### USED OIL TANK SITE ASSESSMENT AND INDEPENDENT CLEANUP REPORT

816 Northeast 57<sup>th</sup> Street Seattle, Washington 98105 FILCO PROJECT NUMBER 25568



### FILCO COMPANY INC. Environmental Services

CONTRACTORS LICENSE NUMBER FILCOC1080RU ICC CERTIFIED www.FilcoEnviro.com

P.O. Box 31228 Seattle, Washington 98103 Telephone: (206) 547-8347 Fax: (206) 548-9352

### USED OIL TANK SITE ASSESSMENT AND INDEPENDENT CLEANUP REPORT

#### November 11, 2016 816 Northeast 57th Street, Seattle, Washington 98105 FILCO Project Number 25568

#### Contents

1.0	Project Background	1
	•	
2.0	General Site Conditions	1
3.0	UST Removal and Site Assessment	1
4.0	Discussion of Analytical Results	5
4.1	Site Assessment Analytical Results	5
4.2	Initial Remedial Excavation Analytical Results	5
4.3	Final Remedial Excavation Analytical Results	5
5.0	Conclusions and Recommendations	6
6.0	Statement of Existing Conditions and Limitations	6
7.0	References	7

FIGURE 1: Vicinity Map FIGURE 2: Geology Map

FIGURE 3: Site Schematic – Used Oil Tank Site Assessment/Remedial Excavation with Cleanup Sample Locations

FIGURE 4: Project Photographs

APPENDIX A: ANALYTICAL RESULTS

APPENDIX B: SOIL DISPOSAL DOCUMENTATION

APPENDIX C: ECOLOGY SITE ASSESSMENT FORMS & PERMITS



### USED OIL TANK SITE ASSESSMENT AND INDEPENDENT CLEANUP REPORT

November 11, 2016 816 Northeast 57th Street, Seattle, Washington 98105 FILCO Project Number 25568

#### 1.0 Project Background

The Subject Property is a residential property located at 816 Northeast 57th Street, Seattle, Washington as shown on Figure 1, *Vicinity Map*. The Subject Property is currently owned by Michael and Marybeth Morris. The residential structure was formerly heated with an oil furnace associated with a 300 gallon underground storage tank (UST). The owner reported that the tank was taken out of service in the late 1970s. The owner reported to Filco that used petroleum products had been put into the tank in the past. Filco Company Inc. (Filco) was retained by the owner to remove the UST and perform a site assessment as required by the Washington State Department of Ecology (Ecology). A utility locate was performed to identify known underground utilities.

#### 2.0 General Site Conditions

The general area of the site slopes downward to the north at a grade of approximately 1% as shown on Figure 1, *Vicinity Map*. At the time of our site reconnaissance, the site appeared to have a generally flat relief. Site soils consisted of medium dense, moist, brown, clayey-silt with sand (Unified Soil Classification symbol SM); which does not appear to be consistent with the mapped geology of Qvt (glacial lodgement till) as shown on Figure 2, Geology Map. The soil encountered has the characteristics of recessional outwash (Qvr) which overlies the glacial till and is mapped nearby (approximately 250 feet west of the site).

#### 3.0 UST Removal and Site Assessment

Filco provided the required 30-Day notice of the planned UST removal to Ecology. After receiving approval to remove the UST, Filco obtained the requisite commercial UST removal permit from the Seattle Fire Department, and arranged for the oversight of the tank removal by a Seattle Fire Inspector.

Mechanized Cleaning Solutions working under subcontract to Filco pumped approximately 200 gallons of a petroleum hydrocarbon and water mixture from the UST and performed a triple rinse of the tank interior. The fluid mixture was transported to the Marine facility for treatment. After the UST was cleaned and pumped of all fluids, a Marine Chemist from Sound Testing tested the tank atmosphere and certified the UST as being safe for removal and offsite transport. A Seattle Fire Department inspector confirmed the UST was safe for removal.

Filco used a tracked excavator to unearth the UST. The UST was a steel tank in poor condition with rusting and pitting breaching the tank interior. The UST was loaded onto a Filco vehicle for transport to Marvac's facility where the tank was prepared for recycling at Seattle Iron and Metals.

A Filco ICC-certified UST Site Assessor collected three site assessment soil samples from the base of the tank pit (TP1), the north end wall (TP2) and south end wall (TP3) of the UST removal basin, along with three samples from the stockpile of excavated overburden soils (Samples SP1, SP2, and SP3).



The Filco site assessor collected soil samples in 4 ounce jars for diesel-motor oil range total petroleum hydrocarbon (TPH), carcinogenic polynuclear aromatic hydrocarbons (cPAHs), polychlorinated biphenyls (PCBs) and total lead analysis. The samples collected for analysis of volatile organic compounds including gasoline TPH were collected using laboratory supplied collection equipment and containers following EPA Method 5035A protocols to minimize the potential loss of volatile compounds.

The samples were chilled with ice packs, placed in a cooler following chain of custody procedures and submitted to Friedman & Bruya, a Washington State certified analytical laboratory. The samples were submitted for analytical testing using the analytes listed in WAC 173-340-900 Table 830-1 (Required Testing for Petroleum Releases).

Friedman & Bruya analyzed samples selected by the site assessor as representative of the release. Tank basin sample (TP1) and a stockpile sample (SP2) were selected to be analyzed for the presence of diesel and motor oil range total petroleum hydrocarbons (TPH) using Northwest Analytical Method NWTPH-Dx. The samples were also analyzed for gasoline range TPH using Northwest Analytical Method NWTPH-Gx, total lead using EPA Analytical Method 200.8, carcinogenic polynuclear aromatic hydrocarbons (CPAHs) using EPA Analytical Method 8270-SIM, volatile organic compounds (VOCs) using EPA Analytical Method 8260, semivolatile compounds using EPA Method 8270D SIM and Polychlorinated Biphenyls (PCBs) using EPA Analytical Method 8080A. Analytical results are presented in Tables 1 through 4. Laboratory analytical certificates are located in Appendix A.

### $\label{eq:Table 1. Soil Sample Analytical Results} Total Diesel (C_{10}-C_{25}) and Motor Oil (C_{25}-C_{36}) Range Petroleum Hydrocarbons \\ Using Northwest Method NWTPH-Dx$

Results in milligrams per kilograms equivalent to parts per million (ppm)

Sample Number	Date Collected	Type or Depth (fbg)	Diesel Range TPH	Motor Oil TPH	Status
TP1	6/21/2016	Assessment /6'	410	<250	removed
SP2	6/21/2016	Stockpile	1,700	350	removed
NSW-7	9/27/2016	7'	9,900	3,900	removed
ESW-7	9/27/2016	7'	2,000	<250	removed
WSW-7	9/27/2016	7'	400	<250	removed
SSW-7'	9/27/2016	7'	890	<250	removed
Base-8'	9/30/2016	8'	2,100	<250	removed
NSW2-8'	9/30/2016	8'	<50	<250	in place
ESW2-8'	9/30/2016	8'	<50	<250	in place
WSW2-8'	9/30/2016	8'	410	<250	removed
SSW2-8'	9/30/2016	8'	<50	<250	in place
Base2-9'	9/30/2016	9'	340	<250	in place
MTCA	Method A	Cleanup Level	2,000	2,000	

Sample Nomenclature: WSW= West sidewall, ESW=East sidewall, NSW=North sidewall, SSW=South sidewall, SP=Stockpile, Base=Bottom of excavation. Analytical results in **bold** are greater than or equal to the MTCA A CL.



### Table 2. Soil Sample Analytical Results Polychlorinated Biphenyls (PCBs) as Aroclors Using EPA Method 8082A

Results in parts per million (ppm)

Sample	Date	Туре	Aroclor						
			1221	1232	1016	1242	1248	1254	1260
TP1	6/21/2016	S	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
SP2	6/21/2016	Α	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MTCA	A CL in ppm		1.0	1.0	1.0	1.0	1.0	1.0	1.0

Nomenclature: S=stockpile sample, A=Assessment sample.

#### **Table 3. Soil Sample Analytical Results**

### Total VOCs including Benzene, Toluene, Ethylbenzene and Xylenes (BTEX) Analyzed using EPA Method 8260C Total Gasoline Range Petroleum Hydrocarbons Analyzed using Method NWTPH-Gx Total Lead Analyzed using EPA Method 200.8

Results in Parts per Million (ppm)

				iits iii rai ts p		- Table 1			
Sample	Date	Type/Status	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	VOCs <sup>3</sup>	Total Lead
Number			TPH						
TP1	6/21/2016	A/R	82	<0.03	<0.05	0.20	3.10	<mtca< td=""><td>8.33</td></mtca<>	8.33
SP2	6/21/2016	S/R	520	<0.03	<0.05	0.84	19.2	<mtca< td=""><td>98.00</td></mtca<>	98.00
NSW-7'	9/27/2016	D/R	4,300	0.22	2.5	16	230	NA	NA
ESW-7'	9/27/2016	D/R	130	<0.02	<0.02	<0.02	1.7	NA	NA
WSW-7'	9/27/2016	D/R	95	<0.02	<0.02	<0.02	0.82	NA	NA
SSW-7'	9/27/2016	D/R	130	<0.02	<0.02	<0.02	1.2	NA	NA
Base-8	9/27/2016	D/R	370	0.034	0.029	<0.02	7.9	NA	NA
NSW2-8'	9/30/2016	C/IP	22	<0.02	<0.02	<0.02	<0.06	NA	NA
ESW2-8'	9/30/2016	C/IP	12	<0.02	<0.02	<0.02	<0.06	NA	NA
WSW2-8'	9/30/2016	D/R	180	<0.02	<0.02	<0.02	0.69	NA	NA
SSW2-8'	9/30/2016	C/IP	<2	<0.02	<0.02	<0.02	<0.06	NA	NA
Base2-9'	9/30/2016	C/IP	82	<0.02	<0.02	<0.02	0.63	NA	NA
WSW3-8'	10/10/2016	C/IP	<2	<0.02	<0.02	<0.02	<0.06	NA	NA
MTCA A	CLs in ppm		30/100 <sup>1</sup>	0.03	7	6	9 <sup>2</sup>	EL VERN	250

Nomenclature: S=S tockpile Sample, A=S tite Assessment Sample, C=C Cleanup Confirmation Sample, D=D Documentation Sample. Status: C=C Removed, C=C In Place. C=C



# FILCO COMPANY INC.

Table 4. Soil Sample Analytical Results

Semivolatile Organic Compounds using SW8270D SIM in parts per billion (ppb)

			;			(24d)			(mdd)			
SAMPLE	DATE	TYPE	Total Naphthalenes	Benzo(a)- Anthracene	Chrysene	Benzo(a)- pyrene)	Benzo(b)fluor- Anthene	Benzo(k) fluor-Anthene	Indeno (1,2,3d)pyrene	Dibenz(a,h)- anthracene	TEF (cPAHs)	STATUS
TP1	9/7/2016	4	2.64	<10	<10	<10	<10	<10	<10	<10	<10	removed
SP2	9/7/2016	s	21.5	110	95	64	81	28	25	0	89.35	removed
NSW-7'	9/27/2016	۵	214	AN	NA	AN	ΑN	AN	NA	NA	NA	removed
ESW-7'	9/27/2016	٥	8.4	A	NA	AN	NA	AN	AN	AN	NA	removed
WSW-7'	9/27/2016	۵	3.48	AN	ΑN	AN	AN	NA	AN	AN	AN	removed
SSW-7'	9/27/2016	۵	4.27	NA	₹ V	NA	NA	AN	NA	AN	NA	removed
BASE-8'	9/27/2016	۵	12.3	NA	ΑN	NA	AN	AN	AN	NA	AN	removed
NSW2-8'	9/30/2016	ပ	<0.05	AN	NA	NA	AN	AN	AN	NA	NA	in place
ESW2-8′	9/30/2016	U	<0.05	AN	NA	NA	ΑN	AN	AN	NA	NA	removed
WSW2-8'	9/30/2016	۵	0.92	AN	Ϋ́	NA	ΑN	AN	AN	AN	AN	in place
SSW2-8'	9/30/2016	U	<0.05	AN	ΑΝ	NA	AN	NA	NA	AN	NA	in place
BASE2-9'	9/30/2016	C	1.7	NA	NA	NA	NA	NA	NA	NA	NA	in place
MTCA	A	ರ	5.0								100*	

Method A (MTCA A) Cleanup Level 100 ppb (equivalent to 0.01 parts per million (ppm) = soil cleanup level in ppm for carcinogenic PAHs (cPAHs); based on direct contact; (Table Nomenclature/acronyms: S=Stockpile sample, A=Site Assessment sample, D=Documentation (Performance ) Sample, C=Cleanup Confirmation Sample. Model Toxics Control Act 740-1 (WAC-340-900)). The cPAH cleanup level is calculated by adding up weighted values of all carcinogenic PAHs using the formula as described in (Table 708-2) WAC 173-340-708(e). Analytical results in bold are greater than or equal to the MTCA A CL.



