



STID 5826

May 9, 1997

Susan L. Hugo  
Alameda County Department of Environmental Health  
Hazardous Materials Division  
1131 Harbor Bay Parkway, Room 250  
Alameda, CA 94502

Re: **First Quarter 1997**  
Days Inn  
1603 Powell Street  
Emeryville, California  
WA Job #149-1262-01

RECEIVED  
Hazardous Materials  
DIVISION  
MAY 13 1997

Dear Ms. Hugo:

This status report satisfies the quarterly reporting requirements prescribed by California Administrative Code Title 23 Waters, Division 3, Chapter 16 Article 5, Section 2652.d for the site referenced above (Figure 1). A summary of activities performed in the first quarter 1997 and proposed activities for the second quarter 1997 are presented below.

**First Quarter 1997 Activities**

- WA measured ground water depths and collected ground water samples from the site wells. The first quarter 1997 sampling was delayed until April 11, 1997 due to the recent change in ownership of the property. The samples were submitted to a state-certified analytical laboratory. The sample collection records are included as Attachment A and the certified analytic reports and chain-of-custody forms are included as Attachment B.
- WA calculated ground water elevations and compiled the analytic data (Table 1) and contoured ground water elevations (Figure 2).

**Second Quarter 1997 Activities**

- WA will measure water levels in each well and collect ground water samples near the end of the quarter.

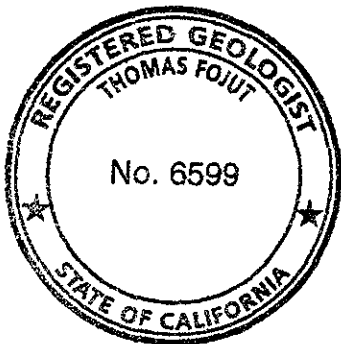
THE DATA, FINDINGS, RECOMMENDATIONS, SPECIFICATIONS, AND PROFESSIONAL OPINIONS CONTAINED IN THIS DOCUMENT WERE PREPARED SOLELY FOR THE USE OF CLEMENT CHEN AND ASSOCIATES WEISS ASSOCIATES MAKES NO OTHER WARRANTY, EITHER EXPRESSED OR IMPLIED, AND IS NOT RESPONSIBLE FOR THE INTERPRETATION BY OTHERS OF THE CONTENT HEREIN

Susan L. Hugo  
May 9, 1997

2

- WA will report the results of the second quarter well sampling. The report will include a summary of the quarter's activities, proposed activities for the upcoming quarter, tabulated ground water elevation and analytic data and a ground water elevation contour map.
- If hydrocarbon concentrations in ground water do not change significantly, WA will request that the Alameda County Department of Environmental Health review the case for closure.

Please call if you have any questions or comments.



Sincerely,  
Weiss Associates



Thomas Fojut, R.G.  
Project Hydrogeologist

Attachments:     Figures  
                         Table  
                         A – Sample Collection Records  
                         B – Certified Analytic Report and Chain-of-Custody Form

cc: Rod Chen, Clement Chen & Associates, 831 Montgomery Street, San Francisco, CA 94133

TF:tf  
J:\clemchen\1262\197QMR.doc

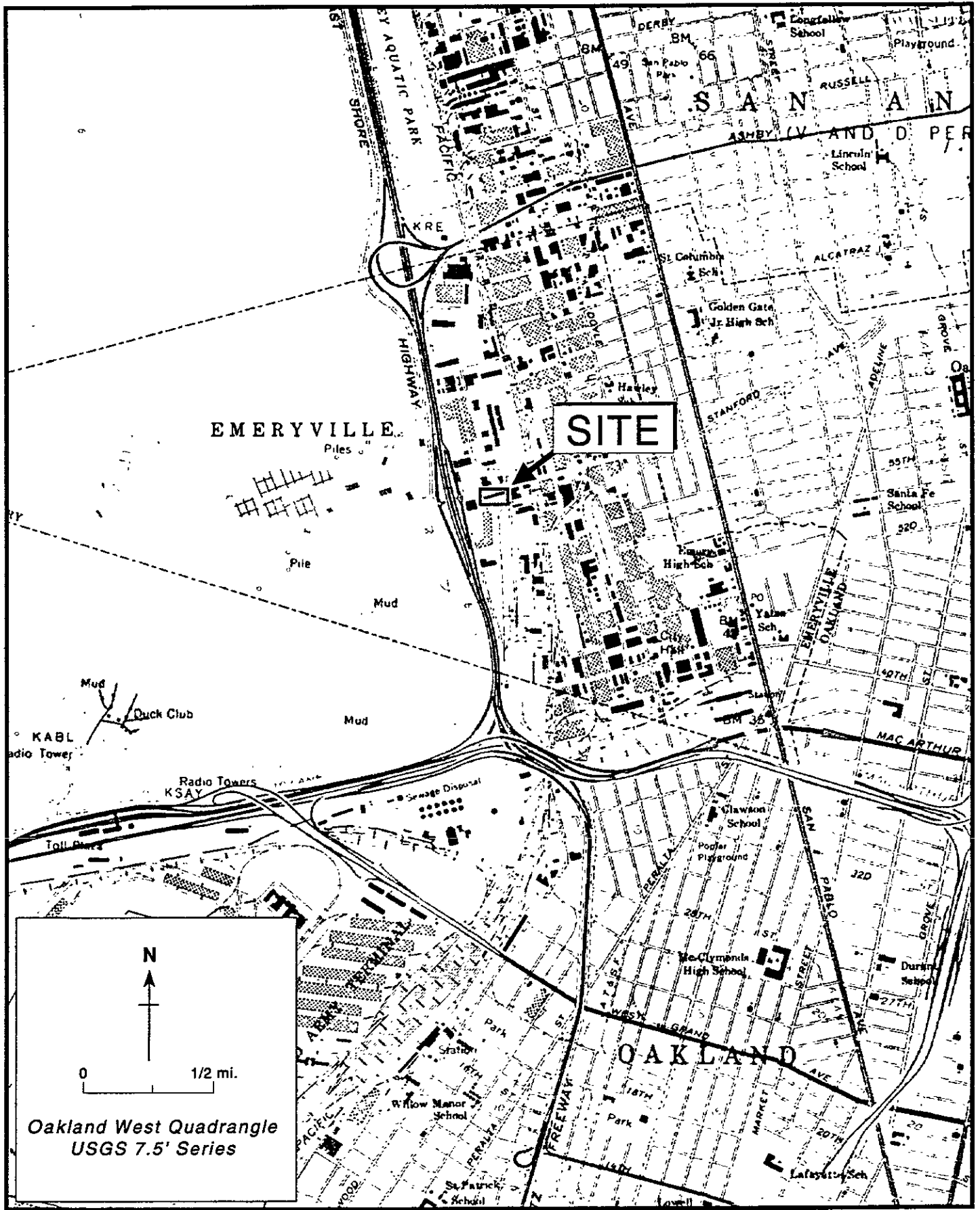


Figure 1. Site Location Map – Days Inn, 1603 Powell Street, Emeryville, California

