

# Limited Phase II ESA ASTM E1903 Environmental Site Assessment Report Minh Tram Market, Inc. 9416 Rainier Ave So Seattle, WA 98118

Prepared for:

Mr. Eugene Shin Llving Color Beauty Supply 9416 Rainier Ave So Seattle, WA 98118 (206) 293-6234

Prepared by

KEE, LLC PO Box 2532 Redmond, WA 98073 (206) 914-4989

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May 18, 2008

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Clients: Mr. Eugene Shin Living Color Beauty Supply 9416 Rainier Avenue South Seattle, WA 98118

Subject: Limited Phase II Environmental Site Assessment Report Living Color Beauty Supply 9416 Rainier Avenue South Seattle, WA 98118

KEE, LLC is pleased to submit two copies of our Limited Phase II Environmental Site Assessment (ESA) (ASTM E 1903)Report for Living Color Beauty Supply property located at 9416 Rainier Avenue South, Seattle in King County, Washington.

KEE, LLC supervised the completion of four soil sampling borings on May 7, 2008. The soil samples taken were submitted to a laboratory for chemical analysis.

Relying upon the information developed during the course of this preliminary investigation, which included locating Underground Storage Tank, drilling, soil samplings, and laboratory analysis of selected soil samples, it appears that:

- No Underground Storage Tank(UST) has been located inside the building or outside asphalt paved parking lot after through investigation with Ground Penetrating Radar (GPR) performed by Geo-Recon of Seattle, Washington.
- Soil boring samples B1-S1( in the storage area of the building) and B4-S4( outside parking lot area) at a depth of approximately 4 feet thru 12 feet from the ground surface contains no concentrations of Benzene, Toluene, Ethylbenzene, Xylenes and TPH as Gasoline in excess of the Method A cleanup level published in the Model Toxics Control Act (MTCA), Chapter 173-340 WAC.
- Soil sample(S2) collected from Boring B2 at the depth of eleven(11) feet below the ground surface in the west side parking lot of the building is impacted with the slight level(320 ppm) of motor oil range (C25-C36) which is in below of the Method A cleanup level published in the Model Toxics Control Act (MTCA), Chapter 173-340 WAC of 2000 ppm of Heavy Oil.
- Air void measure of soil samples with FID(Flame Ionization Detector) range from 200 ppm to 1990 ppm during the soil boring explorations up to the depth of 12 feet from the ground surface(refer to Table 3). Considering the FID reading, the site is slightly compacted with Motor Oil Range over the property possibly due to the previous history or adjacent property's auto related activities.

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• KEE, LLC recommends to install monitoring wells to study groundwater level in the property as well as groundwater contamination status. During boring exploration, the groundwater encountered around the depth of eight(8) feet and need to install the well to obtain the groundwater samples. No groundwater samples collected during the exploration.

We appreciate the opportunity to be of service to you. Please contact us with any comments or questions you have by calling 206-914-4989.

Yours very truly,

Kee-Hoon Pak President KEE, LLC

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Prepared for:

Mr. Eugene Shin Living Color Beauty Supply 9416 Rainier Avenue South Seattle, WA 98118

Questions regarding this investigation, the conclusions reached and the recommendations given should be addressed to one of the following undersigned.

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Kee Hoon Pak

President Registered Washington State Site Assessor ICC# 0874768-U7 KEE, LLC

Reference Job Number: LC050708-1

May 18, 2008

#### SUMMARY OF FINDINGS

KEE, LLC (a.k.a. Key Environmental Engineering) has completed a Limited Phase II Environmental Site Assessment (Limited PHASE II ESA) of the Living Color Beauty Supply property located at 9416 Rainier Avenue South, Seattle, King County, Washington. The subject property consist of beauty supply store and beauty salon located in the back within metal constructed building.

Relying upon the information developed during the course of this preliminary investigation, which included locating Underground Storage Tank (UST), drilling and sampling of soil, and laboratory analysis of selected soil samples, it appears that:

- No Underground Storage Tank(UST) has been located inside the building or outside asphalt paved parking lot after through investigation with Ground Penetrating Radar (GPR) performed by Geo-Recon of Seattle, Washington.
- Soil boring samples B1-S1thru B4-S4 in the storage area of the building and outside parking lot area at a depth of approximately 4 feet thru 12 feet from the ground surface contains no concentrations of Benzene, Toluene, Ethylbenzene, Xylenes and TPH as Gasoline in excess of the Method A cleanup level published in the Model Toxics Control Act (MTCA), Chapter 173-340 WAC.
- Soil sample(S2) collected from Boring B2 at the depth of 11 feet below the ground surface in the west side parking lot of the building is impacted with the slight level(320 ppm) of motor oil range (C25-C36) which is in below of the Method A cleanup level published in the Model Toxics Control Act (MTCA), Chapter 173-340 WAC of 2000 ppm of Heavy Oil.
- Air void measure of soil samples with FID(Flame Ionization Detector) range from 200 ppm to 1990 ppm during the soil boring explorations up to the depth of 12 feet from the ground surface(refer to Table 3). Considering the FID reading, the site is slightly compacted with Motor Oil Range over the property possibly due to the previous history or adjacent property's auto related activities.
- KEE, LLC recommends to install monitoring wells to study groundwater level in the property as well as groundwater contamination status. During boring exploration, the groundwater encountered around the depth of eight(8) feet and need to install the well to obtain the groundwater samples. No groundwater samples collected during the exploration.

