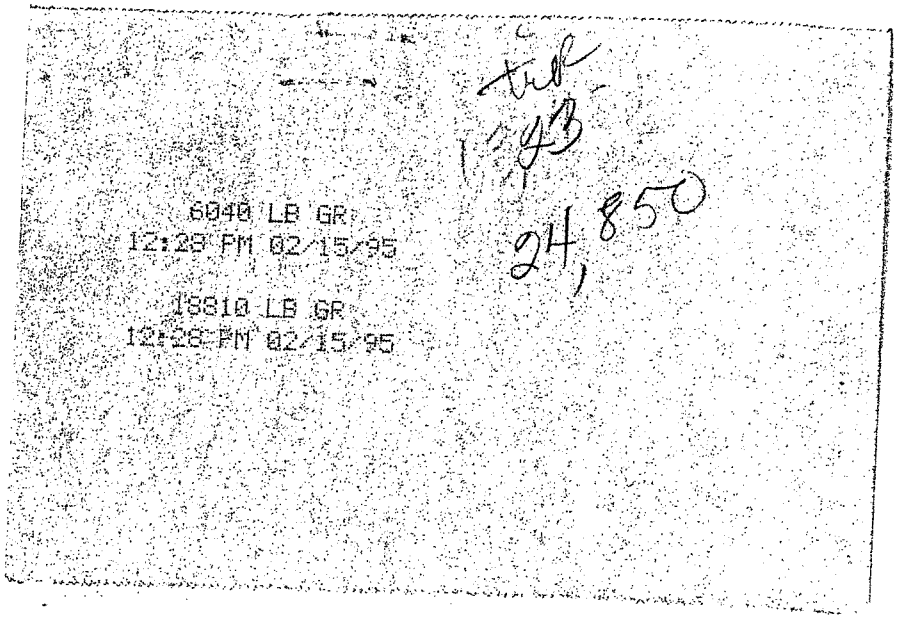
**Recycling Facility** REMEDIAL ENVIRONMENTAL MARKETING CO. INC.
2717 GOODRICK AVENUE RICHMOND, CA 94801

RECEIVED BY: S-356 R. Hargreaves
DATE: 2/15/95
Control No:

A COPY OF THIS SHEET MUST ACCOMPANY EVERY LOAD, AND MUST BE SUBMITTED AT THE GATE FOR ENTRY. ALL LOADS MUST BE SCHEDULED AT LEAST 24 HOURS IN ADVANCE. DELIVERIES MUST BE SCHEDULED ON A DAILY BASIS. ANY UNSCHEDULED LOADS MAY BE REFUSED AT THE GATE.

WHITE-FACILITY COPY YELLOW-TRANSPORTER COPY PINK-GENERATOR COPY


6830 LB GR
12:44 PM 02/15/95
6650 LB GR
12:45 PM 02/15/95
tank 22
13,480


6040 LB GR
12:28 PM 02/15/95
18810 LB GR
12:28 PM 02/15/95
tank 13
24,850

# AGREEMENT

This agreement is a contract between Remedial Environmental Marketing Company, Inc., a California corporation, ("REMCO") and Walker's Hydraulics, Inc. ("Supplier"). The parties agree as follows:

Supplier arranges for the disposal of certain non-hazardous materials. Supplier presently has an agreement with Touchstone hereinafter referred to as "Generator". If Supplier and Generator are the same, then all references herein to Generator shall be deemed to refer to, and be binding upon, Supplier.

1. The term of this agreement shall be from February 3, 1995, to February 3, 1995.

2. Supplier and Generator have hydrocarbon saturated soil or other recyclable material ("material") which Supplier and Remco believe is suitable for use by Remco. Supplier agrees to provide approximately 8 to 10 cu. yards of material during the term of this agreement for transportation and delivery to Remco's plant. Supplier shall supply no more than 10 cu. yards of material without additonal analytical. Supplier shall provide Remco with a schedule for deliveries of the material to Remco's plant. Supplier, is arranging and scheduling the transportation and delivery of the material, agrees to abide by Remco's reasonable directions and instructions for preparation, pick-up, transportation and delivery of the material to Remco's plant.

3. Supplier shall pay to Remco a fee of $ 45.00 per ton of material delivered to and accepted by Remco. Payments due Remco shall be net 15 days from receipt of invoice. Any payment not paid when due shall bear interest at the rate of 1.5% per month (18% APR) on the average daily balance until paid.