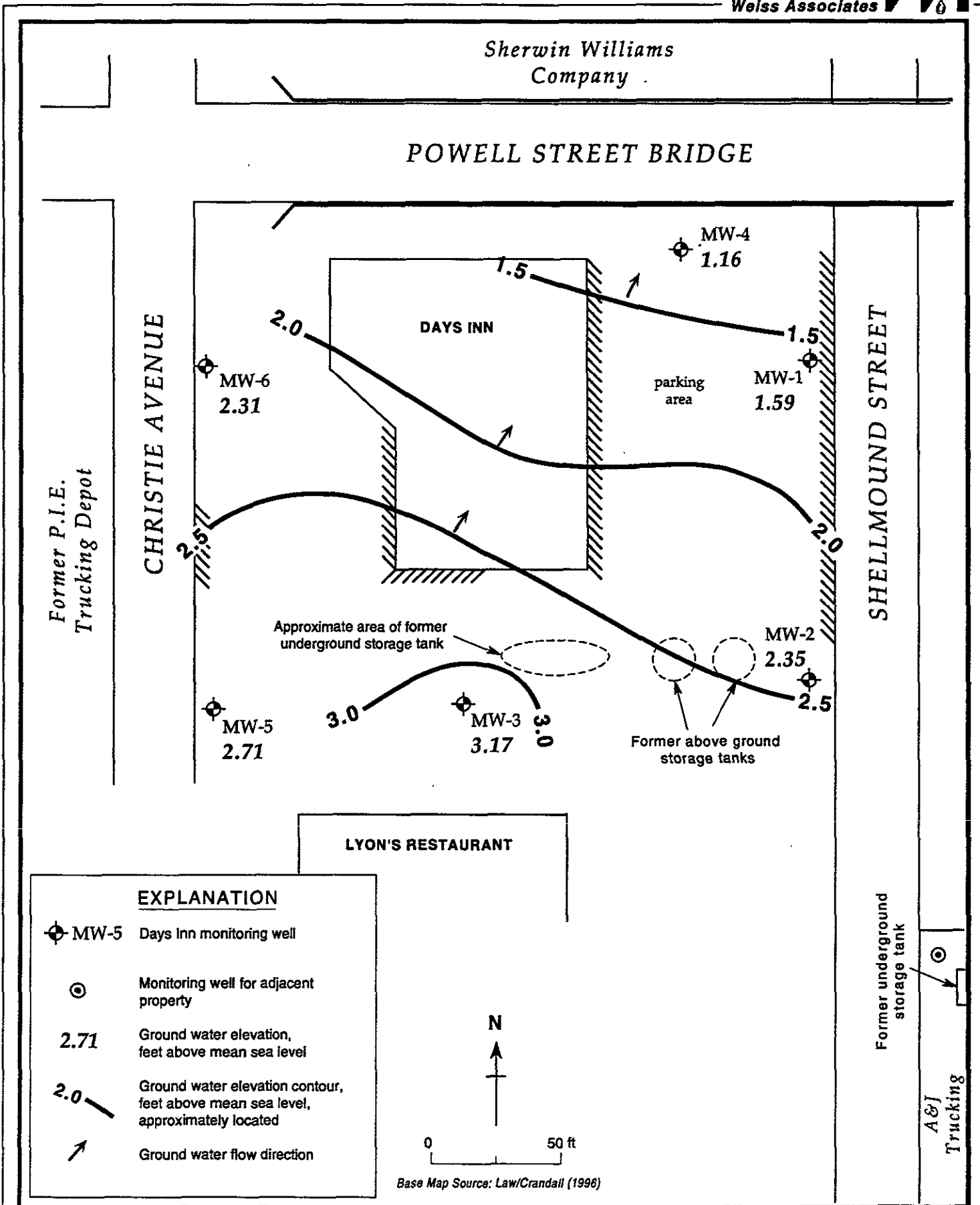


Figure 2. Ground Water Elevations - April 11, 1997 - Days Inn Hotel, 1603 Powell Street, Emeryville, California

Table 1. Ground Water Elevations and Analytic Data - Days Inn, 1603 Powell St, Emeryville, California

Well ID/ TOC Elevation (ft above msl)	Sample Date	Water Depth (ft)	Ground Water Elevation (ft above msl)	(3000 mg/l) TDS	TPH-MO	TPH-D	TPH-G	parts per billion (µg/L)						PAHs
								B	T	E	X	MTBE		
MW-1 8.39	04/24/96 12/19/96 04/11/97	6.72 6.88 6.80	1.67 1.51 1.59	--- 7,210,000 ---	<200 1,100 <sup>e</sup> ---	660 1,700 <sup>d</sup> 320 <sup>d</sup>	<50 --- <50	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<2.0 <0.5 0.97	<50 --- <5.0	f a b	
MW-2 8.80	04/24/96 12/19/96 04/11/97	6.43 5.73 6.45	2.37 3.07 2.35	--- 1,000,000 ---	300 1,800 <sup>e</sup> ---	1,600 1,600 <sup>d</sup> 370	<50 --- <50	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<2.0 <0.5 <0.5	<50 --- <5.0	c ND c, X ND ---	
MW-3 9.49	04/24/96 12/19/96 04/11/97	6.41 5.14 6.32	3.08 4.35 3.17	--- 1,870,000 ---	<200 1,300 <sup>e</sup> ---	580 1,000 <sup>d</sup> 330	<50 --- <50	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<2.0 <0.5 <0.5	<50 --- <5.0	c ND c ND ---	
MW-4 7.96	04/24/96 12/19/96 04/11/97	7.39 6.35 6.80	0.57 1.61 1.16	--- 3,960,000 ---	<200 360 <sup>e</sup> ---	ND 130 <sup>d</sup> <50	<50 --- <50	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<2.0 <0.5 <0.5	<50 --- <5.0	c ND c ND ---	
MW-5 10.04	04/24/96 12/19/96 04/11/97	7.49 6.47 7.33	2.55 3.57 2.71	--- 1,100,000 ---	<200 1,800 <sup>e</sup> ---	440 770 <sup>d</sup> 500 <sup>d</sup>	<50 --- <50	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<2.0 <0.5 <0.5	<50 --- <5.0	c ND c ND ---	
MW-6 9.05	04/24/96 12/19/96 04/11/97	6.77 6.08 6.74	2.28 2.97 2.31	--- 2,080,000 ---	<200 650 <sup>e</sup> ---	230 490 <sup>d</sup> 88 <sup>d</sup>	<50 --- <50	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<0.5 <0.5 <0.5	<2.0 <0.5 <0.5	<50 --- <5.0	c ND c ND ---	

<n = Not detected at laboratory method detection limit of n µg/L

Abbreviations:

TOC = Top-of-well casing  
 msl = Mean sea level  
 TDS = Total dissolved solids by EPA Method 160.1  
 TPH-MO = Total petroleum hydrocarbons as motor oil by modified EPA Method 8015  
 TPH-D = Total petroleum hydrocarbons as diesel by modified EPA Method 8015  
 TPH-G = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015  
 B = Benzene by EPA Method 8020  
 T = Toluene by EPA Method 8020  
 E = Ethylbenzene by EPA Method 8020  
 X = Xylenes by EPA Method 8020  
 MTBE = Methyl tertiary-butyl ether by EPA Method 8020  
 PAHs = Polynuclear aromatic hydrocarbons by EPA Method 8270  
 --- = Not analyzed

Notes:

a = 93 ppb acenaphthene, 12 ppb fluoranthene, 12 ppb fluorene, 41 ppb phenanthrene, 12 ppb pyrene detected  
 b = 47 ppb acenaphthene, 3.8 ppb anthracene, 9.9 ppb fluoranthene, 6.0 ppb fluorene, 2.7 ppb naphthalene, 25 ppb phenanthrene, 8.0 ppb pyrene detected  
 c = No PAHs detected above laboratory method detection limits  
 d = Laboratory reported that chromatogram does not represent a standard diesel pattern  
 e = Laboratory reported that chromatogram does not represent a standard motor oil pattern  
 f = 85 ppb acenaphthene, 15 ppb fluorene, 34 ppb phenanthrene detected

**ATTACHMENT A**

**SAMPLE COLLECTION RECORDS**

# WATER SAMPLING DATA



Job Name: Days Inn Job #: 149-1262-109 Sample ID #: mw-1 Well Name: mw-1  
 Sampled By: SLG Date: 4/11/97

<b>SAMPLE TYPE</b>						
<input checked="" type="checkbox"/> Original	<input type="checkbox"/> Duplicate	<input type="checkbox"/> Trip Blank	<input type="checkbox"/> Field Blank	<input type="checkbox"/> Equip. Blank	<input type="checkbox"/> Other:	
<b>WEATHER</b>						
<input checked="" type="checkbox"/> Sunny	<input type="checkbox"/> Cloudy	<input type="checkbox"/> Rainy	<input type="checkbox"/> Drizzly	<input type="checkbox"/> Breezy	<input type="checkbox"/> Windy	Temperature: <u>75°</u>
<b>WELL TYPE</b>						
<input checked="" type="checkbox"/> Monitoring	<input type="checkbox"/> Extraction	<input type="checkbox"/> Piezometer	<input type="checkbox"/> Other:		Location: <u>E. side of Bldg</u>	
<b>WELL MEASUREMENTS</b>		<b>Measurement</b>	<b>Time</b>	<b>Date</b>	<b>Initials</b>	<b>Formulas/Conversions</b> r = well radius in ft. h = ht of water col in ft. vol. in cyl. - $\pi r^2 h$ 7.48 gal/ft <sup>3</sup> V <sub>2"</sub> casing = 0.163 gal/ft V <sub>3"</sub> casing = 0.367 gal/ft V <sub>4"</sub> casing = 0.653 gal/ft V <sub>6"</sub> casing = 1.47 gal/ft V <sub>8"</sub> casing = 2.61 gal/ft
Depth to Water	DTW	<u>6.80</u> ft.	<u>1030</u>	<u>4/11/97</u>	<u>SLG</u>	
Depth to Product	DTP	<u>N/A</u> ft.				
Product Thickness	PT	<u>N/A</u> ft.				
Specified Well Depth	SWD	<u>N/A</u> ft.				
Measured Well Depth	MWD	<u>15.08</u> ft.				
Well Diameter	D					

EVACUATION CALCULATIONS	Formula	Value
Height of Water Column	HWC=MWD - DTW	<u>8.28</u> ft.
Well Casing Volume	WCV=HWC * V <sub>D</sub>	<u>1.34</u> gal.
Well Casings Volumes to be Evacuated	N	<u>3</u>
Total to be Evacuated	=WCV * N	<u>4.04</u> gal.