KEE, LLC supervised the completion of four boring explorations on May 7, 2008. The seven soil samples out of seven borings submitted to a laboratory for chemical analysis.

Based on the information developed in the course of our Limited Phase II Environmental Site Assessment that include drilling, sampling and the analysis, the subject property is slightly impacted with Diesel range Total Petroleum Hydrocarbon (NWTPH-Diesel). <u>Further Groundwater Investigation is</u> <u>recommended</u> at this time.

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LIMITED PHASE JI ENVIRONMENTAL SITE ASSESSMENT REPORT SITE ASSESSMENT LAVING COLOR BEAUTY SUPPLY 9416 RAINIER AVENUE SOUTH SEATTLE, WA 98118 Project LC050708-1

#### **1 INTRODUCTIOIN**

KEE, LLC is pleased to present this report summarizing Limited Phase II Environmental Site Assessment (ESA) activities completed at Living Color Beauty Supply in Seattle, King County, Washington. Figure 1 presents the location of Living Color Beauty Supply in Seattle, Washington with respect to the surrounding vicinity. Figure 2 is a site plan showing the specific location of the sampling in the Living Color Beauty Supply Area evaluated during the Limited Phase II ESA.

#### 1.1 Background

Our proposal was requested by Mr. Eugene Shin, as an effort to transact the property and our scope of service is based on the signed agreement with the Mr. Eugene Shin of Living Color Beauty Supply in Scattle, Washington.

#### 1.2 Scope of Services

The scope of services was completed in general accordance with ASTM Standard Practices "Standard Practice for Environmental Site Assessments: Phase II Site Assessment Process". The Scope of services for the Limited Phase II ESA included the following:

- 1. Conduct a site visit to assist in the preparation of the scope of work.
- 2. Prepare a site-specific health and safety plan for KEE, LLC's personnel that will address containinants and physical hazards that may be encountered during drilling activities,
- 3. Advance up to six borings to depths of up to 12 feet below ground surface using drilling equipment for field classification for the presence/absence of contaminants.
- 4. Visually classify the soil samples in general accordance with ASTM, the Standard Practice for Description and Identification of Soils.
- 5. Field screen the soil samples for evidence of petroleum using visual, water sheen and headspace vapor screening methods.
- 6. Collect soil samples during drilling activities. Containerize the samples.
- 7. Submit the field samples to the laboratory for chemical analysis.
- 8. Analyze soil and/or groundwater samples (if encounter) that exhibit gasoline-range and/or diesel range total petroleum hydrocarbons (TPH-gas and BTEX, TPH-diesel).
- 9. Complete two copies of Limited Phase II ESA (ASTM E 1903) report.

#### 1.3 Purpose of Investigation

The purpose of the Limited Phase II ESA was to identify and confirm the presence or absence of contaminated soil and/or groundwater, which could potentially affect the development of property.

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Objectives for the Limited Phase II ESA include the following:

- 1. Verify the presence and absence of contaminated soil and/or groundwater
- 2. Compare the concentration of identified contaminants to regulated cleanup levels.

#### 2 SITE DESCRIPTION

The subject property is located at 9416 Rainier Ave South, King County, Washington. (Figure 1). Living Color Beauty Supply is ethnic beauty supply store located metal constructed building. Former gasoline station operation is identified after Phase I Environmental Site Assessment and three underground storage tank (UST) system comprises of 2-3,000 gallons and 1-6,000 gallon were filled and left in place according to the study. The current commercial building was constructed in 1986, apparently directly over the location of three filled tanks.

Parcel Legal Description:

## RAINIER BEACH ADD N 25 FT OF LOTS 4 & 5 AND THE W 30 FT OF LOT 4 EXCEPT THE N 25 FT & ALL OF LOT 3 & THE E 20 FT OF LOT 2 & THAT POR OF TRACT F LY WLY OF THE NLY PROD OF THE ELY LN OF LOT 7 & LY ELY OF THE NLY PROD OF THE W LN OF THE E 20 FT OF SD LOT 2 -LESS POR FOR ST AKA PARCEL B OF SEATTLE LOT BOUNDARY ADJUSTMENT NO 9100254 REC NO 9106200485

#### 2.1 Geologic and Hydrogeologic Description

Moist sandy clay soils sand-clay mixture noticed; most have high water-holding capacity.