#### 4.0 Discussion of Analytical Results

Soil samples were collected during four separate events; the initial site assessment, five samples collected following preliminary remedial excavation activities on September 27, 2016, five samples collected on September 30, 2016 after additional remedial excavation was performed and one sample collected on October 10, 2016 following final remedial excavation activities.

#### 4.1 Site Assessment Analytical Results

Site assessment samples collected on June 21, 2016 following removal of the UST were below MTCA A CLs for diesel-motor oil and gasoline range TPH and total lead. PCBs were not detected above laboratory Method Reporting Limits (MRLs). Samples TP1 and SP2 exhibited 82 ppm and 520 ppm gasoline range TPH respectively; exceeding the MTCA A CL for gasoline TPH. Naphthalenes were detected at levels exceeding the MTCA A CL of 5 ppm from sample SP2. Total lead was present in sample TP1 at 8.33 ppm and SP2 at 98 ppm, below the MTCA A CL of 250 ppm.

Analytical results for carcinogenic PAHs were obtained and used to calculate weighted Toxicity Equivalence Factor (TEF) values: <10 ppm (TP1) and 0.089 ppm (SP2) using equation 740-2 (WAC 173-340-708 (8). Both sample results were below the TEF cleanup level of 0.1 ppm).

#### 4.2 Initial Remedial Excavation Analytical Results

Based on site assessment samples confirming a release of gasoline/diesel petroleum hydrocarbons and naphthalenes, remedial excavation proceeded. Following the removal of 27.37 tons of DRO-impacted soil on September 27, 2016, soil samples were collected from the sidewalls and bottom of the remedial excavation. The soil samples were analyzed to quantify levels of diesel, heavy oil and gasoline, benzene, toluene, ethylbenzene and xylenes (BTEX) and naphthalenes present in the excavation. The results of the analytical testing indicated exceedances of MTCA A CLs for gasoline TPH, benzene and/or naphthalenes in the north sidewall (NSW-7'), west sidewall (WSW-7'), east sidewall (ESW-7'), south side wall (ssw-7') and the base of the remedial excavation (Base-8). The remedial excavation was expanded in all directions.

#### 4.3 Final Remedial Excavation Analytical Results

During the second phase of remedial excavation activities on September 30, 2016, an additional 26.75 tons of soil were removed from each of the remedial excavation sidewalls and bottom. The remedial excavation was then resampled. Analytical results indicated all locations in the remedial excavation met MTCA A CLs for naphthalene, gasoline TPH and BTEX with the exception of WSW2-8 which contained 180 ppm of gasoline range TPH. This area underwent additional remedial excavation by excavating further to the west on October 10, 2016. A final load of 7.88 tons of soil was removed from the west sidewall. Once field tests appeared to indicate the soil met MTCA A CLs, sample WSW3-8' was then collected to document gasoline TPH levels. Sample WSW3-8 exhibited levels of gasoline and BTEX below laboratory MRLs. No further remedial excavation was performed based on the final cleanup confirmation sample results.



#### 5.0 Conclusions and Recommendations

A total of 62 tons of impacted soil was excavated between September 27 and October 10, 2016. The petroleum hydrocarbon-impacted soil was transported off site to Waste Management's Alaska Street drop off facility in Seattle, Washington with eventual transport to their Columbia Ridge, Subtitle D Landfill, located in Arlington, Oregon. Landfill disposal documentation is located in Appendix B. The Subject Property was backfilled with clean imported Type 17 sandy gravel. Remedial excavation was successful, removing petroleum hydrocarbon-impacted soil from all areas and bringing the site into compliance with the applicable MTCA A CLs. No further remedial excavation appears to be warranted. Groundwater was not observed in the remedial excavation. Washington State Department of Ecology Site assessment forms and project permits are located in Appendix C.

#### 6.0 Statement of Existing Conditions and Limitations

The results of this independent cleanup do not preclude the existence of impacts to soil or groundwater in areas on or off the Subject Property that were not sampled during the course of the project. Filco does not warrant that additional tanks or soil contamination does not exist on the Subject Property, or that migration of contamination on to the Subject Property has not occurred from offsite properties. If other tanks or contaminant sources are subsequently discovered, Filco is not liable for such subsequent discoveries.

Work by Filco associated with this task was performed, and this report was prepared in accordance with generally accepted professional practices for work of this nature, at the time it was performed. No warranty, expressed or implied, is made. Should you have any questions regarding this report or any of the activities and analytical results documented herein, please do not hesitate to contact Filco.

FILCO COMPANY INCORPORATED

Jordin Buttenob Environmental Scientist Washington State Site Assessor #8291441 Richard N. Simpson, LG/LHg Senior Geologist/ Hydrogeologist

FIGURE 1: Vicinity Map FIGURE 2: Geology Map

FIGURE 3: Site Schematic – Used Oil Tank Site Assessment/Remedial Excavation with Cleanup Sample Locations

FIGURE 4: Project Photographs

APPENDIX A: ANALYTICAL RESULTS

APPENDIX B: SOIL DISPOSAL DOCUMENTATION

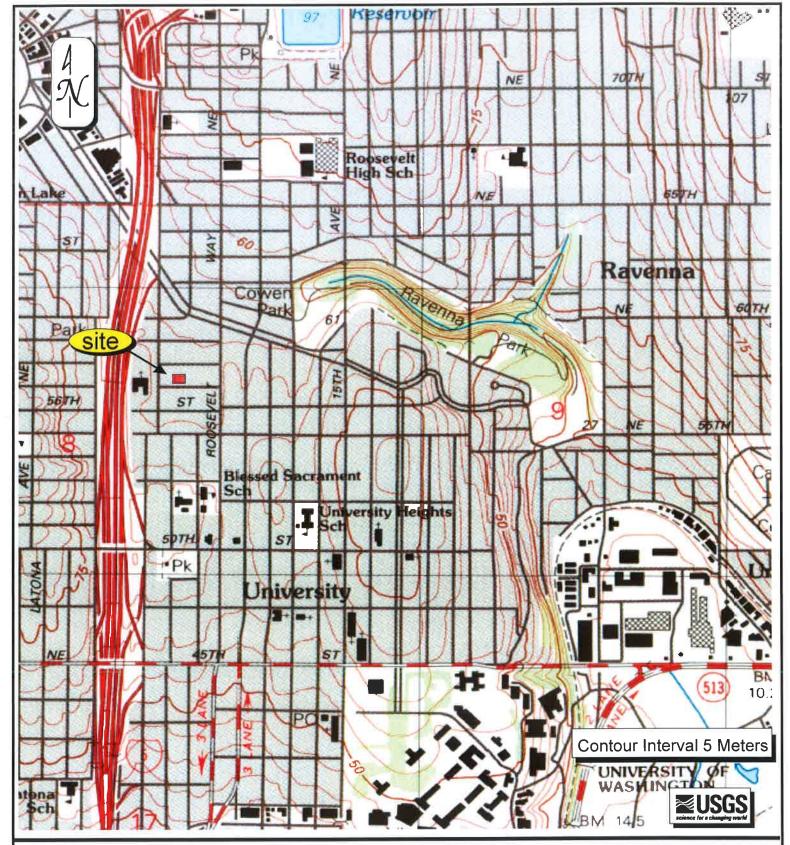
APPENDIX C: ECOLOGY SITE ASSESSMENT FORMS & PERMITS



#### 7.0 References

- Guidance for Remediation of Petroleum Contaminated Sites Washington State Department of Ecology
  Toxics Cleanup Program, Revised June 2016.
- Guidance for Remediation of Releases from Underground Storage Tanks –
   Washington State Department of Ecology Toxics Cleanup Program, July 1991.
- Guidance for Site Checks and Site Assessments for Underground Storage Tanks –
   Washington State Department of Ecology, Revised October 1992.
- 4. Washington State Model Toxics Control Act Chapter 173-340 WAC.
- 5. <u>Underground Storage Tank Regulations</u> Chapter 173-360 WAC.

### **FIGURES**





#### Figure 1. Vicinity Map

#### **USGS Seattle North Topographic Map (1983)**

Site Address: 816 Northeast 57th Street Seattle, Washington 98105 FILCO JOB NUMBER 25568

FILCO COMPANY INCORPORATED P.O Box 31228, Seattle, Washington 98103

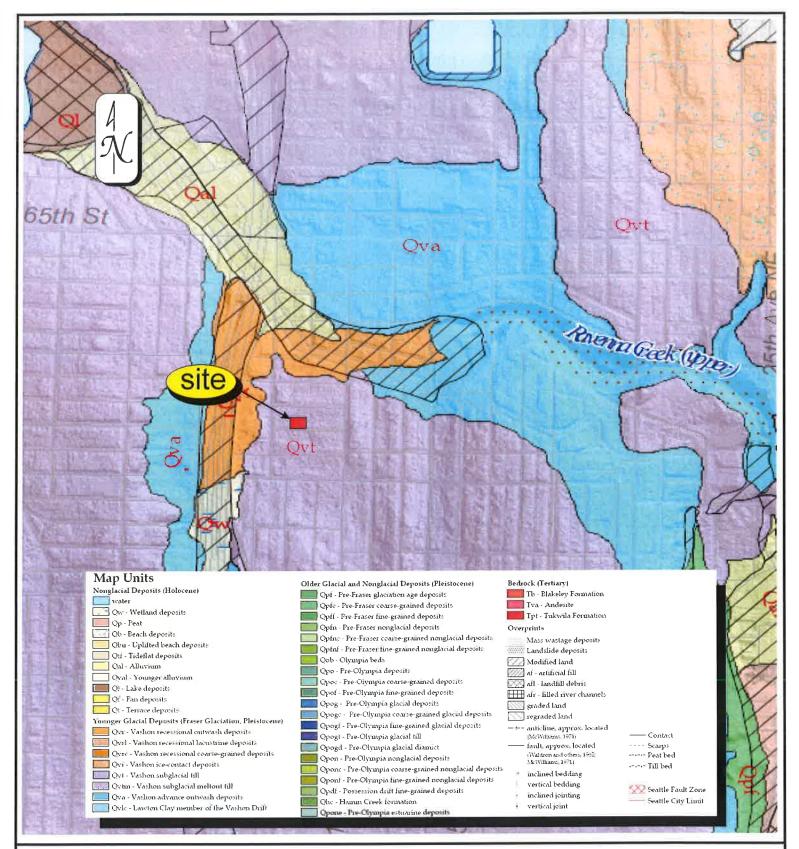


Figure 2. Geology Map

The Geologic Map of Seattle - a Progress Report

Kathy Goetz Troost, Derek B. Booth, Arron P. Wisher and Scott A. Schimel (2005)
Open File Report 2005-1252

Site Address: 816 Northeast 57th Street, Seattle, Washington 98105 FILCO JOB NUMBER 25568

FILCO COMPANY INCORPORATED P.O Box 31228, Seattle, Washington 98103

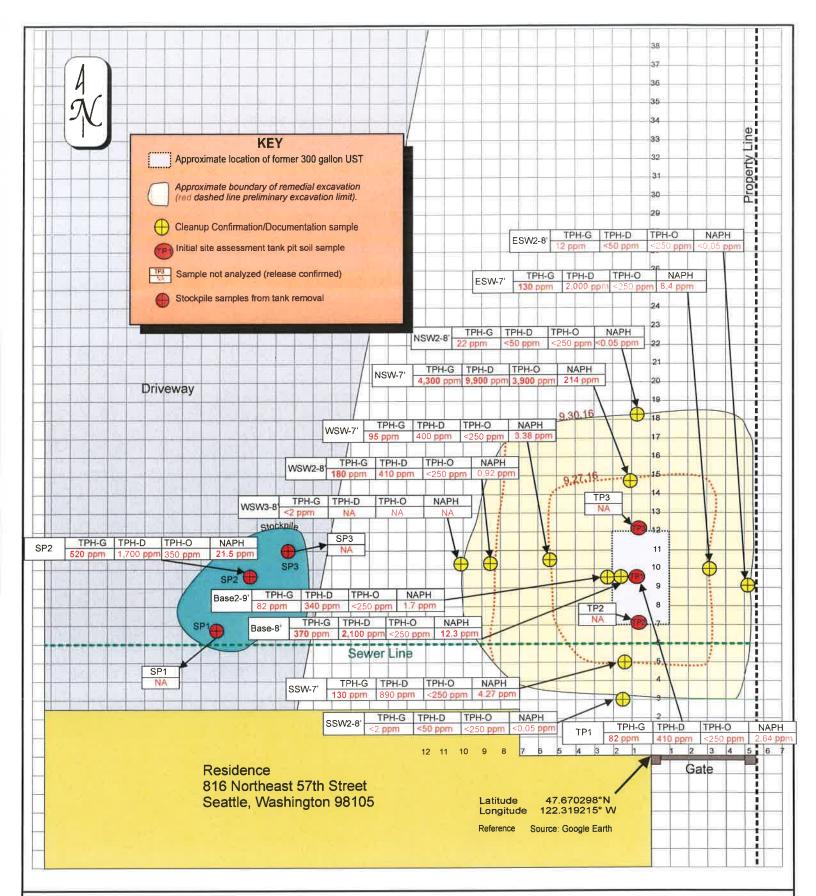




Figure 3. Site Schematic: Used Oil Tank Site Assessment Remedial Excavation with Cleanup Confirmation Sample Locations

Site Address: 816 Northeast 57th Street, Seattle, Washington 98105 FILCO JOB NUMBER 25568

FILCO COMPANY INCORPORATED P.O Box 31228, Seattle, Washington 98103

#### FIGURE 4: SITE PHOTOGRAPHS



Photograph 1. View of the project area.