<b>WELL STATUS</b>					
Casing:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> Problem:	Seal:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> Problem:
Plug:	<input type="checkbox"/> OK	<input type="checkbox"/> Problem:	Vault:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> Problem:

<b>EVACUATION EQUIPMENT</b>								
Pump ID#:	<input type="checkbox"/> Bladder	<input type="checkbox"/> Submersible	<input type="checkbox"/> Sump	<input type="checkbox"/> Peristaltic	Dedicated:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Bailer ID#: <u>85905AD2</u>	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input type="checkbox"/> Stainless	Dedicated:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

<b>EQUIPMENT DECONTAMINATION</b>				<b>Time</b>	<b>Date</b>	<b>Initials</b>
<input type="checkbox"/> Steam	<input type="checkbox"/> Alconox	<input type="checkbox"/> DI Water	<input type="checkbox"/> Other:			

<b>Samples Collected</b>										
Qty	Sample ID	Cont. Type	Vol.	Fil.	Ref.	Pres.	Analyze For	Analytic Method	Turn	LAB
<u>3</u>	<u>mw-1</u>	<u>w/v</u>	<u>40ml</u>	<u>N</u>	<u>Y</u>	<u>HCL</u>	<u>THG/BTEX</u>	<u>8015/20</u>	<u>N</u>	<u>McC</u>
<u>1</u>	<u>↓</u>	<u>N/A</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>None</u>	<u>TPH-D</u>	<u>8015</u>	<u>↓</u>	<u>↓</u>
<u>1</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>PAH</u>	<u>8270</u>	<u>↓</u>	<u>↓</u>

Notes:

# WATER SAMPLING DATA



Job Name: Days Inn Job #: 109-1262-107 Sample ID #: MW-1 Well Name: MW-1  
 Sampled By: SLG Date: 4/11/97

## CALIBRATIONS:

Meter	Manufacturer	ID Number	Calibration Performed	Date	Time	Initials
pH			<input type="checkbox"/> 4 <input type="checkbox"/> 7 <input type="checkbox"/> 10			
Thermometer						
Conductivity						
Turbidity						
ORP						
DO						

## MEASUREMENTS

pH	Temp. °C	Ec SC/μmhos	Turb ntu	Eh mV	D.O. ppm	Volume Purged	Date	Time	Initials

## SAMPLING

SAMPLING METHOD:			SAMPLE TIME: <u>1302</u>		
Pump ID#:	<input type="checkbox"/> Bladder	<input type="checkbox"/> Submersible	<input type="checkbox"/> Sump	<input type="checkbox"/> Peristaltic	Dedicated: <input type="checkbox"/> Yes <input type="checkbox"/> No
Tubing:	<input type="checkbox"/> Tygon	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input type="checkbox"/> Disposable
Bailer ID#:	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input checked="" type="checkbox"/> Disposable	Dedicated: <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Port:	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input type="checkbox"/> Stainless	<input type="checkbox"/> Brass <input type="checkbox"/> Steel
Flow Rate: <u>        </u> gpm	Totalizer: <u>        </u> gal.		Time: <u>        </u>	Date: <u>        </u>	

EVACUATION TIME	1st Purge	2nd Purge	3rd Purge	4th Purge	Total Evac. Vol.:	
Stop: <u>1300</u>					<u>4.0</u>	gal.
Start: <u>1252</u>					<u>8</u>	min.
Elapsed Time:					<u>.50</u>	gpm

## WELL RECOVERY

	Evacuated Dry?	Time	Volume	DTW
	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
DTW During Evacuation:		ft.		
DTW During Evacuation:	<u>N/A</u>	ft.		
.80 * HWC:		ft.	MWD - 80%HWC = 80%DTW	ft
DTW at Sample Time:		ft.	% Recovery at Sample Time:	%

Calculations:

## SAMPLE

Color:	<input checked="" type="checkbox"/> Clear <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Brown <input type="checkbox"/> Tan <input type="checkbox"/> Black <input checked="" type="checkbox"/> Cloudy	<input type="checkbox"/> Other:
Odor:	<input checked="" type="checkbox"/> None.. <input type="checkbox"/> Gasoline <input type="checkbox"/> Diesel <input type="checkbox"/> Solvent <input type="checkbox"/> Sulfur <input type="checkbox"/> Metallic	<input type="checkbox"/> Other:
Solids:	<input type="checkbox"/> None <input checked="" type="checkbox"/> Trace Quantity <input type="checkbox"/> Small Quantity <input type="checkbox"/> Moderate Quantity <input type="checkbox"/> Large Quantity	
	<input checked="" type="checkbox"/> Silt <input type="checkbox"/> Sand <input type="checkbox"/> Gravel <input type="checkbox"/> Organic Material	<input type="checkbox"/> Other:
	<input type="checkbox"/> Separate Phase Hydrocarbons <input type="checkbox"/> Sheen <input type="checkbox"/> Measurable Amount:	



# WATER SAMPLING DATA



Job Name: Days Fun Job #: 149-1262-107 Sample ID #: MW-2 Well Name: MW-2  
 Sampled By: SLG Date: 4/11/97

**SAMPLE TYPE**  
 Original    Duplicate    Trip Blank    Field Blank    Equip. Blank    Other:

**WEATHER**  
 Sunny    Cloudy    Rainy    Drizzly    Breezy    Windy   .   Temperature: 75°

**WELL TYPE**  
 Monitoring    Extraction    Piezometer    Other:   Location: E. of MW-3

WELL MEASUREMENTS		Measurement	Time	Date	Initials
Depth to Water	DTW	<u>6.45</u> ft.	<u>1034</u>	<u>4/11/97</u>	<u>SLG</u>
Depth to Product	DTP	<u>N/A</u> ft.			
Product Thickness	PT	<u>↓</u> ft.			
Specified Well Depth	SWD	<u>↓</u> ft.			
Measured Well Depth	MWD	<u>16.09</u> ft.			
Well Diameter	D	<u>2</u> in.			

**Formulas/Conversions**  
 r = well radius in ft.  
 h = ht of water col in ft.  
 vol. in cyl. -  $\pi r^2 h$   
 7.48 gal/ft<sup>3</sup>  
 V<sub>2"</sub> casing = 0.163 gal/ft  
 V<sub>3"</sub> casing = 0.367 gal/ft  
 V<sub>4"</sub> casing = 0.653 gal/ft  
 V<sub>6"</sub> casing = 1.47 gal/ft  
 V<sub>8"</sub> casing = 2.61 gal/ft

EVACUATION CALCULATIONS	Formula	Value
Height of Water Column	HWC=MWD - DTW	<u>8.64</u> ft.
Well Casing Volume	WCV= HWC * V <sub>b</sub>	<u>1.40</u> gal.
Well Casings Volumes to be Evacuated	N	<u>3</u>
Total to be Evacuated	=WCV * N	<u>4.22</u> gal.