#### 2.2 Current and Historical Property Use

The subject property include beauty supply store building constructed with the metal. The remainder of the site is paved parking area.

#### 2.3 Investigation Area

Investigation area include the area inside the building and outside parking lot location. The completion of four soil sampling borings were investigated and seven soil samples were submitted for the chemical analysis on May 7, 2008.

#### 2.4 Public Well Logs

No public wells are located within 0.5 miles radius according to Department of Ecology well record from the subject property.

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#### **3 FIELD INVESTIGATON**

This section describes the investigation and sampling procedures employed during the Limited Phase II ESA to evaluate environmental conditions at the site. Field investigation for the Limited Phase II ESA was performed on May 7, 2008. Field investigation was limited to the areas of potential concern. The boring locations were selected based on the requirement for the geotechnical investigation. Soil samples were collected at borings where contamination was suspected.

#### 3.1 Investigation Locations

The locations of soil borings and other investigation activities performed during the Limited Phase II ESA were selected based on the requirements of the geotechnical investigations and the result of site observation. Soil borings were limited to the areas indicated because the area of primary concern is around possible previous UST areas on Figure 2. The investigation consisted of drilling 4 soil borings (Figure 2).

#### 3.1.1 Geophysical Survey

A geophysical survey was used to attempt to locate USTs and underground utilities. Ground penetrating radar, utility locator equipment and a haud-held magnetometer were used to attempt to locate previous USTs and any associated fuel lines. The area of interest was evaluated using a grid system on an approximate 4-ft grid interval. USTs were not located as the result of the survey.

#### 3.2 Drilling procedure

The drilling equipment was Skid Steer Mounted Drill Rig with auger attachment (4-inch auger) to drill the holes. The soil was sampled up to the depth of up to 12 feet. During sampling, a field log was written by the project manager, which included soil classification, color, texture, moisture, seepage zones, odors and iridescent sheens (Figure B-1 thru B-7).

#### 3.3 Sample Collection

#### 3.3.1 Sample Design

Phase II sampling was designed to help confirm the presence/absence of environmental contaminants on some of properties, Sampling locations were selected topographically and hydraulically to identify soil and/or groundwater contamination that may have occurred from present and/or past operation on the property (Figure 2).

Collection depths for soil samples from each boring are listed in the following:

Sample ID	Sample depth (feet bgs)		
B1-S1-4	4		
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B1-S1-12	12
B2-S2-4	4
B2-\$2-11	11
B3-S3-4	4
B4-S4-4	4
B4-S4-8	8

Detailed sampling location and analytical method is summarized in Table 1.

#### 3.3.2 Soil/Groundwater samples

Soil/groundwater samples for chemical analyses were collected during drilling soil borings for the geotechnical investigation. Soil samples were collected from the borings and then placed directly into sample containers. The sample containers were placed in a cooler with ice and shipped for delivery within 24 hours to Friedman & Bruya, Inc., in Seattle, Washington. The laboratory was instructed to hold all soil samples until noticed by KEE, LLC for further analysis.

Seven soil samples were sent for chemical analysis to measure NWTPH-Gasoline and BTEX, NWTPH-Diesel depends on the present use. Analytical reports are presented in Section 4.

#### 3.3.3 Chemical Analysis

Analytical approach is intended to provide a basis for comparing the site environment to existing standard offered in the Model Toxics Control Act (MTCA), Chapter 173-340, Washington Administrative Code, and to recommended analyses offered in the April 1994 Underground Storage Tank Site Assessment, Washington State Department of Ecology. Analytical methods used were based on the standard method: NWTPH-Gas WDOE for TPH-Gasoline and BTEX Compounds, NWTPH-Diesel WDOE for TPH-Diesel

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#### 4 ANALYTICAL RESULTS

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#### 4.1 Ground water

Groundwater was encountered at eight(8) feet during the exploratory borings. But could not obtain the samples at the time of the exploration.

#### 4.2 Soil

The analytical result was summarized in Table 3 and laboratory data was attached in the appendix. As shown in Table 3, there was no measurable amount of gasoline-range hydrocarbon (NWTPH-gasoline) and/or BTEX in soil samples.

Some evidence of Motor oil- range free phase petroleum hydrocarbon contamination was observed during the exploration soil boring B-2 from soil sample S2 at eleven(11) feet.

A copy of the Analytical Laboratory Report with chain-of-custody is provided in the Appendix.

#### 5 CONCLUSIONS/RECOMMENDATIONS

KEE, LLC (a.k.a. Key Environmental Engineering) has completed a Limited Phase II Environmental Site Assessment (Limited PHASE II ESA) of the Living Color Beauty Supply property located at 9416 Rainier Avenue South, Seattle, King County, Washington. The subject property consist of beauty supply store and beauty salon located in the back within metal constructed building.