Photograph 3. View of the excavation taking place.



Photograph 5. View of the repaired sewer line.



Photograph 2. View of corrosion holes on the UST.



Photograph 4. View of the contaminated area.



Photograph 6. View of the excavation being backfilled and compacted.

# APPENDIX A ANALYTICAL LABORATORY CERTIFICATES

#### ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Yelena Aravkina, M.S. Michael Erdahl, B.S. Arina Podnozova, B.S. Eric Young, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282 fbi@isomedia.com www.friedmanandbruya.com

July 8, 2016

Jordin Buttenob, Project Manager Filco Company, Inc. PO Box 31228 Seattle, WA 98103

Dear Mr Buttenob:

Included are the results from the testing of material submitted on June 22, 2016 from the 816 NE 57th St, PO 25568, F&BI 606405 project. There are 27 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.

Matthew Langston Project Manager

Enclosures FCI0708R.DOC

#### ENVIRONMENTAL CHEMISTS

Date of Report: 07/08/16 Date Received: 06/22/16

Project: 816 NE 57th St, PO 25568, F&BI 606405

Date Extracted: 06/22/16 Date Analyzed: 06/22/16

#### RESULTS FROM THE ANALYSIS OF 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)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
TP1 606405-01	82	122
SP2 606405-05	520	ip
Method Blank 06-1244 MB	<2	102

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 07/08/16 Date Received: 06/22/16

Project: 816 NE 57th St, PO 25568, F&BI 606405

Date Extracted: 06/22/16 Date Analyzed: 06/23/16

## RESULTS FROM THE ANALYSIS OF 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	$\frac{\text{Diesel Range}}{(\text{C}_{10}\text{-}\text{C}_{25})}$	$\frac{\text{Motor Oil Range}}{\text{(C}_{25}\text{-C}_{36})}$	Surrogate (% Recovery) (Limit 53-144)
TP1 606405-01	410	<250	107
SP2 606405-05	1,700	350	112
Method Blank	<50	<250	96

#### **ENVIRONMENTAL CHEMISTS**

Client:

Project:

Lab ID:

Data File:

Operator:

Instrument:

Filco Company

606405-01.119

606405-01

ICPMS1

SP

816 NE 57th St, F&BI 606405

#### Analysis For Total Metals By EPA Method 200.8

Client ID: Date Received: TP1 06/22/16 06/23/16

Date Extracted: Date Analyzed: 06/23/16 Matrix:

Units:

Soil

mg/kg (ppm) Dry Weight

Concentration mg/kg (ppm)

Analyte:

Lead

8.33

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Total Metals By EPA Method 200.8

Client ID:

SP2

Date Received:

06/22/16

Date Extracted: Date Analyzed:

06/23/16 06/23/16

Matrix: Units:

Soil

mg/kg (ppm) Dry Weight

Client: Project: Filco Company

816 NE 57th St, F&BI 606405

Lab ID: Data File: 606405-05 606405-05.120

Instrument:

ICPMS1

Operator:

SP

Concentration

Analyte:

mg/kg (ppm)

Lead

98.0

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Total Metals By EPA Method 200.8

Client ID:

Method Blank

Date Received:

NA 06/23/16

Date Extracted: Date Analyzed:

06/23/16

Matrix:

Soil

Units:

mg/kg (ppm) Dry Weight

Concentration

Analyte:

mg/kg (ppm)

Lead

<1

Client: Project: Filco Company 816 NE 57th St, F&BI 606405

Lab ID: Data File: I6-404 mb I6-404 mb.017

Instrument:

ICPMS1

Operator:

SP

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: TP1 06/22/16 Date Received: 06/23/16 Date Extracted: 06/23/16 Date Analyzed:

Matrix:

Soil mg/kg (ppm) Dry Weight Units:

Client: Project: Filco Company

816 NE 57th St, F&BI 606405

Lab ID: Data File: 606405-01 1/5 062317.D

> Upper Limit:

163

168

GCMS6 Instrument: Operator:

Lower

Limit: 31 24

ya

Surrogates:	% Recovery:
Anthracene-d10	95
Benzo(a)anthracene-d12	94

Concentration Compounds: mg/kg (ppm) Naphthalene 0.44 1.1 2-Methylnaphthalene 1-Methylnaphthalene 1.1 Benz(a)anthracene < 0.01 < 0.01 Chrysene < 0.01 Benzo(a)pyrene < 0.01 Benzo(b)fluoranthene Benzo(k)fluoranthene < 0.01 Indeno(1,2,3-cd)pyrene < 0.01 Dibenz(a,h)anthracene < 0.01

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: SP2
Date Received: 06/22/16
Date Extracted: 06/23/16
Date Analyzed: 06/23/16
Matrix: Soil

Units: mg/kg (ppm) Dry Weight

Client: Project:

Operator:

Filco Company

816 NE 57th St, F&BI 606405

Upper Limit:

163

168

Lab ID: 6
Data File: 0
Instrument: 0

Lower

Limit:

31

24

606405-05 1/5 062318.D

GCMS6 ya

Surrogates:	% Recovery:
Anthracene-d10	95
Benzo(a)anthracene-d12	97

Concentration Compounds: mg/kg (ppm) 3.2 ve Naphthalene 2-Methylnaphthalene 8.3 ve 1-Methylnaphthalene 6.4 ve Benz(a)anthracene 0.11 0.095 Chrysene Benzo(a)pyrene 0.064 Benzo(b)fluoranthene 0.081 Benzo(k)fluoranthene 0.028Indeno(1,2,3-cd)pyrene 0.025< 0.01 Dibenz(a,h)anthracene

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: SP2
Date Received: 06/22/16
Date Extracted: 06/23/16
Date Analyzed: 06/23/16

Matrix: Soil

Units: mg/kg (ppm) Dry Weight

Client: Project: Filco Company

816 NE 57th St, F&BI 606405

Upper Limit:

163

168

Lab ID: 606405-05 1/50
Data File: 062312.D
Instrument: GCMS6

Operator: ya

Surrogates: % Recovery: Limit:
Anthracene-d10 102 d 31
Benzo(a)anthracene-d12 119 d 24

Concentration Compounds: mg/kg (ppm) 3.5 Naphthalene 2-Methylnaphthalene 10 1-Methylnaphthalene 8.0 0.12 Benz(a)anthracene 0.11 Chrysene < 0.1 Benzo(a)pyrene < 0.1 Benzo(b)fluoranthene Benzo(k)fluoranthene < 0.1 < 0.1 Indeno(1,2,3-cd)pyrene < 0.1 Dibenz(a,h)anthracene

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: Date Received:

Method Blank Not Applicable 06/23/16

Date Extracted: Date Analyzed:

06/23/16 Soil

Matrix: Units:

mg/kg (ppm) Dry Weight

Client:

Filco Company

Project:

816 NE 57th St, F&BI 606405

Upper

Limit:

163

168

Lab ID: Data File: 06-1278 mb 1/5 062307.D

Instrument:

GCMS6

Operator: Lower

Limit:

31 24 ya

Surrogates:	% Recovery:
Anthracene-d10	93
Benzo(a)anthracene-d12	97

Anthracene-d10 Benzo(a)anthracene-d12	93 97
Compounds:	Concentration mg/kg (ppm)
	-0.01

Naphthalene < 0.01 < 0.01 2-Methylnaphthalene 1-Methylnaphthalene < 0.01 < 0.01 Benz(a)anthracene Chrysene < 0.01 Benzo(a)pyrene < 0.01 < 0.01 Benzo(b)fluoranthene < 0.01 Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene < 0.01 Dibenz(a,h)anthracene < 0.01

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Volatile Compounds By EPA Method 8260C

 Client Sample ID:
 TP1
 Client:
 Filco Company

 Date Received:
 06/22/16
 Project:
 816 NE 57th St, F&BI 606405

 Date Extracted:
 06/23/16
 Lab ID:
 606405-01

Date Analyzed:06/23/16Data File:062336.DMatrix:SoilInstrument:GCMS9Units:mg/kg (ppm) Dry WeightOperator:JS

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	102	89	113
Toluene-d8	101	64	137
4-Bromofluorobenzene	99	81	119

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	< 0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.5	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	< 0.5	Ethylbenzene	0.20
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1, 1-Dichloroethene	< 0.05	m,p-Xylene	2.3
Hexane	< 0.25	o-Xylene	0.80
Methylene chloride	< 0.5	Styrene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Isopropylbenzene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Bromoform	< 0.05
1, 1-Dichloroethane	< 0.05	n-Propylbenzene	0.070
2,2-Dichloropropane	< 0.05	Bromobenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	1,3,5-Trimethylbenzene	0.21
Chloroform	< 0.05	1,1,2,2-Tetrachloroethane	< 0.05
2-Butanone (MEK)	< 0.5	1,2,3-Trichloropropane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	2-Chlorotoluene	< 0.05
1,1,1-Trichloroethane	< 0.05	4-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	tert-Butylbenzene	< 0.05
Carbon tetrachloride	< 0.05	1,2,4-Trimethylbenzene	0.57
Benzene	< 0.03	sec-Butylbenzene	0.067
Trichloroethene	< 0.02	p-Isopropyltoluene	0.070
1,2-Dichloropropane	< 0.05	1,3-Dichlorobenzene	< 0.05
Bromodichloromethane	< 0.05	1,4-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,2-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dibromo-3-chloropropane	< 0.5
cis-1,3-Dichloropropene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
Toluene	< 0.05	Hexachlorobutadiene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Naphthalene	0.49
1,1,2-Trichloroethane	< 0.05	1,2,3-Trichlorobenzene	< 0.25
2-Hexanone	< 0.5		

#### ENVIRONMENTAL CHEMISTS

#### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	SP2	Client:	Filco Company
Date Received:	06/22/16	Project:	816 NE 57th St, F&BI 606405
Date Extracted:	06/23/16	Lab ID:	606405-05
Date Analyzed:	06/23/16	Data File:	062337.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

		Lower	Upper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	104	89	113
Toluene-d8	100	64	137
4-Bromofluorobenzene	97	81	119

1 Bromonadiocome	٠.	<del>-</del>	
	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	< 0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.5	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	< 0.5	Ethylbenzene	0.84
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	14
Hexane	< 0.25	o-Xylene	5.2
Methylene chloride	< 0.5	Styrene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Isopropylbenzene	0.26
trans-1,2-Dichloroethene	< 0.05	Bromoform	< 0.05
1,1-Dichloroethane	< 0.05	n-Propylbenzene	0.43
2,2-Dichloropropane	< 0.05	Bromobenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	1,3,5-Trimethylbenzene	1.5
Chloroform	< 0.05	1,1,2,2-Tetrachloroethane	< 0.05
2-Butanone (MEK)	< 0.5	1,2,3-Trichloropropane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	2-Chlorotoluene	< 0.05
1,1,1-Trichloroethane	< 0.05	4-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	tert-Butylbenzene	< 0.05
Carbon tetrachloride	< 0.05	1,2,4-Trimethylbenzene	3.9
Benzene	< 0.03	sec-Butylbenzene	0.31
Trichloroethene	< 0.02	p-Isopropyltoluene	0.32
1,2-Dichloropropane	< 0.05	1,3-Dichlorobenzene	< 0.05
Bromodichloromethane	< 0.05	1,4-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,2-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dibromo-3-chloropropane	< 0.5
cis-1,3-Dichloropropene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
Toluene	< 0.05	Hexachlorobutadiene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Naphthalene	3.8
1,1,2-Trichloroethane	< 0.05	1,2,3-Trichlorobenzene	< 0.25
2-Hexanone	< 0.5		

#### ENVIRONMENTAL CHEMISTS

#### Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Filco Company
Date Received:	Not Applicable	Project:	816 NE 57th St, F&BI 606405
Date Extracted:	06/23/16	Lab ID:	06-1261 mb
Date Analyzed:	06/23/16	Data File:	062314.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm) Dry Weight	Operator:	JS

		Lower	∪pper
Surrogates:	% Recovery:	Limit:	Limit:
1,2-Dichloroethane-d4	101	89	113
Toluene-d8	99	64	137
4-Bromofluorobenzene	98	81	119