**WELL STATUS**  
 Casing:  OK    Problem:   Seal:  OK    Problem:  
 Plug:  OK    Problem:   Vault:  OK    Problem:

**EVACUATION EQUIPMENT**  
 Pump ID#:    Bladder    Submersible    Sump    Peristaltic   Dedicated:  Yes    No  
 Bailer ID#: if possible    PVC    Polyethylene    Teflon    Stainless   Dedicated:  Yes    No

**EQUIPMENT DECONTAMINATION**  
 Steam    Alconox    DI Water    Other:   Time   Date   Initials

**Samples Collected**

Qty	Sample ID	Cont. Type	Vol.	Fil.	Ref.	Pres.	Analyze For	Analytic Method	Turn	LAB
<u>3</u>	<u>MW-2</u>	<u>WV</u>	<u>40ml</u>	<u>N</u>	<u>Y</u>	<u>HCL</u>	<u>TPH-G/BTEX</u>	<u>8015/20</u>	<u>N</u>	<u>MCC</u>
<u>1</u>	<u>↓</u>	<u>IL</u>	<u>IL</u>	<u>↓</u>	<u>↓</u>	<u>None</u>	<u>TPH-D</u>	<u>8015</u>	<u>↓</u>	<u>↓</u>

Notes:

# WATER SAMPLING DATA

Weiss Associates



Job Name: Days Fun Job #: 149-1262-107 Sample ID #: MW-2 Well Name: MW-2  
 Sampled By: SLG Date: 4/11/97

CALIBRATIONS:								
Meter	Manufacturer	ID Number	Calibration Performed			Date	Time	Initials
pH			<input type="checkbox"/> 4	<input type="checkbox"/> 7	<input checked="" type="checkbox"/> 10			
Thermometer								
Conductivity								
Turbidity								
ORP								
DO								

MEASUREMENTS									
pH	Temp. °C	Ec SC/μmhos	Turb ntu	Eh mV	D.O. ppm	Volume Purged	Date	Time	Initials

SAMPLING									
SAMPLING METHOD:					SAMPLE TIME: <u>1327</u>				
Pump ID#:	<input type="checkbox"/> Bladder	<input type="checkbox"/> Submersible	<input type="checkbox"/> Sump	<input type="checkbox"/> Peristaltic	Dedicated: <input type="checkbox"/> Yes <input type="checkbox"/> No				
Tubing:	<input type="checkbox"/> Tygon	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input type="checkbox"/> Disposable	Dedicated: <input type="checkbox"/> Yes <input type="checkbox"/> No			
Bailer ID#:	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input checked="" type="checkbox"/> Disposable	Dedicated: <input type="checkbox"/> Yes <input type="checkbox"/> No				
Sample Port:	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input type="checkbox"/> Stainless	<input type="checkbox"/> Brass	<input type="checkbox"/> Steel			
Flow Rate: <u>gpm</u>	Totalizer: <u>gal</u>			Time: <u>        </u>	Date: <u>        </u>				
EVACUATION TIME	1st Purge	2nd Purge	3rd Purge	4th Purge	Total Evac. Vol.:				
Stop: <u>1325</u>					<u>4.5</u> gal.				
Start: <u>1318</u>					Total Evac. Time:		<u>7</u> min.		
Elapsed Time:					Evacuation Rate:		<u>        </u> gpm		

WELL RECOVERY				Time	Volume	DTW
Evacuated Dry? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
DTW During Evacuation:		ft.				
DTW During Evacuation:		ft.				
.80 * HWC:		ft.	MWD - 80%HWC = 80%DTW			ft
DTW at Sample Time:		ft.	% Recovery at Sample Time:			%
Calculations:						

SAMPLE		
Color:	<input checked="" type="checkbox"/> Clear <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Brown <input type="checkbox"/> Tan <input type="checkbox"/> Black <input type="checkbox"/> Cloudy	<input type="checkbox"/> Other:
Odor:	<input checked="" type="checkbox"/> None <input type="checkbox"/> Gasoline <input type="checkbox"/> Diesel <input type="checkbox"/> Solvent <input type="checkbox"/> Sulfur <input type="checkbox"/> Metallic	<input type="checkbox"/> Other:
Solids:	<input checked="" type="checkbox"/> None <input type="checkbox"/> Trace Quantity <input type="checkbox"/> Small Quantity <input type="checkbox"/> Moderate Quantity <input type="checkbox"/> Large Quantity	
	<input type="checkbox"/> Silt <input type="checkbox"/> Sand <input type="checkbox"/> Gravel <input type="checkbox"/> Organic Material	<input type="checkbox"/> Other:
	<input type="checkbox"/> Separate Phase Hydrocarbons <input type="checkbox"/> Sheen <input type="checkbox"/> Measurable Amount:	

# WATER SAMPLING DATA

Job Name: Days Inn Job #: 144-1262-107 Sample ID #: MW-3 Well Name: MW-3  
 Sampled By: SLG Date: 4/11/97

<b>SAMPLE TYPE</b>						
<input checked="" type="checkbox"/> Original	<input type="checkbox"/> Duplicate	<input type="checkbox"/> Trip Blank	<input type="checkbox"/> Field Blank	<input type="checkbox"/> Equip. Blank	<input type="checkbox"/> Other:	
<b>WEATHER</b>						
<input checked="" type="checkbox"/> Sunny	<input type="checkbox"/> Cloudy	<input type="checkbox"/> Rainy	<input type="checkbox"/> Drizzly	<input type="checkbox"/> Breezy	<input type="checkbox"/> Windy	Temperature: <u>75°</u>
<b>WELL TYPE</b>						
<input checked="" type="checkbox"/> Monitoring	<input type="checkbox"/> Extraction	<input type="checkbox"/> Piezometer	<input type="checkbox"/> Other:		Location: <u>No. of Lyons Rest.</u>	
<b>WELL MEASUREMENTS</b>		<b>Measurement</b>	<b>Time</b>	<b>Date</b>	<b>Initials</b>	<b>Formulas/Conversions</b>
Depth to Water	DTW	<u>6.32</u> ft.	<u>1010</u>	<u>4/11/97</u>	<u>SLG</u>	$r = \text{well radius in ft.}$
Depth to Product	DTP	<u>N/A</u> ft.				$h = \text{ht of water col in ft.}$
Product Thickness	PT	<u>N/A</u> ft.				$\text{vol. in cyl.} = \pi r^2 h$
Specified Well Depth	SWD	<u>N/A</u> ft.				$7.48 \text{ gal/ft}^3$
Measured Well Depth	MWD	<u>15.03</u> ft.				$V_{2"} \text{ casing} = 0.163 \text{ gal/ft}$
Well Diameter	D					$V_{3"} \text{ casing} = 0.367 \text{ gal/ft}$
						$V_{4"} \text{ casing} = 0.653 \text{ gal/ft}$
						$V_{6"} \text{ casing} = 1.47 \text{ gal/ft}$
						$V_{8"} \text{ casing} = 2.61 \text{ gal/ft}$

EVACUATION CALCULATIONS	Formula	Value
Height of Water Column	$HWC = MWD - DTW$	<u>8.71</u> ft.
Well Casing Volume	$WCV = HWC * V_{2"}$	<u>1.41</u> gal.
Well Casings Volumes to be Evacuated	N	<u>3</u>
Total to be Evacuated	$= WCV * N$	<u>4.25</u> gal.

<b>WELL STATUS</b>					
Casing:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> Problem:	Seal:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> Problem:
Plug:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> Problem:	Vault:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> Problem:

<b>EVACUATION EQUIPMENT</b>								
Pump ID#:	<input type="checkbox"/> Bladder	<input type="checkbox"/> Submersible	<input type="checkbox"/> Sump	<input type="checkbox"/> Peristaltic	Dedicated:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Bailer ID#:	<u>Disposable</u>	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input type="checkbox"/> Stainless	Dedicated:	<input type="checkbox"/> Yes	<input type="checkbox"/> No

<b>EQUIPMENT DECONTAMINATION</b>				<b>Time</b>	<b>Date</b>	<b>Initials</b>
<input type="checkbox"/> Steam	<input type="checkbox"/> Alconox	<input type="checkbox"/> DI Water	<input type="checkbox"/> Other:			

Samples Collected										
Qty	Sample ID	Cont. Type	Vol.	Fil.	Ref.	Pres.	Analyze For	Analytic Method	Turn	LAB
<u>3</u>	<u>MW-3</u>	<u>WU</u>	<u>4oz</u>	<u>N</u>	<u>U</u>	<u>HCL</u>	<u>TPH-G/BTEX</u>	<u>8015/20</u>	<u>N</u>	<u>MCC</u>
<u>1</u>	<u>MW-3</u>	<u>W/A</u>	<u>1R</u>	<u>↓</u>	<u>↓</u>	<u>None</u>	<u>TPH-D</u>	<u>8015</u>	<u>↓</u>	<u>↓</u>

Notes:

# WATER SAMPLING DATA

Weiss Associates



Job Name: DAYS INN Job #: 149-1262-107 Sample ID #: MW-3 Well Name: MW-3  
 Sampled By: SLB Date: 4/11/97

## CALIBRATIONS:

Meter	Manufacturer	ID Number	Calibration Performed	Date	Time	Initials
pH			<input type="checkbox"/> 4 <input type="checkbox"/> 7 <input type="checkbox"/> 10			
Thermometer						
Conductivity						
Turbidity						
ORP						
DO						

## MEASUREMENTS

pH	Temp. °C	Ec SCI/μmhos	Turb ntu	Eh mV	D.O. ppm	Volume Purged	Date	Time	Initials