Relying upon the information developed during the course of this preliminary investigation, which included locating Underground Storage Tank (UST), drilling and sampling of soil, and laboratory analysis of selected soil samples, it appears that:

- No Underground Storage Tank(UST) has been located inside the building or outside asphalt paved parking lot after through investigation with Ground Penetrating Radar (GPR) performed by Geo-Recon of Seattle, Washington.
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- Air void measure of soil samples with FID(Flame Ionization Detector) range from 200 ppm to 1990 ppm during the soil boring explorations up to the depth of 12 feet from the ground surface(refer to Table 3). Considering the FID reading, the site is slightly compacted with Motor Oil Range over the property possibly due to the previous history or adjacent property's auto related activities.
- KEE, LLC recommends to install monitoring wells to study groundwater level in the property as well as groundwater contamination status. During boring exploration, the groundwater

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encountered around the depth of eight(8) feet and need to install the well to obtain the groundwater samples. No groundwater samples collected during the exploration,

KEE, LLC supervised the completion of four boring explorations on May 7, 2008. The seven soil samples out of seven borings submitted to a laboratory for chemical analysis.

Based on the information developed in the course of our Limited Phase II Environmental Site Assessment that include drilling, sampling and the analysis, the subject property is slightly impacted with Diesel range Total Petroleum Hydrocarbon (NWTPH-Diesel). <u>Further Groundwater Investigation is</u> <u>recommended</u> at this time due to the slight contamination of soils by motor oils over the subject property.

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#### 6 **REFERENCES**

King County Assessor/Treasurer Property Information, King County, Washington.

WA soil survey report, Soil Survey of Mason County Area. Washington, United States Department of Agriculture – Natural Resources Conservation Services.

Department of Ecology Well Logs

Phase I Environmental Site Assessment prepared by Acrotech Environmental Consulting Inc. on March 28, 2008

#### 7 LIMITATIONS

This report has been prepared for the exclusive use of our customer and their representatives for specific application to this site. This report is a Limited Phase II ESA and does not provide a complete site characterization, such as detailed site geology and hydrology. This Limited Phase II ESA does not delineate the vertical or horizontal extents of soil or groundwater contamination. The findings and conclusions of this study were based on observations and testing made at separated boring locations on the subject property. Conditions may very between the borings and at other locations on the site. If new information is developed in future site work which may include excavations, borings, studies, etc., KEE, LLC must be retained to reevaluate the conclusions of this report and to provide amendments as required.



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FIGURE 2: SITE PLAN

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FIGURE B: LOG OF BORING (B-1 THRU B-4)

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#### LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT SITE ASSESSMENT LIVING COLOR BEAUTY SUPPLY 9416 RAINIER AVENUE SOUTH SEATTLE, WA 98118 Project LC050708-1

Field ID	Sampling Location	Media	Depth (feet)	Compounds of Concern	Analysis Method
<b>S1-4</b>	B-1	Soil	4	TPH-Gas	NWTPH-Gx,
S1-6	B-1	Soil	12	TPH-Gas, BTEX	NWTPH-Gx
S2-4	B-2	Soil	4	TPH-Gas	NWTPH-Gx
<b>S2</b> -11	B-2	Soil	11	TPH-Gas, VOC	NWTPH-G,8260
S3-4	<b>B-3</b>	Soil	4	TPH-Dicsel TPH-Gas	NWTPH-Dx NWTPH-Gx
S4-4	<b>B-4</b>	Soil	4	TPH-Gas, BTEX	NWTPH-Gx
S4-8	<b>B-</b> 4	Soil	8	TPH-Gas	NWTPH-Gx

#### Table 1 Summary of Soil Samples Collected For Analysis

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# Table 2 Summary of Soil Sample Analysis

#### RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE Results reported on a Dry weight Basis Result Reported as ug/g (ppm)

Sample ID	Benzene	Etylbenzene	Toluene	Totai Xylene	Gasoline Range	Surrogate (%Recovery) (Limit 50-132)
<b>B1-S1-4</b>	<0.02	<0.02	<0.02	<0.02	⊲	75
<b>B1-S1-12</b>	<0.02	<0.02	<0.02	<0.02	<2	84
B2-S2-4	<0.02	<0.02	<0.02	<0.02	<2	84
<b>B2-S2-11</b>	<0.05	<0.05	<0.05	<0.05	<2	88
<b>B3-S3-4</b>	<0.02	<0.02	<0.02	<0.02	2	92
B4-S4-4	<0.02	<0.02	<0.02	<0.02	<2	79
B4-S4-8					<2	83
MTCA Method A Cleanup Standards	0.03	6	7	9	100 or 30	

#### RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLE FOR TPH AS DIESEL Results reported on a Dry weight Basis Result Reported as ug/g (ppm)