	Concentration		Concentration
Compounds:	mg/kg (ppm)	Compounds:	mg/kg (ppm)
Dichlorodifluoromethane	< 0.5	1,3-Dichloropropane	< 0.05
Chloromethane	< 0.5	Tetrachloroethene	< 0.025
Vinyl chloride	< 0.05	Dibromochloromethane	< 0.05
Bromomethane	< 0.5	1,2-Dibromoethane (EDB)	< 0.05
Chloroethane	< 0.5	Chlorobenzene	< 0.05
Trichlorofluoromethane	< 0.5	Ethylbenzene	< 0.05
Acetone	< 0.5	1,1,1,2-Tetrachloroethane	< 0.05
1,1-Dichloroethene	< 0.05	m,p-Xylene	< 0.1
Hexane	< 0.25	o-Xylene	< 0.05
Methylene chloride	< 0.5	Styrene	< 0.05
Methyl t-butyl ether (MTBE)	< 0.05	Isopropylbenzene	< 0.05
trans-1,2-Dichloroethene	< 0.05	Bromoform	< 0.05
1,1-Dichloroethane	< 0.05	n-Propylbenzene	< 0.05
2,2-Dichloropropane	< 0.05	Bromobenzene	< 0.05
cis-1,2-Dichloroethene	< 0.05	1,3,5-Trimethylbenzene	< 0.05
Chloroform	< 0.05	1,1,2,2-Tetrachloroethane	< 0.05
2-Butanone (MEK)	< 0.5	1,2,3-Trichloropropane	< 0.05
1,2-Dichloroethane (EDC)	< 0.05	2-Chlorotoluene	< 0.05
1,1,1-Trichloroethane	< 0.05	4-Chlorotoluene	< 0.05
1,1-Dichloropropene	< 0.05	tert-Butylbenzene	< 0.05
Carbon tetrachloride	< 0.05	1,2,4-Trimethylbenzene	< 0.05
Benzene	< 0.03	sec-Butylbenzene	< 0.05
Trichloroethene	< 0.02	p-Isopropyltoluene	< 0.05
1,2-Dichloropropane	< 0.05	1,3-Dichlorobenzene	< 0.05
Bromodichloromethane	< 0.05	1,4-Dichlorobenzene	< 0.05
Dibromomethane	< 0.05	1,2-Dichlorobenzene	< 0.05
4-Methyl-2-pentanone	< 0.5	1,2-Dibromo-3-chloropropane	< 0.5
cis-1,3-Dichloropropene	< 0.05	1,2,4-Trichlorobenzene	< 0.25
Toluene	< 0.05	Hexachlorobutadiene	< 0.25
trans-1,3-Dichloropropene	< 0.05	Naphthalene	< 0.05
1,1,2-Trichloroethane	< 0.05	1,2,3-Trichlorobenzene	< 0.25
2-Hexanone	< 0.5		

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Volatile Compounds By EPA Method 8260C Direct Sparge

Client Sample ID: TP1 Date Received: 06/22/16 Date Extracted: 07/05/16 07/05/16 Date Analyzed: Matrix: Soil

Units:

Surrogates:

Toluene-d8

mg/kg (ppm) Dry Weight

Data File:

Client:

Project: Lab ID:

Instrument: Operator:

Lower

Limit:

50

50

50

GCMS4 JS

Filco Company

606405-01

070510.D

% Recovery:

Upper Limit: 150 150 150

816 NE 57th St, F&BI 606405

Concentration mg/kg (ppm)

102

96

126 J

Compounds:

1,2-Dibromoethane (EDB)

1,2-Dichloroethane-d4

4-Bromofluorobenzene

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Volatile Compounds By EPA Method 8260C Direct Sparge

Client Sample ID: SP2
Date Received: 06/22/16
Date Extracted: 07/05/16
Date Analyzed: 07/05/16
Matrix: Soil

Units: mg/kg (ppm) Dry Weight

Client: Project: Filco Company

816 NE 57th St, F&BI 606405

Lab ID: Data File: Instrument: 606405-05 070511.D GCMS4

Operator: JS

 Lower
 Upper

 Limit:
 Limit:

 50
 150

 50
 150

 50
 150

Concentration mg/kg (ppm)

% Recovery:

103

89

77 J

1,2-Dibromoethane (EDB)

1,2-Dichloroethane-d4

4-Bromofluorobenzene

Surrogates:

Toluene-d8

Compounds:

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For Volatile Compounds By EPA Method 8260C Direct Sparge

Client Sample ID: Date Received:

Method Blank

Date Extracted: Date Analyzed:

Matrix: Units:

Compounds:

Not Applicable 07/05/16

07/05/16 Soil

mg/kg (ppm) Dry Weight

Client:

Filco Company 816 NE 57th St, F&BI 606405

Project: Lab ID:

06-1310 mb

Data File: Instrument:

070509.D GCMS4

Operator: JS

% Recovery: Surrogates: 101 1,2-Dichloroethane-d4 Toluene-d8 103 4-Bromofluorobenzene 102

Lower Limit: 50 50 50

Upper Limit: 150 150 150

Concentration mg/kg (ppm)

1,2-Dibromoethane (EDB)

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For PCBs By EPA Method 8082A

Client Sample ID:	TP1
Date Received:	06/22/16
Date Extracted:	06/23/16
Date Analyzed:	06/24/16
Matrix:	Soil

Units:

Soil mg/kg (ppm) Dry Weight

Client: Project: Lab ID: Filco Company

816 NE 57th St, F&BI 606405

606405-01 1/25 062416.DData File: GC7 Instrument: Operator: MP

Upper Limit: Lower Surrogates: TCMX % Recovery: Limit: 154 29 79

Concentration mg/kg (ppm) Compounds: < 0.1 Aroclor 1221 < 0.1 Aroclor 1232 < 0.1 Aroclor 1016 < 0.1 Aroclor 1242 Aroclor 1248 < 0.1 < 0.1 Aroclor 1254 Aroclor 1260 < 0.1 < 0.1 Aroclor 1262 < 0.1 Aroclor 1268

#### **ENVIRONMENTAL CHEMISTS**

#### Analysis For PCBs By EPA Method 8082A

Client Sample ID: Date Received:

SP2

06/22/16

Date Extracted: Date Analyzed:

06/23/16 06/24/16

Matrix:

Units:

Soil

mg/kg (ppm) Dry Weight

Client:

Filco Company

Project:

Lab ID: Data File: 816 NE 57th St, F&BI 606405

606405-05 1/25 062417.D

Instrument: Operator:

GC7 MP

Surrogates: TCMX

% Recovery: 82

Lower Limit: 29

Upper Limit: 154

Concentration

Aroclor 1221

Aroclor 1262 Aroclor 1268

Compounds: Aroclor 1232 Aroclor 1016 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260

mg/kg (ppm) < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1 < 0.1

#### **ENVIRONMENTAL CHEMISTS**

Client:

Project:

Lab ID:

Data File:

#### Analysis For PCBs By EPA Method 8082A

Method Blank Client Sample ID: Date Received: Not Applicable 06/23/16 Date Extracted: 06/23/16 Date Analyzed:

Soil Matrix:

mg/kg (ppm) Dry Weight Units:

Instrument: Operator:

< 0.02

Lower Limit: % Recovery: 29 94

GC7 mp

062329.D

Filco Company

06-1282 mb 1/5

Upper Limit: 154

816 NE 57th St, F&BI 606405

Surrogates: TCMX Concentration Compounds: mg/kg (ppm) Aroclor 1221 < 0.02 < 0.02 Aroclor 1232 Aroclor 1016 < 0.02 < 0.02 Aroclor 1242 < 0.02 Aroclor 1248 < 0.02 Aroclor 1254 < 0.02 Aroclor 1260 Aroclor 1262 < 0.02

Aroclor 1268

### FRIEDMAN & BRUYA, INC. ENVIRONMENTAL CHEMISTS

Date of Report: 07/08/16 Date Received: 06/22/16

Project: 816 NE 57th St, PO 25568, F&BI 606405

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

Laboratory Code: 606301-04 (Duplicate)

		Sample Result	Duplicate Result	RPD
Analyte	Reporting Units	(Wet Wt)	(Wet Wt)	(Limit 20)
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

		1	Percent		
		Spike	Recovery	Acceptance	
Analyte	Reporting Units	Level	LCS	Criteria	
Gasoline	mg/kg (ppm)	20	95	71-131	

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 07/08/16 Date Received: 06/22/16

Project: 816 NE 57th St, PO 25568, F&BI 606405

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C DIRECT SPARGE

Laboratory Code: 606405-05 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet wt)	Duplicate Result (Wet wt)	RPD (Limit 20)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	< 0.005	< 0.005	nm

Laboratory Code: Laboratory Control Sample

			Percent	Percent		
	Reporting	Spike	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
1,2-Dibromoethane (EDB)	mg/kg (ppm)	0.05	112	118	70-130	5

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 07/08/16 Date Received: 06/22/16

Project: 816 NE 57th St, PO 25568, F&BI 606405

# QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES

# FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 606376-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)	
Diesel Extended	mg/kg (ppm)	5.000	<50	100	113	64-133	12	

Laboratory Code: Laboratory Control Sample

			Percent		
	Reporting	Spike	Recovery	Acceptance	
Analyte	Units	Level	LCS	Criteria	
Diesel Extended	mg/kg (ppm)	5,000	106	58-147	

### ENVIRONMENTAL CHEMISTS

Date of Report: 07/08/16 Date Received: 06/22/16

Project: 816 NE 57th St, PO 25568, F&BI 606405

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 606408-01 (Matrix Spike)

			Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet wt)	MS	MSD	Criteria	(Limit 20)
Lead	mg/kg (nnm)	50	980	0 b	<b>0</b> b	70-130	0 b

Laboratory Code: Laboratory Control Sample

			$\operatorname{Percent}$	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Lead	mg/kg (ppm)	50	107	85-115

#### ENVIRONMENTAL CHEMISTS

Date of Report: 07/08/16 Date Received: 06/22/16

Project: 816 NE 57th St, PO 25568, F&BI 606405

# QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 606360-04 1/25 (Matrix Spike)

			Sample	Percent	
	Reporting	Spike	Result	Recovery	Acceptance
Analyte	Units	Level	(Wet wt)	MS	Criteria
Naphthalene	mg/kg (ppm)	0.17	< 0.05	84	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	< 0.05	82	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	< 0.05	81	40-141
Benz(a)anthracene	mg/kg (ppm)	0.17	< 0.05	95	23-144
Chrysene	mg/kg (ppm)	0.17	0.068	89 b	32-149
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	< 0.05	93	23-176
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	< 0.05	93	42-139
Benzo(a)pyrene	mg/kg (ppm)	0.17	< 0.05	89	21-163
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	< 0.05	81	23-170
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	< 0.05	81	31-146

Laboratory Code: Laboratory Control Sample 1/5

·	-		Percent	Percent		
	Reporting	Spike	Recovery	Recover <b>A</b> c	ceptance	RPD
Analyte	Units	Level	LCS	LCSD	Criteria	(Limit 20)
Naphthalene	mg/kg (ppm)	0.17	86	88	58-121	2
2-Methylnaphthalene	mg/kg (ppm)	0.17	84	86	58-123	2
1-Methylnaphthalene	mg/kg (ppm)	0.17	85	7 86	60-124	1
Benz(a)anthracene	mg/kg (ppm)	0.17	94	96	51-115	2
Chrysene	mg/kg (ppm)	0.17	91	93	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	93	91	56-123	2
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	87	92	54-131	6
Benzo(a)pyrene	mg/kg (ppm)	0.17	86	87	51-118	1
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	95	93	49-148	2
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	94	93	50-141	1