## SAMPLING

SAMPLING METHOD:			SAMPLE TIME: <u>1233</u>		
Pump ID#:	<input type="checkbox"/> Bladder	<input type="checkbox"/> Submersible	<input type="checkbox"/> Sump	<input type="checkbox"/> Peristaltic	Dedicated: <input type="checkbox"/> Yes <input type="checkbox"/> No
Tubing:	<input type="checkbox"/> Tygon	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input type="checkbox"/> Disposable
Bailer ID#:	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input checked="" type="checkbox"/> Disposable	Dedicated: <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Port:	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input type="checkbox"/> Stainless	<input type="checkbox"/> Brass <input type="checkbox"/> Steel
Flow Rate: <u>        </u> gpm	Totalizer: <u>        </u> gal.	Time: <u>        </u>	Date: <u>        </u>		

EVACUATION TIME	1st Purge	2nd Purge	3rd Purge	4th Purge	Total Evac. Vol.:	gal.
Stop: <u>1230</u>					Total Evac. Time:	<u>5</u> gal.
Start: <u>1222</u>					Evacuation Rate:	<u>8</u> min.
Elapsed Time:						<u>.62</u> gpm

## WELL RECOVERY

	Evacuated Dry?	Time	Volume	DTW
	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
DTW During Evacuation:	ft.			
DTW During Evacuation:	ft.			
.80 * HWC:	<u>N/A</u> ft.	MWD - 80%HWC = 80%DTW		ft
DTW at Sample Time:	ft.	% Recovery at Sample Time:		%

Calculations:

## SAMPLE

Color:	<input type="checkbox"/> Clear <input checked="" type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Brown <input type="checkbox"/> Tan <input type="checkbox"/> Black <input type="checkbox"/> Cloudy	<input type="checkbox"/> Other:
Odor:	<input checked="" type="checkbox"/> None.. <input type="checkbox"/> Gasoline <input type="checkbox"/> Diesel <input type="checkbox"/> Solvent <input type="checkbox"/> Sulfur <input type="checkbox"/> Metallic	<input type="checkbox"/> Other:
Solids:	<input type="checkbox"/> None <input type="checkbox"/> Trace Quantity <input checked="" type="checkbox"/> Small Quantity <input type="checkbox"/> Moderate Quantity <input type="checkbox"/> Large Quantity	
	<input checked="" type="checkbox"/> Silt <input type="checkbox"/> Sand <input type="checkbox"/> Gravel <input type="checkbox"/> Organic Material	<input type="checkbox"/> Other:
	<input type="checkbox"/> Separate Phase Hydrocarbons <input type="checkbox"/> Sheen <input type="checkbox"/> Measurable Amount:	

# WATER SAMPLING DATA



Job Name: Dags Inn Job #: 149-1262-107 Sample ID #: MU-4 Well Name: MU-4  
 Sampled By: SLG Date: 4/11/97

## CALIBRATIONS:

Meter	Manufacturer	ID Number	Calibration Performed	Date	Time	Initials
pH			<input type="checkbox"/> 4 <input type="checkbox"/> 7 <input type="checkbox"/> 10			
Thermometer						
Conductivity						
Turbidity						
ORP						
DO						

## MEASUREMENTS

pH	Temp. °C	Ec SC/μmhos	Turb ntu	Eh mV	D.O. ppm	Volume Purged	Date	Time	Initials

## SAMPLING

SAMPLING METHOD:				SAMPLE TIME: <u>1052</u>		
Pump ID#:	<input type="checkbox"/> Bladder	<input type="checkbox"/> Submersible	<input type="checkbox"/> Sump	<input type="checkbox"/> Peristaltic	Dedicated: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Tubing:	<input type="checkbox"/> Tygon	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input type="checkbox"/> Disposable	Dedicated: <input type="checkbox"/> Yes <input type="checkbox"/> No
Bailer ID#:	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input checked="" type="checkbox"/> Disposable	Dedicated: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Sample Port:	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input type="checkbox"/> Stainless	<input type="checkbox"/> Brass	<input type="checkbox"/> Steel
Flow Rate: <u>        </u> gpm	Totalizer: <u>        </u> gal.	Time: <u>        </u>	Date: <u>        </u>			

EVACUATION TIME	1st Purge	2nd Purge	3rd Purge	4th Purge	Total Evac. Vol.:	Total Evac. Time:	Evacuation Rate:
Stop: <u>1050</u>					<u>6.5</u> gal.	<u>1.3</u> min.	<u>1.5</u> gpm
Start: <u>1037</u>							
Elapsed Time:							

WELL RECOVERY	Time	Volume	DTW
Evacuated Dry? <input type="checkbox"/> Yes <input type="checkbox"/> No			
DTW During Evacuation:	ft.		
DTW During Evacuation:	ft.		
.80 * HWC:	ft.	MWD - 80%HWC = 80%DTW	ft
DTW at Sample Time:	ft.	% Recovery at Sample Time:	%
Calculations:			

SAMPLE			
Color:	<input type="checkbox"/> Clear <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Brown <input checked="" type="checkbox"/> Tan <input type="checkbox"/> Black <input type="checkbox"/> Cloudy	<input type="checkbox"/> Other:	
Odor:	<input checked="" type="checkbox"/> None <input type="checkbox"/> Gasoline <input type="checkbox"/> Diesel <input type="checkbox"/> Solvent <input type="checkbox"/> Sulfur <input type="checkbox"/> Metallic	<input type="checkbox"/> Other:	
Solids:	<input type="checkbox"/> None <input checked="" type="checkbox"/> Trace Quantity <input type="checkbox"/> Small Quantity <input type="checkbox"/> Moderate Quantity <input type="checkbox"/> Large Quantity		
	<input checked="" type="checkbox"/> Silt <input type="checkbox"/> Sand <input type="checkbox"/> Gravel <input type="checkbox"/> Organic Material	<input type="checkbox"/> Other:	
	<input type="checkbox"/> Separate Phase Hydrocarbons <input type="checkbox"/> Sheen <input type="checkbox"/> Measurable Amount:		

# WATER SAMPLING DATA

Job Name: Days Inn Job #: 149-1262-107 Sample ID #: MW-4 Well Name: MW-4  
 Sampled By: SLG Date: 4/11/97

SAMPLE TYPE						
<input checked="" type="checkbox"/> Original	<input type="checkbox"/> Duplicate	<input type="checkbox"/> Trip Blank	<input type="checkbox"/> Field Blank	<input type="checkbox"/> Equip. Blank	<input type="checkbox"/> Other:	
WEATHER						
<input checked="" type="checkbox"/> Sunny	<input type="checkbox"/> Cloudy	<input type="checkbox"/> Rainy	<input type="checkbox"/> Drizzly	<input type="checkbox"/> Breezy	<input type="checkbox"/> Windy	Temperature: <u>76°F</u>
WELL TYPE						
<input checked="" type="checkbox"/> Monitoring	<input type="checkbox"/> Extraction	<input type="checkbox"/> Piezometer	<input type="checkbox"/> Other:		Location: <u>E. side of Bldg. So. of</u>	
WELL MEASUREMENTS		Measurement	Time	Date	Initials	Formulas/Conversions <sup>Powell</sup> <sub>Bridge</sub> r = well radius in ft. h = ht of water col in ft. vol. in cyl. - $\pi r^2 h$ 7.48 gal/ft <sup>3</sup> V <sub>2"</sub> casing = 0.163 gal/ft V <sub>3"</sub> casing = 0.367 gal/ft V <sub>4"</sub> casing = 0.653 gal/ft V <sub>6"</sub> casing = 1.47 gal/ft V <sub>8"</sub> casing = 2.61 gal/ft
Depth to Water	DTW	<u>6.80</u> ft.	<u>0920</u>	<u>4/11/97</u>	<u>SLG</u>	
Depth to Product	DTP	<u>N/A</u> ft.				
Product Thickness	PT					
Specified Well Depth	SWD	<u>↓</u> ft.				
Measured Well Depth	MWD	<u>20.11</u> ft.				
Well Diameter	D	<u>2</u> in.				

EVACUATION CALCULATIONS	Formula	Value
Height of Water Column	HWC=MWD - DTW	<u>13.31</u> ft.
Well Casing Volume	WCV=HWC * V <sub>D</sub>	<u>2.16</u> gal.
Well Casings Volumes to be Evacuated	N	<u>3</u>
Total to be Evacuated	=WCV * N	<u>6.50</u> gal.