4. Remco will arrange for the transportation and delivery of the material to Remco's plant. As a prior condition and before transportation of the material, Supplier will furnish to Remco a California certified laboratory analysis of the subject material indicating the hydrocarbon content of the material and confirming the absence of hazardous material as defined by DTSC, Title 22, 40 CFR and all applicable state and federal laws and regulations. The parties agree that prior to any delivery of the material to Remco, Remco may sample and analyze such portions of the material to determine its suitability for Remco's use.

5. Net 15 days from receipt of invoice for fees assoicated with completion of soil removal. REMCO will perform thermal remediation of client's soil. Soil will be remediated to the point of non-detect.

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6. Subject to Remco's consent, Supplier may, within (10) days of the expiration of the term hereof, extend this agreement for a like term by giving written notice thereof to Remco, on the same terms and conditions except that the fee for each ton of material disposed of during said extended term shall be mutually agreed upon by Supplier and Remco.

7. Supplier agrees that nothing in this agreement shall be construed to obligate Remco to accept any material which contains material as defined by DTSC, Title 22, 40 CFR and all applicable state and federal laws and regulations or other non-conforming matter, or which is unsuitable for Remco's use. Non-conforming matter means any designated waste or other material which shall increase the risk or hazard to human health or to the environment incidental to the handling, transportation, use or disposal of such matter.

8. Supplier represents and agrees that the material shall conform to the laboratory analysis provided to Remco and that the material shall be in such condition that without additional preparation, it may be used by Remco with its existing equipment and production process, to produce a toxin-free product.

9. Should Remco affirm at any time that its samples and tests disclose that the material does not conform to the certified laboratory analysis provided by supplier, additional analysis or preparation of the material may be required before further acceptance of the material. The cost of such additional analysis or preparation shall be borne by the generator.

10. In the event that additional preparation of the material is required, following such notice of such fact from Remco, Remco shall promptly notify Supplier. Supplier may elect to either retransport the material and perform the additional preparation at its point of origin, or request that Remco handle such preparation on site. In addition to the fees described in paragraph 3 of this agreement, Suipplier agrees that any and all costs of said preparation shall be borne by Supplier. The parties agree that additional preparation shall mean the removal of any deleterious materials, such as metal, wood chunks, plastic, or any foreign materials which would be harmful to the recycling process or the productions of a toxin-free product. If such additional preparation is done by Remco, Remco shall be responsible for the removal and disposal of the deleterious and foreign materials from Remco's site of plant.

11. The material shall remain the property and responsibility of Generator, until delivery to and acceptance of the material by Remco. Acceptance of testing by Remco of portions of the material during the term hereof shall not modify of limit Supplier's obligation to deliver material conforming to this agreement and the analytic data sent by Supplier to Remco as described in paragraph 4. Generator agrees that Remco may, at its sole discretion, arrange for transportation and return of any non-conforming matter or material to Generator or the site of its initial location. Supplier agrees that, in the event Remco rejects any portion of the material as non-conforming, or otherwise will not issue a certificate of remediation for such material of any portion thereof, any long-term liability and ownership of the rejected of non-conforming material of matter shall be that of Generator.

12. Supplier and Generator agrees that all handling, reprocessing, and preparation of the material, whether by the Supplier or by Generator, and all other actions taken by Supplier and Generator as set forth herein shall be in compliance with all applicable federal, state, county or other local laws, ordinances and regulations.

13. The parties' relationship under this agreement shall be that of independent contractors, and nothing in this agreement shall be construed to constitute Remco, Supplier, or any of them or their employees of subcontractors, as an agent, a venture or partner of the other.

14. Any controversy or claim arising out of or relating to the terms of this agreement shall be settled by arbitration in accordance with the rules of the American Arbitration Association, and judgment on the award rendered by the arbitrator or arbitrators may be entered into any court having jurisdiction.

15. In the event Remco rejects all or a portion of the material and Supplier refuses or fails to retake possession, custody, or control thereof, that act, omission of failure will injure Remco in the amount that will be extremely difficult to determine and fix. Therefore, it is fixed in an amount of $5.00 per ton per day of materials which Supplier refuses or fails to receive or dispose of as described herein. Supplier agrees to pay said sum to Remco on demand, as liquidated damages. Nothing herin shall be construed to obligate Remco to possess, dispose or manage any portion of such rejected or nonconforming material.

16. Supplier hereby agrees to indemnify and hold Remco harmless from and against any and all liability, losses, damages, claims, costs or expenses (including reasonable attorney's fees), which directly or indirectly arise out of, and to the extent due to the Supplier's peformance of its duties hereunder, or that of its agents and employees.