### ENVIRONMENTAL CHEMISTS

Date of Report: 07/08/16 Date Received: 06/22/16

Project: 816 NE 57th St, PO 25568, F&BI 606405

# QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 606408-01 (Matrix Spike)

	_		Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level		MS	MSD	Criteria	(Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	25	24	10-56	4
Chloromethane	mg/kg (ppm)	2.5	< 0.5	50	49	10-90	2
Vinyl chloride	mg/kg (ppm)	2.5	< 0.05	50	50	10-91	0
Bromomethane	mg/kg (ppm)	2.5	<0.5	58	60	10-110	3
Chloroethane	mg/kg (ppm)	2.5	<0.5	62	62 58	10-101 10-95	0 2
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	57 90	90	11-141	0
Acetone	mg/kg (ppm)	12.5 2.5	<0.5 <0.05	66	68	11-103	3
1,1-Dichloroethene Hexane	mg/kg (ppm) mg/kg (ppm)	2.5	<0.25	53	55	10-95	4
Methylene chloride	mg/kg (ppm)	2.5	<0.5	80	81	14-128	1
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	< 0.05	83	84	17-134	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	< 0.05	75	76	13-112	1
1,1-Dichloroethane	mg/kg (ppm)	2.5	< 0.05	77	78	23-115	1
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	89	89 81	18-117 25-120	0
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	80 82	82	29-117	0
Chloroform	mg/kg (ppm)	2.5 12.5	<0.05 <0.5	88	89	20-133	i
2-Butanone (MEK)	mg/kg (ppm) mg/kg (ppm)	2.5	<0.05	87	88	22-124	î
1,2-Dichloroethane (EDC) 1.1.1-Trichloroethane	mg/kg (ppm)	2.5	< 0.05	83	83	27-112	0
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	77	78	26-107	1
Carbon tetrachloride	mg/kg (ppm)	2.5	< 0.05	83	84	22-115	1
Benzene	mg/kg (ppm)	2.5	< 0.03	77	77	26-114	0
Trichloroethene	mg/kg (ppm)	2.5	<0.02	78	79	30-112	1
1,2-Dichloropropane	mg/kg (ppm)	2.5	< 0.05	84 86	85 87	31-119 31-131	1
Bromodichloromethane	mg/kg (ppm)	2.5 2.5	<0.05 <0.05	83	82	27-124	1
Dibromomethane	mg/kg (ppm)	12.5	<0.5	94	94	16-147	ó
4-Methyl-2-pentanone	mg/kg (ppm) mg/kg (ppm)	2.5	<0.05	92	92	28-137	0
cis-1,3-Dichloropropene Toluene	mg/kg (ppm)	2.5	<0.05	81	82	34-112	1
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	< 0.05	90	89	30-136	1
1.1.2-Trichloroethane	mg/kg (ppm)	2.5	< 0.05	88	88	32-126	0
2-Hexanone	mg/kg (ppm)	12.5	<0.5	91	90 85	17-147 29-125	0
1,3-Dichloropropane	mg/kg (ppm)	2.5	< 0.05	85 81	82	25-125 25-114	i
Tetrachloroethene	mg/kg (ppm)	2.5 2.5	<0.025 <0.05	92	93	32-143	i
Dibromochloromethane	mg/kg (ppm) mg/kg (ppm)	2.5	< 0.05	88	89	32-126	i
1,2-Dibromoethane (EDB) Chlorobenzene	mg/kg (ppm)	2.5	<0.05	81	81	37-113	0
Ethylbenzene	mg/kg (ppm)	2.5	< 0.05	81	81	34-115	0
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	< 0.05	93	93	35-126	0
m,p-Xylene	mg/kg (ppm)	5	<0.1	82	83	25-125	1
o-Xylene	mg/kg (ppm)	2.5	< 0.05	84 86	84 86	27-126 39-121	0
Styrene	mg/kg (ppm)	2.5 2.5	<0.05 <0.05	84	86	34-123	2
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	88	87	18- 155	ĭ
Bromoform n-Propylbenzene	mg/kg (ppm) mg/kg (ppm)	2.5	<0.05	84	84	31-120	0
Bromobenzene	mg/kg (ppm)	2.5	< 0.05	83	82	40-115	1
1.3.5-Trimethylbenzene	mg/kg (ppm)	2.5	< 0.05	83	83	24-130	0
1.1.2.2-Tetrachloroethane	mg/kg (ppm)	2.5	< 0.05	88	88	27-148	0
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	88 82	89 82	33-123 39-110	0
2-Chlorotoluene	mg/kg (ppm)	2.5 2.5	<0.05 <0.05	85	84	39-110	1
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	87	87	36-116	ó
tert-Butylbenzene	mg/kg (ppm) mg/kg (ppm)	2.5	<0.05	83	84	35-116	1
1,2,4-Trimethylbenzene sec-Butylbenzene	mg/kg (ppm)	2.5	< 0.05	85	86	33-118	1
p-Isopropyltoluene	mg/kg (ppm)	2.5	< 0.05	85	85	32-119	0
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	< 0.05	83	83	38-111	0
1,4-Dichlorobenzene	mg/kg (ppm)	2,5	<0.05	82	81	39-109	1
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	82	81 91	40-111 37-122	1 2
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5 <0.25	93 83	85	31-121	2
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5 2.5	<0.25 <0.25	86	87	24-128	ĩ
Hexachlorobutadiene Naphthalene	mg/kg (ppm) mg/kg (ppm)	2.5	<0.05	87	88	24-139	i
Naphthalene 1.2.3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	82	82	35-117	0
1,810-1 remotoreme							

### ENVIRONMENTAL CHEMISTS

Date of Report: 07/08/16 Date Received: 06/22/16

Project: 816 NE 57th St, PO 25568, F&BI 606405

# QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

•			Percent	
	Reporting	Spike	Recovery	Acceptance
A. Take	Units	Level	LCS	Criteria
Analyte		2.5	52	10-76
Dichlorodifluoromethane	mg/kg (ppm) mg/kg (ppm)	2.5	71	34-98
Chloromethane Vinyl chloride	mg/kg (ppm)	2.5	76	42-107
Bromomethane	mg/kg (ppm)	2,5	77	46-113
Chloroethane	mg/kg (ppm)	2.5	86	47-115
Trichlorofluoromethane	mg/kg (ppm)	2.5	86	53-112
Acetone	mg/kg (ppm)	12.5	106	39-147 65-110
1,1-Dichloroethene	mg/kg (ppm)	2.5 2.5	93 94	55-107
Hexane	mg/kg (ppm) mg/kg (ppm)	2.5	99	50-127
Methylene chloride Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	97	72-122
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	98	71-113
1.1-Dichloroethane	mg/kg (ppm)	2.5	96	74-109
2,2-Dichloropropane	mg/kg (ppm)	2.5	103	64-151
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	98	73-110
Chloroform	mg/kg (ppm)	2.5	96	76-110 60-121
2-Butanone (MEK)	mg/kg (ppm)	12.5 2.5	104 102	73-111
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	102	72-116
1,1,1-Trichloroethane	mg/kg (ppm) mg/kg (ppm)	2.5	97	72-112
1,1-Dichloropropene Carbon tetrachloride	mg/kg (ppm)	2.5	103	67-123
Benzene	mg/kg (ppm)	2.5	93	72-106
Trichloroethene	mg/kg (ppm)	2.5	93	72-107
1.2-Dichloropropane	mg/kg (ppm)	2.5	101	74-115
Bromodichloromethane	mg/kg (ppm)	2.5	102	75-126
Dibromomethane	mg/kg (ppm)	2.5	98 111	76-116 80-128
4-Methyl-2-pentanone	mg/kg (ppm)	12.5 2.5	108	71-138
cis-1,3-Dichloropropene	mg/kg (ppm) mg/kg (ppm)	2.5	97	74-111
Toluene trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	106	77-135
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	105	77-116
2-Hexanone	mg/kg (ppm)	12.5	104	70-129
1,3-Dichloropropane	mg/kg (ppm)	2.5	101	75-115
Tetrachloroethene	mg/kg (ppm)	2.5	100	73-111 64-152
Dibromochloromethane	mg/kg (ppm)	2.5 2.5	109 106	77-117
1,2-Dibromoethane (EDB)	mg/kg (ppm) mg/kg (ppm)	2.5	95	76-109
Chlorobenzene Ethylbenzene	mg/kg (ppm)	2.5	97	75-112
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	108	76-125
m,p-Xylene	mg/kg (ppm)	5	99	77-115
o-Xylene	mg/kg (ppm)	2.5	101	76-115
Styrene	mg/kg (ppm)	2.5	102	76-119 76-120
Isopropylbenzene	mg/kg (ppm)	2.5 2.5	102 101	50-174
Bromoform	mg/kg (ppm)	2.5	100	77-115
n-Propylbenzene	mg/kg (ppm) mg/kg (ppm)	2.5	98	76-112
Bromobenzene 1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	99	77-121
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2,5	103	74-121
1.2.3-Trichloropropane	mg/kg (ppm)	2.5	102	74-116
2-Chlorotoluene	mg/kg (ppm)	2.5	98	75-113
4-Chlorotoluene	mg/kg (ppm)	2.5	99	77-115 77-123
tert-Butylbenzene	mg/kg (ppm)	2.5	101 100	77-119
1,2,4-Trimethylbenzene	mg/kg (ppm) mg/kg (ppm)	2.5 2.5	100	78-120
sec-Butylbenzene	mg/kg (ppm) mg/kg (ppm)	2.5	101	77-120
p-Isopropyltoluene 1.3-Dichlorobenzene	mg/kg (ppm)	2.5	97	76-112
1,3-Dicmorobenzene 1,4-Dichlorobenzene	mg/kg (ppm)	2.5	96	74-109
1.2-Dichlorobenzene	mg/kg (ppm)	2.5	94	75-114
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	105	68-122 75-122
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	94	75-122 74-130
Hexachlorobutadiene	mg/kg (ppm)	2.5 2.5	99 97	73-122
Naphthalene	mg/kg (ppm) mg/kg (ppm)	2.5	95	75-117
1,2,3-Trichlorobenzene	me've (hhm)	2.0		

### **ENVIRONMENTAL CHEMISTS**

Date of Report: 07/08/16 Date Received: 06/22/16

Project: 816 NE 57th St, PO 25568, F&BI 606405

### QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 606430-03 1/50 (Matrix Spike) 1/50

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Control Limits
Aroclor 1016	mg/kg (ppm)	0.8	< 0.2	89	50-150
Aroclor 1260	mg/kg (ppm)	0.8	< 0.2	88	50-150

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.8	86	91	55-130	6
Aroclor 1260	mg/kg (ppm)	0.8	89	96	58-133	8

#### ENVIRONMENTAL CHEMISTS

### Data Qualifiers & Definitions

- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c The presence of the analyte may be due to carryover from previous sample injections.
- cf The sample was centrifuged prior to analysis.
- d The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv Insufficient sample volume was available to achieve normal reporting limits.
- f The sample was laboratory filtered prior to analysis.
- fb The analyte was detected in the method blank.
- fc The compound is a common laboratory and field contaminant.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs Headspace was present in the container used for analysis.
- ht The analysis was performed outside the method or client-specified holding time requirement.
- ip Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the analyte is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve The analyte response exceeded the valid instrument calibration range. The value reported is an
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

606405

FILCO COMPANY INC. Since 1980

Environmental Services ICC Cetter - Les FLOCOSSES www.FilcoEnviro.com

Jordin Butternob

Jordin@FilcoEnviro.com

Street Address: 13190 Stone Avenue North, Scattle, WA 98133 Mulling Address: P.O. Box 31228, Seattle, WA 98103 Office: 206-547-8347 Fax: 206-548-9352

SAMPLE CHAIN OF CUSTODY 916 NESTRYSE SAMPLERS (signature) PROJECT NAME/NO. please fax results REMARKS

18T/ Rush charges authorized by: Will call with instructions TURNAROUND TIME SAMPLE DISPOSAL Dispose after 30 days Standard (2 Weeks) Return samples ME MC 06/22/16 PO# 15569

				(44.		1 [	INAL	ANALYSKS REQUESTED	REGI	TESTE	0 0	-	Dia	
Date	Time	Sample Type	# of containers	Jessid-HTT enilossb-HTT	BTEX by 8021B	VOCe by 8260	SAOC® pà 8510	HES DANGE		C's 2HAY	rsd Naplers	(6m) Jdg	EDD-EDC-MI	Notes
71-17	Sm71 91-12-9 310	Soil	5.0	X	X	X	,	*	-	+	7	分	7	-
	_		>			•		-				+	+	
	-		\						-	_			+	
	1755		í					$\dashv$	-			1	$\dashv$	
			5	N V	심	+		*	1	시	X	X	#	
			-		_			-	-	_			+	
													-	١
			,		_							ŝ		
-0					-				-	-			-	
	-				-	-		+	Sam	Samples received at	seive	d at	1	ن
	-				$\ $			1					2	-
SIC	SIGNATURE	_	H H	PRINT NAME	NAM	N		1	1	COMPANY	ANA		DATE	

(30g)

100/0

YBY

Z

-224 1736

CK CV

名がな

MASON

1000

Relinquished by:

Friedman & Bruya, Inc.

Relinquished by

Received by

Fax (206) 283-5044 Ph. (206) 285-8282

Received by:

Seattle, WA 98119-2029 3012 16th Avenue West

7-22 9

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Yelena Aravkina, M.S. Michael Erdahl, B.S. Arina Podnozova, B.S. Eric Young, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282 fbi@isomedia.com www.friedmanandbruya.com

October 21, 2016

Richard Simpson, Project Manager Filco Company, Inc. PO Box 31228 Seattle, WA 98103

Dear Mr Simpson:

Included is the amended report for the 816 NE 57th St, F&BI 609470 project. There are 12 pages included in this report. The NWTPH-Dx results have been expressed as diesel and motor oil per your request.

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.

Matthew Langston Project Manager

Enclosures FCI1004R.DOC

### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Yelena Aravkina, M.S. Michael Erdahl, B.S. Arina Podnozova, B.S. Eric Young, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282 fbi@isomedia.com www.friedmanandbruya.com

October 4, 2016

Nate Montgomery, Project Manager Filco Company, Inc. PO Box 31228 Seattle, WA 98103

Dear Mr Montgomery:

Included are the results from the testing of material submitted on September 27, 2016 from the 816 NE 57th St, F&BI 609470 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.