WELL STATUS					
Casing:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> Problem:	Seal:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> Problem:
Plug:	<input checked="" type="checkbox"/> OK	<input checked="" type="checkbox"/> Problem: <u>Needs Lock</u>	Vault:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> Problem:

EVACUATION EQUIPMENT								
Pump ID#:		<input type="checkbox"/> Bladder	<input type="checkbox"/> Submersible	<input type="checkbox"/> Sump	<input type="checkbox"/> Peristaltic	Dedicated:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Bailer ID#:	<u>Disposable</u>	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input type="checkbox"/> Stainless	Dedicated:	<input type="checkbox"/> Yes	<input type="checkbox"/> No

EQUIPMENT DECONTAMINATION				Time	Date	Initials
<input type="checkbox"/> Steam	<input type="checkbox"/> Alconox	<input type="checkbox"/> DI Water	<input checked="" type="checkbox"/> Other: <u>Not Applicable</u>			

Samples Collected										
Qty	Sample ID	Cont. Type	Vol.	Fil.	Ref.	Pres.	Analyze For	Analytic Method	Turn	LAB
<u>3</u>	<u>MW-4</u>	<u>WV</u>	<u>40ml</u>	<u>N</u>	<u>Y</u>	<u>HCL</u>	<u>TPH-G / BTEX</u>	<u>8015/20</u>	<u>N</u>	<u>MCC</u>
<u>1</u>	<u>↓</u>	<u>W/A</u>	<u>12</u>	<u>↓</u>	<u>↓</u>	<u>None</u>	<u>TPHD</u>	<u>8015</u>	<u>↓</u>	<u>↓</u>

Notes:

# WATER SAMPLING DATA



Job Name: Days Inn Job #: 149-1262-107 Sample ID #: WW-5 Well Name: WW-5  
 Sampled By: SLG Date: 4/11/97

**SAMPLE TYPE**  
 Original    Duplicate    Trip Blank    Field Blank    Equip. Blank    Other:

**WEATHER**  
 Sunny    Cloudy    Rainy    Drizzly    Breezy    Windy   Temperature: 25°F

**WELL TYPE**  
 Monitoring    Extraction    Piezometer    Other:   Location: SO. of MW-6

WELL MEASUREMENTS		Measurement	Time	Date	Initials	Formulas/Conversions r = well radius in ft. h = ht of water col in ft. vol. in cyl. - $\pi r^2 h$ 7.48 gal/ft <sup>3</sup> V <sub>2"</sub> casing = 0.163 gal/ft V <sub>3"</sub> casing = 0.367 gal/ft V <sub>4"</sub> casing = 0.653 gal/ft V <sub>6"</sub> casing = 1.47 gal/ft V <sub>8"</sub> casing = 2.61 gal/ft
Depth to Water	DTW	7.33 ft.	1000	4/11/97	SLG	
Depth to Product	DTP	None				
Product Thickness	PT	None				
Specified Well Depth	SWD	N/A				
Measured Well Depth	MWD	15.14				
Well Diameter	D					

EVACUATION CALCULATIONS	Formula	Value
Height of Water Column	HWC=MWD - DTW	7.81 ft.
Well Casing Volume	WCV= HWC * V <sub>D</sub>	1.27 gal.
Well Casings Volumes to be Evacuated	N	3
Total to be Evacuated	=WCV * N	3.81 gal.

**WELL STATUS**  
 Casing:  OK    Problem:   Seal:  OK    Problem:  
 Plug:  OK    Problem:   Vault:  OK    Problem:

**EVACUATION EQUIPMENT**  
 Pump ID#:    Bladder    Submersible    Sump    Peristaltic   Dedicated:  Yes    No  
 Bailer ID#: disposable    PVC    Polyethylene    Teflon    Stainless   Dedicated:  Yes    No

**EQUIPMENT DECONTAMINATION**  
 Steam    Alconox    DI Water    Other:   Time   Date   Initials

**Samples Collected**

Qty	Sample ID	Cont. Type	Vol.	Fil.	Ref.	Pres.	Analyze For	Analytic Method	Turn	LAB
3	WW-5	w/v	40ml	↓	↓	HCL	TPH-G/BTEX	8015/20	N	MCC
1	WW-5	w/A	12	↓	↓	None	TPH-D	8015	↓	↓

Notes:

# WATER SAMPLING DATA



Job Name: Days Inn Job #: 149-1262-107 Sample ID #: MW-5 Well Name: MW-5  
 Sampled By: SLG Date: 4/11/97

CALIBRATIONS:								
Meter	Manufacturer	ID Number	Calibration Performed			Date	Time	Initials
pH			<input type="checkbox"/> 4	<input type="checkbox"/> 7	<input type="checkbox"/> 10			
Thermometer								
Conductivity								
Turbidity								
ORP								
DO								

MEASUREMENTS									
pH	Temp. °C	Ec SC/μmhos	Turb ntu	Eh mV	D.O. ppm	Volume Purged	Date	Time	Initials

SAMPLING									
SAMPLING METHOD:				SAMPLE TIME:			1202		
Pump ID#:	<input type="checkbox"/> Bladder	<input type="checkbox"/> Submersible	<input type="checkbox"/> Sump	<input type="checkbox"/> Peristaltic	Dedicated: <input type="checkbox"/> Yes <input type="checkbox"/> No				
Tubing:	<input type="checkbox"/> Tygon	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input type="checkbox"/> Disposable	Dedicated: <input type="checkbox"/> Yes <input type="checkbox"/> No			
Bailer ID#:	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input checked="" type="checkbox"/> Disposable	Dedicated: <input type="checkbox"/> Yes <input type="checkbox"/> No				
Sample Port:	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input type="checkbox"/> Stainless	<input type="checkbox"/> Brass	<input type="checkbox"/> Steel			
Flow Rate: <u>gpm</u>	Totalizer: <u>gal</u>			Time:	Date:				
<b>EVACUATION TIME</b>	Ist Purge	2nd Purge	3rd Purge	4th Purge					
Stop: <u>1200</u>					Total Evac. Vol.:	<u>4</u> gal.			
Start: <u>1155</u>					Total Evac. Time:	<u>5</u> min.			
Elapsed Time:					Evacuation Rate:	<u>.80</u> gpm			

WELL RECOVERY				Time	Volume	DTW
Evacuated Dry?			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
DTW During Evacuation:		ft.				
DTW During Evacuation:		ft.				
.80 * HWC:		ft.	MWD - 80%HWC = 80%DTW			ft
DTW at Sample Time:		ft.	% Recovery at Sample Time:			%
Calculations:						

SAMPLE								
Color:	<input type="checkbox"/> Clear	<input checked="" type="checkbox"/> Gray	<input type="checkbox"/> Yellow	<input type="checkbox"/> Brown	<input type="checkbox"/> Tan	<input type="checkbox"/> Black	<input type="checkbox"/> Cloudy	<input type="checkbox"/> Other:
Odor:	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Gasoline	<input type="checkbox"/> Diesel	<input type="checkbox"/> Solvent	<input type="checkbox"/> Sulfur	<input type="checkbox"/> Metallic	<input type="checkbox"/> Other:	
Solids:	<input type="checkbox"/> None	<input type="checkbox"/> Trace Quantity	<input checked="" type="checkbox"/> Small Quantity	<input type="checkbox"/> Moderate Quantity	<input type="checkbox"/> Large Quantity			
	<input checked="" type="checkbox"/> Silt	<input type="checkbox"/> Sand	<input type="checkbox"/> Gravel	<input type="checkbox"/> Organic Material	<input type="checkbox"/> Other:			
	<input type="checkbox"/> Separate Phase Hydrocarbons			<input type="checkbox"/> Sheen	<input type="checkbox"/> Measurable Amount:			



# WATER SAMPLING DATA



Job Name: DAYS Inn Job #: 149-1262-107 Sample ID #: mw6 Well Name: mw-6  
 Sampled By: SLG Date: 4/11/97