Sample ID	Diesel Range	Motor Oil Range	Surrogate (%Recovery) (Limit 50-150)
B2-S2-11	81x	320	93
MTCA Method A Cleanup Standards	2000	2000	······

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 Table 3 Summary of Field Reading on Air Void of Soil Samples Using Flame Ionization Detector (FID)

FID Reading
260
200
178
577
1665
1990
908
1041
575

#### Results reported on a Field weight Basis Result Reported as ug/g (ppm)

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Table 3 Summary of Field Reading on Air Void of Soil Samples Using Flame Ionization Detector (FID)

Sample ID	FID Reading
B1-S1-4	260
B1-S1-8	200
B1-S1-12	178
B2-S2-4	577
B2-S2-8	1665
B2-S2-11	. 1990
B3-\$3-4	908
B4-S4-4	1041
B4-S4-8	575

## Results reported on a Field weight Basis Result Reported as ug/g (ppm)

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**APPENDIX A: SITE PHOTOGRAPHS** 

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View of Living Color Beauty Supply Looking North

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Looking GPR(Ground Penetrating Radar) screen to locate UST inside the building

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Looking inside Living Color Beauty Supply building

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Exploration of Boring B2 at the parking lot

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Exploration of Boring B4at the parking lot

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APPENDIX B : GROUND PENETRATING RADAR(GPR) DATA

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GPR Data inside Living Color Beauty Supply building



GPR Data outside parking lot Living Color Beauty Supply building #1



Data outside parking lot Living Color Beauty Supply building #2

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#### ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Morrow, M.S. Yelena Aravkina, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seaule, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: lbi@isomedia.com

May 15, 2008

Kee-Hoon Pak, Project Manager Kee, LLC PO Box 2532 Redmond, WA 98073

Dear Mr. Pak:

Included are the results from the testing of material submitted on May 8, 2008 from the LCB050708-1, F&BI 805066 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl Project Manager

Enclosures KEE05151LDOC

#### ENVIRONMENTAL CHEMISTS

Date of Report: 05/15/08 Date Received: 05/08/08 Project: LCB050708-1, F&BI 805066 Date Extracted: 05/09/08 Date Analyzed: 05/09/08

# RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx Results Reported on a Dry Weight Basis

Results Reported as mg/kg (ppm)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate ( <u>% Recovery</u> ) (Limit 50-150)
B1-S1-4 805066-01	<2	75
B2-S2-4 805066-03	<2	84
B2-S2-11 805066-04	<2	88
B3-S3-4 805066-05	<2	92
B4-S4-8 805066-07	<2	83
Method Blank	<2	101

#### ENVIRONMENTAL CHEMISTS

Date of Report: 05/15/08 Date Received: 05/08/08 Project: LCB050708-1, F&BI 805066 Date Extracted: 05/09/08 Date Analyzed: 05/09/08

## RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xvlenes</u>	Gasoline <u>Range</u>	Surrogate ( <u>% Recovery)</u> (Limit 50-150)
B1-S1-12 806066-02	<0.02	<0.02	<0.02	<0.06	<2	84
B4-S4-4 805066-06	<0.02	<0.02	<0.02	<0.06	<2	79
Method Blank	<0.02	<0.02	<0.02	<0.06	<2	90

#### ENVIRONMENTAL CHEMISTS

Date of Report: 05/15/08 Date Received: 05/08/08 Project: LCB050708-1, F&BI 805066 Date Extracted: 05/09/08 Date Analyzed: 05/12/08

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## RESULTS FROM THE ANALYSIS OF THE SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C10-C25)	Motor Oil Range (C25-C35)	Surrogate ( <u>% Recovery)</u> (Limit 67-127)
B2-S2-11 805066-04	81 x	320	93
Method Blank	<50	<250	89