Matthew Langston Project Manager

Enclosures FCI1004R.DOC

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 10/04/16 Date Received: 09/27/16

Project: 816 NE 57th St, F&BI 609470

Date Extracted: 09/29/16 Date Analyzed: 09/29/16

# RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Benzene	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline <u>Range</u>	Surrogate (% Recovery) (Limit 50-132)
NSW-7' 609470-01 1/5 and 1/20	0.22	2.5	16	230 ve	4,300	ip
ESW-7' 609470-02	< 0.02	< 0.02	<0.02	1.7	130	101
WSW-7' 609470-03	< 0.02	< 0.02	< 0.02	0.82	95	94
SSW-7' 609470-04	< 0.02	< 0.02	< 0.02	1.2	130	95
Base-8' 609470-05	0.034	0.029	<0.02	7.9 ve	370	120
Method Blank 06-1962 MB	<0.02	<0.02	<0.02	<0.06	<2	95

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 10/04/16 Date Received: 09/27/16

Project: 816 NE 57th St, F&BI 609470

Date Extracted: 09/28/16 Date Analyzed: 09/28/16

# RESULTS FROM THE ANALYSIS OF 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 (C <sub>10</sub> -C <sub>25</sub> )	Motor Oil Range (C <sub>25</sub> -C <sub>36</sub> )	Surrogate (% Recovery) (Limit 53-144)
NSW-7' 609470-01	9,900	3,900	88
ESW-7' 609470-02	2,000	<250	83
WSW-7' 609470-03	400	<250	81
SSW-7' 609470-04	890	<250	83
Base-8' 609470-05	2,100	<250	83
Method Blank 06-2027 MB	<50	<250	82

### **ENVIRONMENTAL CHEMISTS**

## Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:

NSW-7'

Date Received:
Date Extracted:

09/27/16 09/28/16

Date Analyzed:

Matrix: Units: 09/28/16 Soil

mg/kg (ppm) Dry Weight

Client:

Filco Company

Project:

816 NE 57th St, F&BI 609470

Lab ID:

609470-01 1/250

Data File: Instrument: 092810.D GCMS6

Operator:

ya

Surrogates: Anthracene-d10 Benzo(a)anthracene-d12

% Recovery: 92 d 171 d Lower Limit: 31 24 Upper Limit: 163 168

Concentration

Compounds:

mg/kg (ppm) 33

Naphthalene 2-Methylnaphthalene 1-Methylnaphthalene

100 ve 81 ve

### ENVIRONMENTAL CHEMISTS

# Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	ESW-7'
Date Received:	09/27/16
Date Extracted:	09/28/16
Date Analyzed:	09/28/16
Matrix:	Soil
Units:	mg/kg (ppm) Dry W

MIGUIA.	COL
Units:	mg/kg (ppm) Dry Weight

Compounds:	Concentration mg/kg (ppm)
Naphthalene	1.3
2-Methylnaphthalene	2.6
1-Methylnaphthalene	4.5

O 2202011	2 0
Project:	816 NE 57th St, F&BI 609470
Lab ID:	609470-02 1/25

Data File: 092812.D
Instrument: GCMS6
Operator: ya

Lower	Upper Limit:
31	163
24	168

### **ENVIRONMENTAL CHEMISTS**

## Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	WSW-7'
Date Received:	09/27/16
Date Extracted:	09/28/16
Date Analyzed:	09/28/16
Matrix:	Soil
I Inits:	mg/kg (nnm) Dry

MICHULIA.	DOLL
Units:	mg/kg (ppm) Dry Weight

Surrogates:	% Recovery:
Anthracene-d10	84
Benzo(a)anthracene-d12	104
Benzo(a)anthracene-d12	104

Compounds:	Concentration mg/kg (ppm)
Naphthalene 2-Methylnaphthalene	0.28 1.3
1-Methylnaphthalene	1.9

Client: Filco Company

Project: 816 NE 57th St, F&BI 609470

Lab ID: 609470-03 1/25
Data File: 092813.D
Instrument: GCMS6
Operator: ya

Lower	Upper
Limit:	Limit:
31	163
24	168

### ENVIRONMENTAL CHEMISTS

Client:

Project: Lab ID:

Data File:

Instrument:

# Analysis For Semivolatile Compounds By EPA Method 8270D SIM

222000	
Client Sample ID:	SSW-7'
Date Received:	09/27/16
Date Extracted:	09/28/16
Date Analyzed:	09/28/16
Matrix:	Soil
Tīmitas	malka (nnm) Dry

Surrogates:

2720.0	
Units:	mg/kg (ppm) Dry Weight

Operator:	ya	
Lower Limit: 31 24		Upper Limit: 163 168

Filco Company

609470-04 1/25

092814.D GCMS6

816 NE 57th St, F&BI 609470

Anthracene-d10 Benzo(a)anthracene-d12	85 104
Compounds:	Concentration mg/kg (ppm)
Naphthalene 2-Methylnaphthalene 1-Methylnaphthalene	0.47 1.8 2.0

### **ENVIRONMENTAL CHEMISTS**

Client:

# Analysis For Semivolatile Compounds By EPA Method 8270D SIM

•	
Client Sample ID:	Base-8'
Date Received:	09/27/16
Date Extracted:	09/28/16
Date Analyzed:	09/28/16
Matrix:	Soil
Units:	mg/kg (ppm) Dry

Compounds:

Naphthalene

2-Methylnaphthalene

1-Methylnaphthalene

Units:	mg/kg (ppm) Dry Weight
Surrogates:	% Recovery:
Anthracene-d10	83
Benzo(a)anthracene-	d12 107

% Recovery: 83 107
Concentration mg/kg (ppm)

2.1

2.8

7.4

:	Filco Company
t:	816 NE 57th St, F&BI 609470
):	609470-05 1/25

Project:	816 NE 57th S
Lab ID:	609470-05 1/25
Data File:	092815.D
Instrument:	GCMS6
Operator:	ya

Lower	Upper
Limit:	Limit:
31	163
24	168

### **ENVIRONMENTAL CHEMISTS**

## Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: Method Blank
Date Received: Not Applicable
Date Extracted: 09/28/16
Date Analyzed: 09/28/16
Matrix: Soil

Units: mg/kg (ppm) Dry Weight

Surrogates: % Recovery: Lim
Anthracene-d10 84 31
Benzo(a)anthracene-d12 92 24

Concentration mg/kg (ppm)

Naphthalene <0.01
2-Methylnaphthalene <0.01
1-Methylnaphthalene <0.01

Client: Filco Company

Project: 816 NE 57th St, F&BI 609470

Lab ID: 06-2002 mb2 1/5
Data File: 092807.D
Instrument: GCMS6
Operator: ya

 Lower
 Upper

 Limit:
 Limit:

 31
 163

 24
 168

### **ENVIRONMENTAL CHEMISTS**

Date of Report: 10/04/16 Date Received: 09/27/16

Project: 816 NE 57th St, F&BI 609470

# 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: 609491-04 (Duplicate)

•	· -		Duplicate	
	}	Sample Result	Result	RPD
Analyte	Reporting Units	(Wet Wt)	(Wet Wt)	(Limit 20)
Benzene	mg/kg (ppm)	< 0.02	< 0.02	nm
Toluene	mg/kg (ppm)	< 0.02	< 0.02	nm
Ethylbenzene	mg/kg (ppm)	< 0.02	< 0.02	nm
Xylenes	mg/kg (ppm)	< 0.06	< 0.06	nm
Gasoline	mg/kg (ppm)	<2	3	nm

Laboratory Code: Laboratory Control Sample

			Percent	
		Spike	Recovery	Acceptance
Analyte	Reporting Units	Level	LCS	Criteria
Benzene	mg/kg (ppm)	0.5	72	66-121
Toluene	mg/kg (ppm)	0.5	75	72-128
Ethylbenzene	mg/kg (ppm)	0.5	72	69-132
Xylenes	mg/kg (ppm)	1.5	75	69-131
Gasoline	mg/kg (ppm)	20	90	61-153

### ENVIRONMENTAL CHEMISTS

Date of Report: 10/04/16 Date Received: 09/27/16

Project: 816 NE 57th St, F&BI 609470

# QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES

# FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 609467-04 (Matrix Spike)

·			Sample	Percent	$\mathbf{Percent}$		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	$\operatorname{RPD}$
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	<50	85	89	64-133	5

Laboratory Code: Laboratory Control Sample

			Percent	
	Reporting	Spike	Recovery	Acceptance
Analyte	Units	Level	LCS	Criteria
Diocal Extended	mg/kg (nnm)	5.000	87	58-147

### **ENVIRONMENTAL CHEMISTS**

Date of Report: 10/04/16 Date Received: 09/27/16

Project: 816 NE 57th St, F&BI 609470

# QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 609440-15 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	< 0.01	93	50-150
2-Methylnaphthalene	mg/kg (ppm)	0.17	< 0.01	93	50-150
1-Methylnaphthalene	mg/kg (ppm)	0.17	< 0.01	93	50-150

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	90	93	70-130	3
2-Methylnaphthalene	mg/kg (ppm)	0.17	89	93	70-130	4
1-Methylnaphthalene	mg/kg (ppm)	0.17	89	93	70-130	4

#### **ENVIRONMENTAL CHEMISTS**

### **Data Qualifiers & Definitions**

- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c The presence of the analyte may be due to carryover from previous sample injections.
- cf The sample was centrifuged prior to analysis.
- d The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dy Insufficient sample volume was available to achieve normal reporting limits.
- f The sample was laboratory filtered prior to analysis.
- fb The analyte was detected in the method blank.
- fc The compound is a common laboratory and field contaminant.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs Headspace was present in the container used for analysis.
- ht The analysis was performed outside the method or client-specified holding time requirement.
- ip Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the analyte is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

NE STIT ST SAMPLE CHAIN OF CUSTODY · ELECTRONIC DATA REQUESTED SAMPLERS (signature) PROJECT NAME/NO. PROJECT ADDRESS 918 Phone # 206-547-8347 Fax # 206-548-9352 Seattle, WA 98103 Send Report To Nate Montgomery Filco Company, Inc. PO Box 31228 City, State, ZIP 609470 Email Address Company Address

Samples Received at 4 °C

Ŝ

· Will call with instructions

ML 09/27/16 USI/COJ

Page # of
TURNAROUND TIME

Page #

Rush charges authorized by:

• Standard Turnaround • RUSH

**PO#** 

SAMPLE DISPOSAL

· Dispose after 30 days · Return samples

Γ	I			1			T	Т				r_0	0	20	I	T
	Notes									Ş		TIME	1536	1 536		
	Z									at &		DATE	9/27	4		
				_				-	-	ecc ved at		+		0	-	†
ANALYSEE REQUESTED				-						9. SC;		ž	any			
EQUI			<u> </u>							#		COMPANY	Filco Company	0	1	
ES R	シカホアのかい	X	بد	×	4	×						]පි	ပ မ	16		
LYS	HFS												這	$\mu$	1	
ANA												┢				t
	AOCs by 8260								_			1		١		l
	BLEX Py 8021B	X	K	×	X	X						١.,		{		I
1	PH-Gasoline	K	X	X	X	X	<u> </u>	<u> </u>	_			WE WE	جِ	1	3	ı
	TPH-Diesel	X	X	X	X	X	_	_	_		_	Ž	ome C			
	# of containers	رها	ന	w	3	(4)				(=)		PRINT NAME	Nathan Montgomery	-		
													latha	10	¥	
	Sample Type	2015				>							1	<b>Y</b>	-	1
	Time	3.00				<b>&gt;</b>						RE	( )	1		
	Date	627	_			<del>&gt;</del>						SIGNATI	スケノ			
	Lab ID	0 A-C	æ	63	m	7 8							Relinquished	Received by	Relinquished by	Received hu
	Sample ID	NSJ-7'	ESU-71	12-25M	55U-7 <sup>1</sup>	BASE-81						Friedman & Bruya, Inc.	3012 16th Avenue West	Seattle, WA 98119-2029	Ph. (206) 285-8282	Fax (906) 982, 5044

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Yelena Aravkina, M.S. Michael Erdahl, B.S. Arina Podnozova, B.S. Eric Young, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282 fbi@isomedia.com www.friedmanandbruya.com

October 21, 2016

Richard Simpson, Project Manager Filco Company, Inc. PO Box 31228 Seattle, WA 98103

Dear Mr Simpson:

Included is the amended report for the 816 NE 57th St, F&BI 609549 project. There are 12 pages included in this report. The NWTPH-Dx results have been expressed as diesel and motor oil per your request.

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.

Matthew Langston Project Manager

Enclosures FCI1006R.DOC

### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Yelena Aravkina, M.S. Michael Erdahl, B.S. Arina Podnozova, B.S. Eric Young, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282 fbi@isomedia.com www.friedmanandbruya.com

October 6, 2016

Jordin Buttenob, Project Manager Filco Company, Inc. PO Box 31228 Seattle, WA 98103

Dear Mr Buttenob:

Included are the results from the testing of material submitted on September 30, 2016 from the 816 NE 57th St, F&BI 609549 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.