<b>SAMPLE TYPE</b>						
<input checked="" type="checkbox"/> Original	<input type="checkbox"/> Duplicate	<input type="checkbox"/> Trip Blank	<input type="checkbox"/> Field Blank	<input type="checkbox"/> Equip. Blank	<input type="checkbox"/> Other:	
<b>WEATHER</b>						
<input checked="" type="checkbox"/> Sunny	<input type="checkbox"/> Cloudy	<input type="checkbox"/> Rainy	<input type="checkbox"/> Drizzly	<input type="checkbox"/> Breezy	<input type="checkbox"/> Windy	Temperature: <u>70°F</u>
<b>WELL TYPE</b>						
<input checked="" type="checkbox"/> Monitoring	<input type="checkbox"/> Extraction	<input type="checkbox"/> Pieziometer	<input type="checkbox"/> Other:		Location: <u>W. side of bldg. by Christie</u>	
<b>WELL MEASUREMENTS</b>		<b>Measurement</b>	<b>Time</b>	<b>Date</b>	<b>Initials</b>	<b>Formulas/Conversions</b>
Depth to Water	DTW	<u>12.6 - 456.74</u> ft.	<u>9 25</u>	<u>4/11/97</u>	<u>SLG</u>	$r = \text{well radius in ft.}$
Depth to Product	DTP	<u>None</u> ft.				$h = \text{ht of water col in ft.}$
Product Thickness	PT	<u>None</u> ft.				$\text{vol. in cyl.} = \pi r^2 h$
Specified Well Depth	SWD	<u>20.11</u> ft.				$7.48 \text{ gal/ft}^3$
Measured Well Depth	MWD	<u>15.09</u> ft.				$V_{2"} \text{ casing} = 0.163 \text{ gal/ft}$
Well Diameter	D	<u>2</u> in.				$V_{3"} \text{ casing} = 0.367 \text{ gal/ft}$
						$V_{4"} \text{ casing} = 0.653 \text{ gal/ft}$
						$V_{6"} \text{ casing} = 1.47 \text{ gal/ft}$
						$V_{8"} \text{ casing} = 2.61 \text{ gal/ft}$

EVACUATION CALCULATIONS	Formula	Value
Height of Water Column	$HWC = MWD - DTW$	<u>13.37</u> ft.
Well Casing Volume	$WCV = HWC * V_D$	<u>4.17</u> gal.
Well Casings Volumes to be Evacuated	$N$	<u>3</u>
Total to be Evacuated	$= WCV * N$	<u>6.53</u> gal.

<b>WELL STATUS</b>					
Casing:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> Problem:	Seal:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> Problem:
Plug:	<input type="checkbox"/> OK	<input type="checkbox"/> Problem:	Vault:	<input checked="" type="checkbox"/> OK	<input type="checkbox"/> Problem:

<b>EVACUATION EQUIPMENT</b>							
Pump ID#:	<input type="checkbox"/> Bladder	<input type="checkbox"/> Submersible	<input type="checkbox"/> Sump	<input type="checkbox"/> Peristaltic	Dedicated:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Bailer ID#:	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input type="checkbox"/> Stainless	Dedicated:	<input type="checkbox"/> Yes	<input type="checkbox"/> No

<b>EQUIPMENT DECONTAMINATION</b>				<b>Time</b>	<b>Date</b>	<b>Initials</b>
<input type="checkbox"/> Steam	<input type="checkbox"/> Alconox	<input type="checkbox"/> DI Water	<input type="checkbox"/> Other:			

<b>Samples Collected</b>										
Qty	Sample ID	Cont. Type	Vol.	Fil.	Ref.	Pres.	Analyze For	Analytic Method	Turn	LAB
<u>3</u>	<u>mw6</u>	<u>WIV</u>	<u>40ml</u>	<u>N</u>	<u>Y</u>	<u>HCL</u>	<u>TPH-B/BTEX</u>	<u>15/20</u>	<u>N</u>	<u>me</u>
<u>1</u>	<u>↓</u>	<u>WIA</u>	<u>1L</u>	<u>↓</u>	<u>↓</u>	<u>None</u>	<u>TPH-D</u>	<u>15</u>	<u>↓</u>	<u>↓</u>

Notes:

# WATER SAMPLING DATA



Job Name: Days Inn Job #: 149-1262-107 Sample ID #: MW-6 Well Name: MW-6  
 Sampled By: SG Date: 4/11/97

CALIBRATIONS:								
Meter	Manufacturer	ID Number	Calibration Performed			Date	Time	Initials
pH			<input type="checkbox"/> 4	<input type="checkbox"/> 7	<input type="checkbox"/> 10			
Thermometer			N/A					
Conductivity								
Turbidity								
ORP								
DO								

MEASUREMENTS									
pH	Temp. °C	Ec SC/μmhos	Turb ntu	Eh mV	D.O. ppm	Volume Parged	Date	Time	Initials
			N/A						

SAMPLING									
SAMPLING METHOD:				SAMPLE TIME:			1133		
Pump ID#:	<input type="checkbox"/> Bladder	<input type="checkbox"/> Submersible	<input type="checkbox"/> Sump	<input type="checkbox"/> Peristaltic	Dedicated: <input type="checkbox"/> Yes <input type="checkbox"/> No				
Tubing:	<input type="checkbox"/> Tygon	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input type="checkbox"/> Disposable	Dedicated: <input type="checkbox"/> Yes <input type="checkbox"/> No			
Bailer ID#:	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input checked="" type="checkbox"/> Disposable	Dedicated: <input type="checkbox"/> Yes <input type="checkbox"/> No				
Sample Port:	<input type="checkbox"/> PVC	<input type="checkbox"/> Polyethylene	<input type="checkbox"/> Teflon	<input type="checkbox"/> Stainless	<input type="checkbox"/> Brass	<input type="checkbox"/> Steel			
Flow Rate:	gpm	Totalizer:	gal.	Time:	Date:				
EVACUATION TIME	1st Purge	2nd Purge	3rd Purge	4th Purge					
Stop:	1131				Total Evac. Vol.:	6.5 gal.			
Start:	1122				Total Evac. Time:	9 min.			
Elapsed Time:					Evacuation Rate:	.72 gpm			

WELL RECOVERY				Time	Volume	DTW
Evacuated Dry?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DTW During Evacuation:		ft.				
DTW During Evacuation:		ft.				
.80 * HWC:		ft.	MWD - 80%HWC = 80%DTW			ft
DTW at Sample Time:		ft.	% Recovery at Sample Time:			%
Calculations:						

SAMPLE								
Color:	<input type="checkbox"/> Clear	<input type="checkbox"/> Gray	<input type="checkbox"/> Yellow	<input type="checkbox"/> Brown	<input checked="" type="checkbox"/> Tan	<input type="checkbox"/> Black	<input type="checkbox"/> Cloudy	<input type="checkbox"/> Other:
Odor:	<input checked="" type="checkbox"/> None.	<input type="checkbox"/> Gasoline	<input type="checkbox"/> Diesel	<input type="checkbox"/> Solvent	<input type="checkbox"/> Sulfur	<input type="checkbox"/> Metallic	<input type="checkbox"/> Other:	
Solids:	<input type="checkbox"/> None <input type="checkbox"/> Trace Quantity <input checked="" type="checkbox"/> Small Quantity <input type="checkbox"/> Moderate Quantity <input type="checkbox"/> Large Quantity							
	<input checked="" type="checkbox"/> Silt <input type="checkbox"/> Sand <input type="checkbox"/> Gravel <input type="checkbox"/> Organic Material						<input type="checkbox"/> Other:	
	<input type="checkbox"/> Separate Phase Hydrocarbons <input type="checkbox"/> Sheen <input type="checkbox"/> Measurable Amount:							

**ATTACHMENT B**

**CERTIFIED ANALYTIC REPORT AND CHAIN-OF-CUSTODY FORM**

McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553  
Tele: 510-798-1620 Fax: 510-798-1622

04/18/97

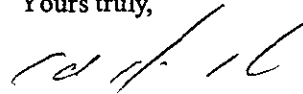
Dear Tom:

Enclosed are:

- 1). the results of 6 samples from your # 149-1262-107 project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,



Edward Hamilton, Lab Director







## QC REPORT FOR HYDROCARBON ANALYSES

Date: 04/11/97

Matrix: Water

Analyte	Concentration (mg/L) Sample (#75417)			Amount Spiked	% Recovery		RPD
	MS	MSD			MS	MSD	
TPH (gas)	0.0	95.3	96.8	100.0	95.3	96.8	1.6
Benzene	0.0	8.4	8.8	10.0	84.0	88.0	4.7
Toluene	0.0	8.8	9.3	10.0	88.0	93.0	5.5
Ethyl Benzene	0.0	9.3	9.6	10.0	93.0	96.0	3.2
Xylenes	0.0	27.6	28.6	30.0	92.0	95.3	3.6
TPH (diesel)	0	137	133	150	91	88	3.1
TRPH (oil & grease)	0	22200	24400	23700	94	103	9.4

$$\% \text{ Rec.} = (\text{MS} - \text{Sample}) / \text{amount spiked} \times 100$$

$$\text{RPD} = (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) \times 2 \times 100$$



McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553  
Tele: 510-798-1620 Fax: 510-798-1622