# ENVIRONMENTAL CHEMISTS

# Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	B2-S2-11 05/08/08 05/09/08 05/09/08 Soil mg/kg (ppm)	)	Client: Project: Løb ID: Data File: Instrument: Operator:	Ксе, LLC LCH050708-1, Р&НJ 805066-04 050912.D GCMS5 MB	805066
			Lower	Upper	
Surrogates:		% Recovery:	Limit:	Limit:	
Dibromofluorometh	ane	80	42	142	
1,2-Dichloroethane-	d4	86	42	152	
Toluene-d8		78	36	149	
4-Bromofluorobenze	ane	83	50	150	
		Concentration			Concentration
Compounds:		mg/kg (ppm)	Compou	nds:	mg/kg (ppm)
Dichlorodifluorome	thane	<0.5	Tetrach	loroethene	<0.025
Chloromethane		<0.05	Dibromo	chloromethane	<0.05
Vinyl chloride		< 0.05	1,2-Dibr	omoethane (EDB)	<0.05
Bromomethane		<0.5	Chlorob	enzene	< 0.05
Chloroethane		<0.5	Ethylbe		< 0.05
Trichlorofluoromet	hane	<0.5	1,1,1,2-1	l'etrachloroethane	<0.05
Acetone		<0.5	m,p-Xyl		<0.1
1,1-Dichloroethene		<0.05	o-Xylend	9	<0.05
Methylene chloride		<0,5	Styrene		<0.05
trans-1,2-Dichloroe		<0.05		ylbenzene	<0.05
1,1-Dichloroethane		<0.05	Bromolo		<0.05
2,2-Dichloropropan		<0.05		lbenzene	<0.05
cis-1,2-Dichloroethe	ene	<0.05	Bromob		<0.05
Chloroform		<0.05		imethylbenzene	<0.05
2-Butanone (MEK)		<0.5		Tetrachloroethane	<0.05
1,2-Dichloroethane		<0.05		ichloropropane	<0.05
1,1,1-Trichloroetha		< 0.05		otoluene	<0.05
1,1-Dichloropropen		< 0.05		otoluene	<0.05
Carbon Tetrachlori	de	< 0.05		tylbenzene	<0.05
Benzene		<0.03		rimethylbenzene	<0.05
Trichloroethene		<0.03		ylbenzene pyltoluene	< 0.05
1,2-Dichloropropan Bromodichlorometh		<0.05 <0.05		lorobenzene	<0.05 <0,05
Dibromomethane	lane	<0.05		lorobenzene	<0.05
		<0.05		nlorobenzene	<0.05
4-Methyl-2-pentanc cis-1,3-Dichloroprop		<0.05		romo-3-chloropropane	<0.05
Toluene	pene	<0.05		richlorobenzene	<0.1
trans-1,3-Dichlorop	ມາດກອກຄ	<0.05		lorobutadiene	<0.1
1,1,2-Trichloroetha		<0.05	Naphth		<0.05
2-Hexanone		<0.5		richlorobenzene	<0.1
1,3-Dichloropropan	e	<0.05			
-10 Prorperokropan	-				

# ENVIRONMENTAL CHEMISTS

# Analysis For Volatile Compounds By EPA Method 8260B

Client Sample ID: Date Received: Date Extracted: Date Analyzed: Matrix: Units:	Method Blan NA 05/09/08 05/09/08 Soil mg/kg (ppm)		Client: Project: Lab ID: Data File: Instrument: Operator:	Kee, LLC LCB050708-1, F&BI 080687 mb 050904.D GCMS5 MB	805066			
			Lower	Upper				
Surrogates:		% Recovery:	Limit:	Limit:				
Dibromofluorometh	ane	101	42	142				
1,2-Dichloroethane-	d4	101	42	152				
Toluene-d8		103	36	149				
4-Bromofluorobenze	ene	122	50	150				
		Concentration			Concentration			
Compounds:		mg/kg (ppm)	Compou	nds:	ing/kg (ppm)			
Dichlorodifluorome	thane	<0.5	Tetrachl	loroethene	<0.026			
Chloromethane		<0.05	Dibromo	chloromethane	< 0.05			
Vinyl chloride		<0.05		omoethane (EDB)	< 0.05			
Bromomethane		<0.5	Chlorobe	-	<0,05			
Chloroethane		<0.5	Ethylbe	nzene	<0.05			
Trichlorofluoromet	hane	<0.5	1,1,1,2-7	<b>Fetrachloroethane</b>	<0.05			
Acetone		<0.5	m,p-Xyl	ene	<0.1			
1,1-Dichloroethenc		<0.05	o-Xylene	3	<0.05			
Methylene chloride		<0.5	Styrene		<0.05			
trans-1,2-Dichloroe	thene	<0.05	lsopropy	lbenzene	<0.05			
1,1-Dichloroethane		<0.05	Bromofo		<0.05			
2,2-Dichloropropan		<0.05	n-Propy	lbenzene	<0.05			
cis-1,2-Dichloroethe	ene	<0.05	Bromob		<0.05			
Chloroform		<0.05	• •	imethylbenzene	<0,05			
2-Butanone (MEK)		<0.5	• • •	Petrachloroethane	<0.05			
1,2-Dichloroethane		<0.05		ichloropropane	<0.05			
1,1,1-Trichloroetha		<0.05		otoluene	<0.05			
1,1-Dichloropropen		<0.05		otoluene	<0.05			
Carbon Tetrachlori	de	< 0.05		ylbenzene	< 0.05			
Benzene		<0.03		imethylbenzene	<0.05			
Trichloroethene		<0.03		ylbenzene	< 0.05			
1,2-Dichloropropan		<0.05		pyltoluene Norobenzene	< 0.05			
Bromodichlorometh	lane	<0,05 <0.05	•	lorobenzene	<0.05			
Dibromomethane		<0.5		nlorobenzene	<0,05 <0.06			
4-Methyl-2-pentance cis-1,3-Dichloroprop		<0.05		romo-3-chloropropane	<0.05			
Toluene	pene	<0.05		ichlorobenzena	<0.03			
trans-1,3-Dichlorop	wonana	<0.05	-1-1	lorobutadiene	<0.1			
1,1,2-Trichloroetha		<0.05	Naphth		<0.1 <0.05			
2-Hexanone	110	<0.5		richlorobenzene	<0.1			
1,3-Dichloropropan	o	<0.05	1,2,0,11	. 1944 <b>(17</b> 1977) 1977 1977 1977 1977 1977 1977 197	-0.1			
r <sup>10</sup> -memorohrohan	v	-0.00						