Matthew Langston Project Manager

Enclosures FCI1006R.DOC

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 10/06/16 Date Received: 09/30/16

Project: 816 NE 57th St, F&BI 609549

Date Extracted: 10/03/16

Date Analyzed: 10/03/16 and 10/04/16

# RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Benzene	<u>Toluene</u>	Ethyl <u>Benzene</u>	Total <u>Xylenes</u>	Gasoline Range	Surrogate (% Recovery) (Limit 50-132)
NSW2-8' 609549-01	< 0.02	<0.02	<0.02	<0.06	22	93
ESW2-8' 609549-02	< 0.02	< 0.02	<0.02	<0.06	12	90
WSW2-8' 609549-03	< 0.02	< 0.02	< 0.02	0.69	180	97
SSW2-8' 609549-04	< 0.02	< 0.02	<0.02	<0.06	<2	92
Base2-9' 609549-05	< 0.02	< 0.02	< 0.02	0.63	82	93
Method Blank 06-2059 MB	<0.02	<0.02	<0.02	<0.06	<2	96

### **ENVIRONMENTAL CHEMISTS**

Date of Report: 10/06/16 Date Received: 09/30/16

Project: 816 NE 57th St, F&BI 609549

Date Extracted: 09/30/16 Date Analyzed: 09/30/16

# RESULTS FROM THE ANALYSIS OF 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	$\frac{\text{Diesel Range}}{\text{(C}_{10}\text{-C}_{25})}$	Motor Oil Range (C <sub>25</sub> -C <sub>36</sub> )	Surrogate (% Recovery) (Limit 48-168)
NSW2-8' 609549-01	<50	<250	88
ESW2-8' 609549-02	<50	<250	88
WSW2-8' 609549-03	410	<250	97
SSW2-8' 609549-04	<50	<250	97
Base2-9' 609549-05	340	<250	88
Method Blank 06-2041 MB	<50	<250	99

### ENVIRONMENTAL CHEMISTS

# Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	NSW2-8'
Date Received:	09/30/16
Date Extracted:	10/03/16
Date Analyzed:	10/03/16
Matrix:	Soil
Units:	mg/kg (ppm) Dry Weight

Surrogates:	% Recovery:
A . 41 110	0.3

Anthracene-d10 Benzo(a)anthracene-d12	99
Compounds:	Concentration mg/kg (ppm)
Naphthalene	< 0.05
2-Methylnaphthalene	< 0.05
1-Methylnaphthalene	< 0.05

Client: Filco Company

Project: 816 NE 57th St, F&BI 609549 Lab ID: 609549-01 1/25

Data File: 100312.D
Instrument: GCMS6
Operator: ya

	* .
Lower	Upper
Limit:	Limit
31	163
24	168

#### **ENVIRONMENTAL CHEMISTS**

## Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	ESW2-8'	
Date Received:	09/30/16	
Date Extracted:	10/03/16	
Date Analyzed:	10/03/16	
Matrix:	Soil	
TT 1.		\ T

Units:

mg/kg (ppm) Dry Weight % Recovery:

Surrogates: Anthracene-d10 Benzo(a)anthracene-d12 87 99 Concentration

mg/kg (ppm) Compounds: < 0.05 Naphthalene < 0.05 2-Methylnaphthalene < 0.05 1-Methylnaphthalene

Client: Filco Company

816 NE 57th St, F&BI 609549 Project:

Lab ID: 609549-02 1/25 Data File: 100313.DInstrument: GCMS6 Operator: ya

> Upper Limit: Lower Limit: 163 168 31 24

### ENVIRONMENTAL CHEMISTS

# Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	WSW2-8'
Date Received:	09/30/16
Date Extracted:	10/03/16
Date Analyzed:	10/03/16
Matrix:	Soil
TT-SA-	mallea (nnm) Dry

Units:	mg/kg	(pp <b>m</b> ) D	ry Weight

Surrogates:	% Recovery:
Anthracene-d10	87
Benzo(a)anthracene-d12	100
	Concentration

Compounds:	mg/kg (ppm)
Naphthalene 2-Methylnaphthalene	<0.05 0.31
1-Methylnaphthalene	0.61

Client: Filco Company

Project: 816 NE 57th St, F&BI 609549

Lab ID: 609549-03 1/25
Data File: 100314.D
Instrument: GCMS6
Operator: ya

Lower Limit:	Upper Limit
31	163
24	168

### **ENVIRONMENTAL CHEMISTS**

# Analysis For Semivolatile Compounds By EPA Method 8270D SIM

GU G L TD	damo o
Client Sample ID:	SSW2-8'
Date Received:	09/30/16
Date Extracted:	10/03/16
Date Analyzed:	10/03/16
	CI 17

Matrix: Soil

mg/kg (ppm) Dry Weight

Units:

% Recovery: Surrogates: Anthracene-d10 Benzo(a)anthracene-d12 85 96

Concentration mg/kg (ppm) Compounds:

< 0.05 Naphthalene < 0.05 2-Methylnaphthalene < 0.05 1-Methylnaphthalene

Filco Company Client:

816 NE 57th St, F&BI 609549 Project:

Lab ID: 609549-04 1/25 Data File: 100315.D GCMS6 Instrument: Operator: ya

> Upper Limit: 163 Lower Limit: 31 168 24

### ENVIRONMENTAL CHEMISTS

Client: Project:

Lab ID:

Data File:

Instrument:

Filco Company

609549-05 1/25

100316.D

GCMS6

816 NE 57th St, F&BI 609549

## Analysis For Semivolatile Compounds By EPA Method 8270D SIM

-	
Client Sample ID:	Base2-9'
Date Received:	09/30/16
Date Extracted:	10/03/16
Date Analyzed:	10/03/16
Matrix:	Soil
TT to .	madem (nam) Dur

Units:	mø/kg	(mmag)	Drv	Weight
Omto.	me, re	(hhm)	$\nu_{ij}$	11 OTPITE

Units:	mg/kg (ppm) Dry Weight	Operator:	ya	
Surrogates: Anthracene-d10 Benzo(a)anthracene	% Recovery: 85 d12 105	Lower Limit: 31 24		Upper Limit 163 168

	Concentration
Compounds:	mg/kg (ppm)
Naphthalene	0.13
2-Methylnaphthalene	0.57
1-Methylnaphthalene	1.0

### ENVIRONMENTAL CHEMISTS

## Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank
Date Received:	Not Applicable
Date Extracted:	10/03/16
Date Analyzed:	10/03/16
Matrix:	Soil

Units:	mg/kg (ppm) Dry Weight
Surrogates:	% Recovery:

% Recover 81 93

Compounds:	Concentration mg/kg (ppm)
Naphthalene 2-Methylnaphthalene 1-Methylnaphthalene	<0.01 <0.01 <0.01
1 Wilding Maphanacare	

Client:	Filco	Compan
опень.	I. IICO	Оошран

Project:	816 NE 57th St, F&BI 60954
Lab ID:	06-2060 mb 1/5
Data File:	100305.D

Data File:	100309
Instrument:	GCMS6
Onorator:	179

Lower	Upper Limit:
31	163
24	168

### **ENVIRONMENTAL CHEMISTS**

Date of Report: 10/06/16 Date Received: 09/30/16

Project: 816 NE 57th St, F&BI 609549

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

Laboratory Code: 610001-01 (Duplicate)

•			Duplicate	
	;	Sample Result	Result	RPD
Analyte	Reporting Units	(Wet Wt)	(Wet Wt)	(Limit 20)
Benzene	mg/kg (ppm)	< 0.02	< 0.02	nm
Toluene	mg/kg (ppm)	< 0.02	< 0.02	nm
Ethylbenzene	mg/kg (ppm)	< 0.02	< 0.02	nm
Xylenes	mg/kg (ppm)	< 0.06	< 0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

		Percent			
		Spike	Recovery	Acceptance	
Analyte	Reporting Units	Level	LCS	Criteria	
Benzene	mg/kg (ppm)	0.5	76	66-121	
Toluene	mg/kg (ppm)	0.5	79	72-128	
Ethylbenzene	mg/kg (ppm)	0.5	76	69-132	
Xylenes	mg/kg (ppm)	1.5	79	69-131	
Gasoline	mg/kg (ppm)	20	85	61-153	

### **ENVIRONMENTAL CHEMISTS**

Date of Report: 10/06/16 Date Received: 09/30/16

Project: 816 NE 57th St, F&BI 609549

# QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES

# FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx $\,$

Education Court		• ′	Sample	Percent	Percent		
	Reporting	Spike	Result	Recovery	Recovery	Acceptance	RPD
Analyte	Units	Level	(Wet Wt)	MS	MSD	Criteria	(Limit 20)
Diesel Extended	mg/kg (ppm)	5,000	< 50	96	96	73-135	0

Laboratory Code: Laboratory Control Sample

	Reporting Units	Spike	Recovery	Acceptance	
Analyte		Level	LCS	Criteria	- 17
Diesel Extended	mg/kg (ppm)	5,000	87	74-139	

### **ENVIRONMENTAL CHEMISTS**

Date of Report: 10/06/16 Date Received: 09/30/16

Project: 816 NE 57th St, F&BI 609549

# QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES FOR PAHS BY EPA METHOD 8270D SIM

Laboratory Code: 609541-06 1/5 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Recovery MS	Acceptance Criteria
Naphthalene	mg/kg (ppm)	0.17	< 0.01	89	44-129
2-Methylnaphthalene	mg/kg (ppm)	0.17	< 0.01	90	45-135
1-Methylnaphthalene	mg/kg (ppm)	0.17	< 0.01	90	40-141

Laboratory Code: Laboratory Control Sample 1/5

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	90	90	58-121	0
2-Methylnaphthalene	mg/kg (ppm)	0.17	90	90	58-123	0
1-Methylnaphthalene	mg/kg (ppm)	0.17	90	90	60-124	0

#### **ENVIRONMENTAL CHEMISTS**

# Data Qualifiers & Definitions

- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c The presence of the analyte may be due to carryover from previous sample injections.
- cf The sample was centrifuged prior to analysis.
- d The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv Insufficient sample volume was available to achieve normal reporting limits.
- f The sample was laboratory filtered prior to analysis.
- fb The analyte was detected in the method blank.
- fc The compound is a common laboratory and field contaminant.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs Headspace was present in the container used for analysis.
- ht The analysis was performed outside the method or client-specified holding time requirement.
- ip Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the analyte is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Jordin Buttench ince 1980

FILCO COMPANY INC.

Environmental Services
ICC Catiles + Let McOckessu
www.FilcoEnviro.com

Fax: 206-548-9352 Jordin@FilcoEnviro.com Office: 206-547-8347 Street Address: 13190 Stone Avenue North, Seattle, WA 98133 Mailing Address: P.O. Box 31228, Seattle, WA 98103

AMPLE CHAIN OF CUSTODY

È

ML 04-30-16

SAMPLERS (signature) PROJECT NAME/NO.

PO# BIG NE STANT please fax results REMARKS

Rush charges authorized by: TURNAROUND TIME SAMPLE DISPOSAL Standard (2 Weeks) RUSH

Dispose after 30 days Return samples Will call with instructions

	Notes			2					30 7 te pe		TIME TIME
					_			-	received at		NATE
QUESTED	(existina)	×	<b>×</b>	*	×	×		<i>x</i>	sejdus.		COMPANIO
ANALYSES REQUESTED	SAOCs py 8270										
	AOCs pa 8021B		~	×	X	$\overline{\chi}$		+	-	-	9
	TPH-Gasoline	$\stackrel{\sim}{\sim}$	×	X	X	X					and the same of th
	Lesei G-HTT		X	X	X	X	L		4		,
	# of containers	3									
<b>5</b>	Sample Type	>0.1			_						
	Time	1335	1335	1336	75.57	17355					
	Date	2551 3105 ADMIO									
	Lab	2410	1.80	03	30	10			_		
	Sample ID	NSW-B				BAJEL-R					

Friedman & Bruya, Inc. Seattle, WA 98119-2029 3012 16th Avenue West

FR Jord. - Buttenob Relinquished by: Relinquished by: Received by: Fax (206) 283-5044 Ph. (206) 285-8282

1450

71/05/6

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Yelena Aravkina, M.S. Michael Erdahl, B.S. Arina Podnozova, B.S. Eric Young, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282 fbi@isomedia.com www.friedmanandbruya.com

October 26, 2016

Richard Simpson, Project Manager Filco Company, Inc. PO Box 31228 Seattle, WA 98103

Dear Mr Simpson:

Included is the amended report for the 816 NE 57th St, F&BI 610114 project. There are 3 pages included in this report. The sample ID has been changed per your request.

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.

Matthew Langston Project Manager

Enclosures FCI1012R.DOC

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Yelena Aravkina, M.S. Michael Erdahl, B.S. Arina Podnozova, B.S. Eric Young, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282 fbi@isomedia.com www.friedmanandbruya.com

October 12, 2016

Nate Montgomery, Project Manager Filco Company, Inc. PO Box 31228 Seattle, WA 98103

Dear Mr Montgomery:

Included are the results from the testing of material submitted on October 10, 2016 from the 816 NE 57th St, F&BI 610114 project. There are 3 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.