## QC REPORT FOR HYDROCARBON ANALYSES

Date: 04/14/97

Matrix: Water

Analyte	Concentration (mg/L)			Amount Spiked	% Recovery		RPD
	Sample (#75497)	MS	MSD		MS	MSD	
TPH (gas)	0.0	91.7	95.2	100.0	91.7	95.2	3.8
Benzene	0.0	8.5	8.5	10.0	85.0	85.0	0.0
Toluene	0.0	8.9	9.0	10.0	89.0	90.0	1.1
Ethyl Benzene	0.0	9.0	9.3	10.0	90.0	93.0	3.3
Xylenes	0.0	26.9	28.1	30.0	89.7	93.7	4.4
TPH (diesel)	0	160	158	150	107	105	1.5
TRPH (oil & grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

$$\% \text{ Rec.} = (\text{MS} - \text{Sample}) / \text{amount spiked} \times 100$$

$$\text{RPD} = (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) \times 2 \times 100$$

## QC REPORT FOR HYDROCARBON ANALYSES

Date: 04/16/97-04/17/97

Matrix: Water

Analyte	Concentration (mg/L)			Amount Spiked	% Recovery		RPD
	Sample (#75541)	MS	MSD		MS	MSD	
TPH (gas)	0.0	99.1	94.0	100.0	99.1	94.0	5.2
Benzene	0.0	8.6	8.0	10.0	86.0	80.0	7.2
Toluene	0.0	8.8	8.4	10.0	88.0	84.0	4.7
Ethyl Benzene	0.0	9.3	9.0	10.0	93.0	90.0	3.3
Xylenes	0.0	27.9	27.0	30.0	93.0	90.0	3.3
TPH (diesel)	0	146	146	150	97	98	0.4
TRPH (oil & grease)	0	24500	24600	23700	103	104	0.4

\* Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

# CHROMALAB, INC.

Environmental Services (SDB)

April 21, 1997

Submission #: 9704228

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: WA-149-1262-107

Project#: 8460

Received: April 14, 1997

re: One sample for Polynuclear Aromatic Hydrocarbons (PAHs) analysis.  
Method: SW846 Method 8270A Nov 1990

Client Sample ID: MW-1

Spl#: 126238

Matrix: WATER

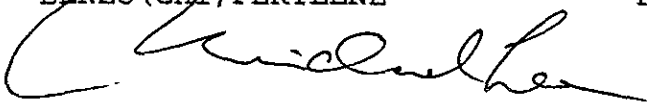
Extracted: April 18, 1997

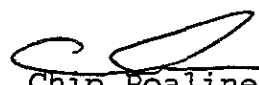
Sampled: April 11, 1997

Run#: 6374

Analyzed: April 18, 1997

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
NAPHTHALENE	2.7	2.0	N.D.	--	1
ACENAPHTHYLENE	N.D.	2.0	N.D.	--	1
ACENAPHTHENE	47	2.0	N.D.	71.0	1
FLUORENE	6.0	5.0	N.D.	--	1
PHENANTHRENE	25	2.0	N.D.	--	1
ANTHRACENE	3.8	2.0	N.D.	--	1
FLUORANTHENE	9.9	2.0	N.D.	--	1
PYRENE	8.0	2.0	N.D.	64.7	1
BENZO (A) ANTHRACENE	N.D.	2.0	N.D.	--	1
CHRYSENE	N.D.	2.0	N.D.	--	1
BENZO (B) FLUORANTHENE	N.D.	2.0	N.D.	--	1
BENZO (K) FLUORANTHENE	N.D.	2.0	N.D.	--	1
BENZO (A) PYRENE	N.D.	2.0	N.D.	--	1
INDENO (1, 2, 3-CD) PYRENE	N.D.	2.0	N.D.	--	1
DIBENZO (A, H) ANTHRACENE	N.D.	2.0	N.D.	--	1
BENZO (GHI) PERYLENE	N.D.	2.0	N.D.	--	1

  
Michael Lee  
Chemist

  
Chip Poalinelli  
Operations Manager

# CHROMALAB, INC.

Environmental Services (SDB)

April 21, 1997

Submission #: 9704228

MCCAMPBELL ANALYTICAL, INC.

Atten: Ed Hamilton

Project: WA-149-1262-107  
Received: April 14, 1997

Project#: 8460


re: **Surrogate** report for 1 sample for Polynuclear Aromatic  
Method: SW846 Method 8270A Nov 1990  
Lab Run#: 6374  
Matrix: WATER

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
126238-1	MW-1	NITROBENZENE-D5	62.0	35-114
126238-1	MW-1	2-FLUOROBIPHENYL	66.7	43-116
126238-1	MW-1	TERPHENYL-D14	60.5	33-141

Sample#	QC Sample Type	Surrogate	% Recovered	Recovery Limits
127041-1	Reagent blank (MDB)	NITROBENZENE-D5	68.0	35-114
127041-1	Reagent blank (MDB)	2-FLUOROBIPHENYL	66.7	43-116
127041-1	Reagent blank (MDB)	TERPHENYL-D14	70.3	33-141
127042-1	Spiked blank (BSP)	NITROBENZENE-D5	69.8	35-114
127042-1	Spiked blank (BSP)	2-FLUOROBIPHENYL	73.8	43-116
127042-1	Spiked blank (BSP)	TERPHENYL-D14	73.1	33-141
127043-1	Spiked blank duplicate (BSD)	NITROBENZENE-D5	64.0	35-114
127043-1	Spiked blank duplicate (BSD)	2-FLUOROBIPHENYL	70.3	43-116
127043-1	Spiked blank duplicate (BSD)	TERPHENYL-D14	66.7	33-141

S105  
QCSURR1229 MIKELEE 21-Apr-97 12





**Weiss Associates**  
Environmental and Geologic Services  
5500 Shellmound Street, Emeryville, CA 94608  
Phone: 510-450-6000 Fax: 510-547-5043  
AguaTierra Associates Incorporated, DBA

Please send analytic results and a copy of the signed chain of custody form to:  
Tom Foivt  
Project ID: 149-1262-107

Lab Personnel: **PLEASE INCLUDE QA/QC DATA IF BOX IS CHECKED.**  
1) Specify analytic method and detection limit in report.  
2) Notify us if there are any anomalous peaks in GC or other scans.  
3) **ANY QUESTIONS/CLARIFICATIONS: CALL US.**

8460 AWA 4

CHAIN-OF-CUSTODY RECORD AND ANALYTIC INSTRUCTIONS

Sampled by: Sheila Garrett

Laboratory Name: Mc Campbell

No. of Containers	Sample ID	Container Type	Sample Date	Vol <sup>2</sup>	Fil <sup>3</sup>	Ref <sup>4</sup>	Preservative (specify)	Analyze for	Analytic Method	Turn <sup>5</sup>	COMMENTS
1	mw-1	W/A	4/11/97	1L	N	Y	None	TPH-D	8015	N	75508
	mw-2										75509
	mw-3										75510
	mw-4										75511
	mw-5										75512
	mw-6										75513
3	mw-1	W/V	4/11/97	40ml	N	Y	HCL	PAHs, TPH-G/BTEX	8270, 8015/8020		
	mw-2										
	mw-3										
	mw-4										
	mw-5										
	mw-6										

1 Sheila Garrett 4/11/97  
Released by (Signature), Date  
1409

1 Weiss Assoc.  
Affiliation

2 Baker 11 APR 97  
Received by (Signature), Date

2 Mc Campbell Ana/ASCO  
Affiliation

3 Baker 11 APR 97  
Released by (Signature), Date

3 ASCO  
Affiliation

4 \_\_\_\_\_  
Shipping Carrier, Method, Date

4 \_\_\_\_\_  
Affiliation

5 \_\_\_\_\_  
Released by (Signature), Date

5 \_\_\_\_\_  
Affiliation

6 Maie Pina 4/11/97  
Received by Lab Personnel, Date

6 MAI (510) 798-1620  
Affiliation, Telephone

Seal intact?

1 Sample Type Codes: W = Water, S = Soil, Describe Other; Container Type Codes: V = VOA/Teflon Septa, P = Plastic, C or B - Clear/Brown Glass, Describe Other;  
Cap Codes: PT = Plastic, Teflon Lined 2 = Volume per container; 3 = Filtered YY/N; 4 = Refrigerated (Y/N)  
5 Turnaround [N = Normal, W = 1 Week, R = 24 Hour, HOLD (write out)]

K:\OFFICE\FORMS\CHAINCOC.DOC

ICE/T ✓  
GOOD CONDITION ✓  
HEAD SPACE ABSENT ✓  
PRESERVATIVE ✓  
APPROPRIATE CONTAINERS ✓

VOAS | O&G | METALS | OTHER