17. Neither this agreement nor any rights, duties or obligations hereunder may be assigned by Supplier without the prior written consent of Remco.

18. This agreement supersedes any and all other agreements between the parties and may be modified only by an instrument in writing. Each party to this agreement acknowledges that no representations, inducements, promises, or agreements, orally or otherwise, have been made which are not embodied herein.

19. If any action at law or in equity, or if any arbitration, is necessary to enforce or interpret the terms of this agreement, the prevailing party shall be entitled to reasonable attorney's fees and costs, in addition to any other relief to which the party may be entitled.

20. Supplier agrees that Remco's contract and business, constitutes confidential and proprietary information of Remco, and that Supplier has access to confidential information concerning Remco's business, including the method, process, and location for disposal of the material and that this constitutes Remco's trade secret. Supplier agrees that it shall not disclose said trade secret directly or indirectly to any other person or use it in any way during the terms of this agreement or at any time thereafter, except as is required in the course of its obligations under this agreement.

21. The failure of any party at any time to require performance by the other party of any provision hereof, will not affect in any way the full right to require such performance at any time thereafter. Nor shall the waiver by either party of a breach of any provision be taken or held to be a waiver of the provision itself.

22. This agreement may be executed in several counterparts and all such executed counterparts shall constitute a single agreement.

23. Any provisions of this agreement which may be prohibited by law, or otherwise held invalid, shall be ineffective only to the extent of such prohibition or invalidity and shall not invalidate or render ineffective the remaining provisions of this agreement. This agreement shall be governed and construed in accordance with the Laws of the state of California.

By: _____ RAY WALKER
Signature type or print name

Title: PRES

Company: WALKERS HYDRAULICS

Date: ____/____/____

By: _____

Signed: _____

Title: _____

Company: Remedial Environmental Marketing Co., Inc.

Date: ____/____/____

**WALKER'S HYDRAULICS, INC.**
**2322-N BATES AVENUE**
**CONCORD, CALIFORNIA 94520**
**(510) 798-1217**

November 10, 1994

Mr. Richard Cochran
C & C Property Management
499 Embarcadero
Oakland, CA 94606

Re: Salle's Auto Body - Tank #2

Dear Dick: / INV. 4529

The enclosed extras for soil samples are required for landfill or disposal purposes (Remco). Touchstone automatically does this when soil is obviously dirty and will need to be hauled off.

I have sent the analysis to Remco and will have a cost to get rid of same very soon.

I will call you when I have it.

Sincerely,

Raymond E. Walker
President

Enclosure

# FACSIMILE TRANSMITTAL


## WALKER'S HYDRAULICS, INC.

2322-N Bates Avenue
Concord, CA 94520
Phone: (510) 798-1217
Fax: (510) 798-1218


Date: 11-10-94 Fax No: 529-2483

To: Lynn Company: Dowco

This fax contains 21 page(s), including this transmittal sheet.
Please contact the sender regarding any transmission problems.

PURCHASE ORDER

CUSTOMER NO. _____ PURCHASE ORDER NO. _____

Lynn
Call To bring in 8-10 yards
for attached analysis.

Thanks. Lee

S-356

AT LEAST 24 HOUR ADVANCE NOTIFICATION REQUIRED FOR FREIGHT DELIVERIES.

RECEIVING HOURS ARE FROM 10 AM TO 2 PM MONDAY THRU FRIDAY.

Touchstone Developments
684 30th Avenue
San Francisco, CA 94121

# INVOICE

| | |
|---|---|
| INVOICE # | 94-13 |
| DATE | 9-5-94 |

BILL TO:

Walker's Hydraulics
2322 N. Bates Ave. Unit N
Concord, CA 94520

Attention: Ray Walker

| P.O. NUMBER | TERMS | JOB ADDRESS |
|---|---|---|
| contract | net 30 days | Salle's Auto Body, Oakland, California |

| DESCRIPTION | AMOUNT |
|---|---|
| Observe, document and collect samples/reort preparation | $ 750.00 |
| Analytical costs | $1,897.50 |
| Normal 750.00 | |
| Extras for Soil | Paul 1147.50 |
| etc. | |

| | |
|---|---|
| SUB TOTAL | |
| TAX @ | |
| TOTAL | $ 2,647.50 |

BLUELINE HD 2501L

*please return this portion with your payment*

Salle's Auto Body 9-5-94 94-13 $ 2,647.50