#### ENVIRONMENTAL CHEMISTS

Date of Report: 05/15/08 Date Received: 05/08/08 Project: LCB050708-1, F&BI 805066

# QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code:	805066-02 (Duplicat	e)			
Analyte	Roporting Units	Sample R	esult I	Duplicate Result	Relative Percent Difference (Limit 20)
Gasoline	mg/kg (ppm)	<2		<2	ាញ
Laboratory Code:	Laboratory Control	Sample	Percen	t	
Analyte	Reporting Units	Spike Level	Recover LCS	y Acceptance <u>Criteria</u>	
Gasoline	mg/kg (ppm)	20	98	70-130	

#### ENVIRONMENTAL CHEMISTS

Date of Report: 05/15/08 Date Received: 05/08/08 Project: LCB050708-1, F&BI 805066

## QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, AND TPH AS GASOLINE USING EPA METHOD 8021B AND NWTPH-Gx

Laboratory Code: 805066-02 (Duplicate)

Алаlyte	Reporting Units S	Reporting Units Sample Result Duplicate Result						
Benzeno	mg/kg (ppm)	<0.02	<0.02					
Toluene	mg/kg (ppm)	<0.02	<0.02	nm				
Ethylbenzene	mg/kg (ppm)	<0.02	<0.02	nın				
Xylenes	mg/kg (ppm)	<0.06	<0.06	nm				
Gasoline	mg/kg (ppm)	<2	<2	nin				

#### Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	84	70-130
Toluene	mg/kg (ppm)	0.5	82	70-130
Ethylbenzene	mg/kg (ppm)	0.6	82	70-130
Xylenes	mg/kg (ppm)	1.5	81	70-1.90
Gasoline	mg/kg (ppm)	20	98	70-130



LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT REPORT SITE ASSESSMENT LIVING COLOR BEAUTY SUPPLY 9416 RAINIER AVENUE SOUTH SEATTLE, WA 98118 Project LC050708-1

**APPENDIX D : SAMPLE CHAIN OF CUSTODY** 

PO Box 2532, Redmond, WA 98073

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805066	11	RI	<u>,</u>	SAMPLI	ERS (signa)	ure)	/								18	7.0	RNARO		<u>، آه</u>
Send'Report To Kee Company KEE, Address P. 0. B.9×	ЦC			PROJEC	Т NAMEЛ В 65°07°8	10.		<u>~</u>	~~	•••	•	PO	#		la:	Sunnd RUSH	ard (2 W	ecks)	)
City, State, ZIP <u>Redm</u> Phone # 206-914-490	ond	WA 9		REMAR E 3 Se	KS -mail attle 4	7h. 98	۰ ۶ (	rep	g m	e 7	ته <del>و</del> ب ب	Ne -m		e	0 17	Dispo Retur	AMPLE so after n sampl all with	30 da 05	<b>A</b> z
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: Sample ID	Lab ID	lato Senpled	Time Sampled	Sample Type	# of containers	TPH-Diusol	TP11-(3#solino	BTEX by H021B	VOC8 hy 8260	SVOCA hy H270	lifs							•	Ňo
B1-51-4	01	5/7	1030	Soil	1		7												
BZ-51-12	02	5/2	1100	50 il	/		2	-				$\downarrow$						<b>-</b>	_
BZ=52-4	03	5/7_	1200	soil	1		$\sum$												
BZ-52-11	04	5/7	1230	so I		Ŀ						_							
B3-53-4	05	5/7:	1330	soil	1		V					_							
84-54-4	06	5/2	1430	soil.	1		~	1				$\downarrow$					_+		
84-54-8	07	5/7	1500	soil	/		V					-							
	·	<b> </b> .	<u> </u>	1	<u> </u>							-							
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# KEE, LLC

Structural & Environmental Solution PO Box 2532 Redmond, WA 98073-2532 www.key-enviro.com

# **Fax Cover Sheet**





					,		B2							
	SAN					<b></b>	SOIL PROFILE	GROUNDWATER						
Depth (A)	Sample P.ocalion	Sampler Type	Blaws/Foot	FID (ppm)	Grophic Symbol	USCS Symbol	Drilling Method - Ski <u>d Steer Mountee Aug</u> Ground Elevetion (11) : <u>No Reference</u> Drilled By : <u>KEF. 11C</u> Boring Completion on : <u>CS/07/08</u>	Water Level	Menilering Well on tite: <u>No</u>					
0 1 2 3 4 5	<b>G</b> 37-4	Auger		577 ppr		<i>\$</i> ₽	E construct economic light around, fare to mechan wood with grand, microcous, non-plastic (loose, by to molet) (odor) (hydroxic (U)							
6 7 8 7 10 11 12 12 13	<b>\$</b> 7	luger		1855 pp		æ	Dark brown, fine to medium elay mith staud, necaseous, plastic (koose, moist to net) (over)	¥	Ref R Caleron and part					
11 12 13 14 15	<b>G</b> <sub>27</sub> -11	kugur		1590 pp		a	Dark brom, kins to mechan cigr mits snot, micocous, pionis (laose, mois! to nel) (odor)		JA-test Genetic eccess of Data to the Data to the trans data to the data to th					
Ht <del>a.</del>	1. 57039 2. 844	apte anda Is Udžet S	te ore kons në filmofect	i en ficti felm lin Spriter i f	प्रार्थनेक का ति द्यूर्थकर्त्रका	f का वालय म हुक्सिल	net k		LEGEND: Sompling Location Waler Table					
4		<i>P.</i> (		25.32, Roo	tmond, #4 ?),(125)83			aty	32 Supply File Number: LC050708-1 Boring Dote: May 7, 2008 Figure 82					

							B3		
	SAM		DATA	····			SOIL PROFILE		GROUNDWATER
Depth (rt)	Sample Location	Sampler Type	Blows/Fool	FID (ppm)	Graphic Symool	1 10	Driting Method : <u>Skid Sieer Meunled Aug</u> Ground Eleverton (ft) <u>No Reference</u> Drilled By : <u>KEE_1LC</u> Boring Completion on : <u>PS/07/08</u>	Vater Level	Monitoring Well on sits: No.
5 3 4 5 5 7 8 9 10 11 12 13	<b>9</b> 51-4	Aayer		\$08 pp		ST SC	I and in non-place in made in a made with gravel, microscope, non-place (base, day to most) (noter) (notenue, su) Dark brown, Ene to medium clay with some, microscope, phate (base, maist to wel) (cdar)		Activity of p
15 144a	1. Study 2. fein: 1	apality constants to Instant S	tr an lare	i an foil Jeb			Cort broan, Ane lo nechero cier ville send, naturceous, plastic (loose, moist to vel) (cetar)		V/Hota Scentre Scotter 40 M Harden Start Harden Start Harden Start Investo set op LEGEND: ♥ Sampling Location
5		P.	EE, L O. Box J	25J2, RA	ámond, ili P).(425)8.	1 98073-	Log of Borin Living Color Bea (f) Seattle,	uty	- Woler Table 3.3 File Number LC050708-1 Supply Boring Date: May 7, 2008

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					·		B4						
	SAM	PLE (				•	SOIL PROFILE	GROUNDWATER					
Depth (ft)	Somple Location	Sompler Type	Blows/Faat	FID (ppm)	Graphic Symbol	USCS Symb	DriVing Method : <u>Skid_Slær_Møvnlad_Ava</u> Ground Elavation (it) : <u>No Reference</u> Drilled By : <u>KEE_LLC</u> Joring Completion en : <u>05/07/08</u>	Water Level	Menitoring Wall on sito: No.				
1	SI-1	Auger		1041 <sub>P</sub> g		52	L'andred service Light howen, the to medium sand with growel microcous, non-plastic (losse, dry to moist) (ocar) (hydrawic 121) Duck homen, fine to machine also with event		Proprio Borroute engo				
3 4 5 8 7 8 9 10 11 -12 -13	<b>6</b> 57	Auger		575 pp			Park brown, fine to mediam city with sond, micocours, possic (lease, moist to wel) inder) hyde brown, fine to medium city; with sond,	Ž	Ti (20 Obrach and pai				
-11 -12 -13 -14 -15						a (	nisosocus, plantic (ivose, nasist io mat) star)		Strate donore come of pro- come of pro- come of pro- standing pa- he-free fibro-				
Mba	L. Streig L. Beler I	arthe enabed to United So	d an kara V Danibut	( os <b>fol</b> s kit Stri Syntus <sup>(*</sup> )	npablos az ky apiszt <del>u</del>	l are espiratas a' provis an	<sup>τη</sup> , <i>ή</i> γημιτά,		LEGEND: © Sampting Location ————————————————————————————————————				
4	2	P.C		?5 <b>3</b> 2, Rec		<i>58073-2</i>  6=0463		līy -	B4 Supply File Number: LC050708-1 Boring Octe: May 7, 2008 Figure B4				