Matthew Langston Project Manager

Enclosures FCI1012R.DOC

## **ENVIRONMENTAL CHEMISTS**

Date of Report: 10/12/16 Date Received: 10/10/16

Project: 816 NE 57th St, F&BI 610114

Date Extracted: 10/10/16 Date Analyzed: 10/10/16

# RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES AND TPH AS GASOLINE USING METHODS 8021B AND NWTPH-Gx

Results Reported on a Dry Weight Basis Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Benzene	<u>Toluene</u>	Ethyl Benzene	Total <u>Xylenes</u>	Gasoline Range	Surrogate (% Recovery) (Limit 50-132)
WSW3-8' 610114-01	< 0.02	<0.02	<0.02	<0.06	<2	91
Method Blank 06-2022 MB	<0.02	< 0.02	<0.02	<0.06	<2	92

## **ENVIRONMENTAL CHEMISTS**

Date of Report: 10/12/16 Date Received: 10/10/16

Project: 816 NE 57th St, F&BI 610114

# 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: 610111-01 (Duplicate)

-			Duplicate	
		Sample Result	Result	RPD
Analyte	Reporting Units	-	(Wet Wt)	(Limit 20)
Benzene	mg/kg (ppm)	< 0.02	< 0.02	$\mathbf{n}\mathbf{m}$
Toluene	mg/kg (ppm)	< 0.02	< 0.02	nm
Ethylbenzene	mg/kg (ppm)	< 0.02	< 0.02	nm
Xylenes	mg/kg (ppm)	< 0.06	< 0.06	nm
Gasoline	mg/kg (ppm)	<2	<2	nm

Laboratory Code: Laboratory Control Sample

Percent						
		Spike	Recovery	Acceptance		
Analyte	Reporting Units	Level	LCS	Criteria		
Benzene	mg/kg (ppm)	0.5	77	66-121		
Toluene	mg/kg (ppm)	0.5	82	72-128		
Ethylbenzene	mg/kg (ppm)	0.5	77	69-132		
Xylenes	mg/kg (ppm)	1.5	81	69-131		
Gasoline	mg/kg (ppm)	20	80	61-153		

#### **ENVIRONMENTAL CHEMISTS**

# Data Qualifiers & Definitions

- a The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.
- b The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.
- ca The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.
- c The presence of the analyte may be due to carryover from previous sample injections.
- cf The sample was centrifuged prior to analysis.
- d The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.
- dv Insufficient sample volume was available to achieve normal reporting limits.
- f The sample was laboratory filtered prior to analysis.
- fb The analyte was detected in the method blank.
- fc The compound is a common laboratory and field contaminant.
- hr The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.
- hs Headspace was present in the container used for analysis.
- ht The analysis was performed outside the method or client-specified holding time requirement.
- ip Recovery fell outside of control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.
- j The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.
- J The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- lc The presence of the analyte is likely due to laboratory contamination.
- L The reported concentration was generated from a library search.
- nm The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo The value reported fell outside the control limits established for this analyte.
- x The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

W

HL

10110/16

SAMPL	AMPLE
SA	CHAIN
ionature	OF CUS
7	XCO.L

Phone # 206-547-8347 Fax # 206-548-9352 Company\_ Send Report To Nate Montgomery City, State, ZIP\_ Address Filco Company, Inc. PO Box 31228 Seattle, WA 98103

Email Address

PROJECT NAME/NO. PROJECT ADDRESS 200 · ELECTRONIC DATA REQUESTED NE STIFF PO#

Rush charges authorized by: Samples Received at Return samples
 Will call with instructions SAMPLE DISPOSAL

Dispose after 30 days RUSH Sound duy TURNAROUND TIME

FORMS\COC\COC.DOC	Ph. (806) 285-8282	Seattle, WA 98119-2039	3018 16th Avenue West	Friedman & Bruya, Inc.								Mar RS 185/16	MSM3-8,	-18-Er33	Sample ID	
Received by:	Relinquished by:	Received by: AM	Relinquished by:											01A-C	Lab ID	
		[6]	25TM	SIGNATU									,	10//0	Date	
		mu	とう	RE									•	90.49	Time	
	1	7	Nath											7195	Sample Type	
		When Phan	Nathan Montgomery	PRINT NAME										u	#of	
		Z	ner	X				L				_		_	TPH-Diesel	П
		5	-										_	×	TPH-Gasoline	П
												_		X	BTEX by 8021B	П
								_	_		_		_	_	VOCs by 8260	
-			$\vdash$	H			_	_	_		L	_	_	_	SVOCe by 8270	ANA
	Ī	6	팙					Ļ	1			_	_	_	HFS	YSI
		180	C	8		am										SR
		<b>'</b> '	3	P		les										000
			Fileo Company	COMPANY		909		Π	T							YSES REQUESTED
				Γ		ved				$\top$		Т		1		GS C
				L	H	量		+	+	╁	$\vdash$	$\vdash$	+	+-		1
		0	0	Þ	_	#	-	┿	┿	+	+	+	+	+		1
		10/16	0	DATE		0.0						Ì			Notes	
		1200		TIME											8.	

# APPENDIX B SCALE TICKET SUMMARY SOIL DISPOSAL DOCUMENTATION

# Filco Scale Ticket Summary

Address

816 NE 57th St

Job Number

25568

## Disposal of Petroleum-Impacted Soils

Date	Facility	Ticket No.	Truck ID	Gross	Tare	Net Pounds	Net Tons
9/27/2016	Waste Mgt	127992	F32	53300	25200	28100	14.05
9/27/2016	Waste Mgt	128028	F32	51840	25200	26640	13.32
9/30/2016	Waste Mgt	128303	F32	53520	25200	28320	14.16
9/30/2016	Waste Mgt	128341	F32	50380	25200	25180	12.59
10/10/2016	Waste Mgt	128844	F16	40860	25100	15760	7.88
Total	11000	,					62.00

WASTE MANAGEMENT

70 S Alaska Street Seattle, WA. 98154 Ticket# 127992

Unlune

Customer Name FILCO EO Filco Company, Inc

Ticket Date 09/27/2016 Payment Type Credit Account

Manual Ticket# haari e

Hagling Ticket# Destination

2004 489694 Time

09/27/2016 11:36:58 Dut 09/27/2016 11:36:58

Scale SCALE 1

Operator lsercer lwermen.

CHUNTEL

Driver

Circulati

Grid

Vehicle#

Billing# 90000005

GELF HAULER \*

TIM RAISEN

F32

Inbound Gross Tarr Net Tons

53300 16 25200 16 28100 15 14.05

FILCO-KF MORRIS 816 NE S7TH ST Comments

Product	LDx	Qty	MOU	Rate	Tax	Amount	Drigin
1 Daily Cover-PCS-Tons-Pet	100	14.85	Tons				KING
2 FEA-FUEL, ENV, ADMIN	100	14.05	Tons				
3 GONDOLA T-GONDOLA TON	100	14.05	Tons				

Total Tax Total Ticket

em's Signature 25 Un

STE MANAGEMENT

Alaska Street 70 S Alaska Street Seattle, WA, 98134

Scale

SCALE 4

Ticket# 128028

Original

Volume

Gross

Tare

Tons

Net

Ph: 206 763 5025

Customer Name FILCO CO Fileo Company, Inc.

Ticket Date 09/27/2016 Payment Type Credit Account

Manual Ticket# Route Hauling Ticket# Destination

489694 PO# Time

- 09/27/2016 15:17:26 Dut 09/27/2016 15:17:26

BELF HAULER \* Carrier

F32 Vehicle#

Container Driver

TIM KAISER

Check#

0000005 Billing#

Grid

Operator luercer Imencer

Inbound

51840 16 25200 16 26640 15 13.32

FILCO-KF MORRIS 816 NE 57TH ST Comments

Product	LD%	Oty	NOU	Rate	Tax	Amount	Origin	
1 Daily Cover-PCS-Tons-Pet 2 FEA-FUEL, ENV, ADMIN 3 GONDOLA T-GONDOLA TON	100 100 100	13.32	Tons Tons Tons				KING	

Total Tax Total Ticket



489694

Dut 09/30/2016 11:08:18

Destination

In:

Product

3

3

Time

Alaska Street 70 S Aleska Street Seattle, WA, 58134

Ticket# 128303

Values

Phr 206 763 5025

Inbound

customer Name FILLU DO Fire Company, Inc. Ticket Date | 09 30 7016 Payment Type Credit Account Manual licket# Route AK Hautinn Ticket#

Container

Campion SELF HAULER \* Vehicle# F32

Driver TIM KAISER

Billing# 0000005

Grid

Operator

Gross Tare Net Tons

53520 16 25200 lb 28320 15 14, 16

Comments

09/30/2016 11:08:18

FILCO-KF MORRIS BIG NE STTH ST

SCALE 1

LD% Qty . UDM

lmercer -

imencer-

Tax Rate

Amount

Original

Volume

Ticket# 128341

Drigin

KING

Daily Cover-PCS-Tons-Pet 100 14.16 Tons 14.16 Tons 100 FEA-FUEL, ENV. ADMIN GONDOLA T-GONDOLA TON 100 14.16 Tons

Orzbywm's Signature 2nd U.S.

Customer Name FILCO CO Filco Company, Inc

Total Tax Total Ticket

NASTE MANAGEMENT

Ticket Date 09/30/2016 Payment Type Credit Account

Alaska Street 70 S Alaska Street Seattle, WA, 98134

Ph: 206 763 5025

SELF HAULER \* Carrier

Vehicle# F32 Container

FIN KAISER HENCY PROVENCE Driver Check#

Billing#

Grid

0000005

Hauling Ticket# Destination PO# 489694

Manual Ticket#

Route

Time In 09/30/2016 15:28:34

Dut 09/30/2016 15:28:34

AK

Scale SCALE 1

Operator 1mercer lmercer

Inbound

Gross Tare Net Tons

50380 15 25200 16 25180 16

12.59

FILCO-KF MORRIS 816 NE 57TH ST Comments

WASTE MADENT Product LD%

Daily Cover-PCS-Tons-Pet

100 100

12.59 Tone 100 12.59

Qty.

Rate

Tax

Asount

Origin

KING

KING

KING

2 FEA-FUEL, ENV. ADMIN GONDOLA T-GONDOLA TON 3

12.59

Tons Tons

MOU

Total Tax Total Ticket

hrzbawm's Signature



70 S Alaska Street Seattle, WA, 98134

Ticket# 188844

Dolume

Ph: 206 763 5025

Customer Name FILCO CO Filco Company, Inc Carrier SELF HAULER \* Ticket Date 10/10/2016

Payment Type Credit Account

Manual Ticket# Route AK:

Hauling Ticket# Destination PO# 489694

Time 10/10/2016 12:03:17 Out 10/10/2016 12:03:17

Scale SCALE 1

Operator Imercer

Vehicle# F16

Billing# 0000005

Drived NATE MONTBOMERY

**医乳腺管 医乳腺管 医乳腺** 

Rate

Container

Checke

Grid

Inbound

Tax

Tare Net Tons

Amount

40860 16 25100 16 15760 lb. 7.88

Origin

KING

Comments

FILCO - SF ( MORRIS 816 NE 57TH ST )

Pro	duct	LD%	Qty	UOM	X	
1	Daily Cover-PCS-Tons-Pet	100	7.88	Tons		
2	FEA-FUEL, ENV, ADMIN	100	7.88	Tons		
2	CONDOLO T-CONDOLO TON	1 (202	7 00	Toris		

)1269'WM's Signature N. M.M.

Total Tax Total Ticket

# APPENDIX C ECOLOGY SITE ASSESSMENT FORMS, TANK DECOMMISSIONING DOCUMENTATION AND PERMITS



# UNDERGROUND STORAGE TANK (UST) **30-DAY NOTICE**

(See back of form for instructions)

	100	10	-
	110	J.	
- 1	ND		

FOR OFFICE USE ONLY
Site ID #
FS ID#

RECEIVED

MAY 09 2016

Please ✓ the appropriate	box:
--------------------------	------

Intent to Install Intent to Close

HQ (360)407-7170	/ Central (509)5	75-2490 / E	astern (509)3	29-3400 / North	west (425)649-7000xissus	இசைப்படு <b>60</b> 9401.9490300
SITE INFORMATION				OWNER INF (this form will	be returned to this address)	
					a & Michael Morris	
Tag or UBI number				UST Owner/		
				P O Box 3		
Site Name				Seattle	ress/PO Box	98103
816 NE 57th St				City		Zip Code
Site Physical Addres	SS	(	98105	(206) 525	-0758	•
Seattle			Cip Code		ator Phone Number	=======================================
City (200) 525 075	0	2	iip code		m6@gmail.com	
(206) 525-075 Site Phone Number	0			Owner/Oper	ator Email Address	
Site Phone Number						
TANK INFORMATION						
	Substance	Consolts		roject is I to Begin	Commer	nts:
Tank ID	Stored Waste Oil	Capacity 300 gal	June 7, 2016			
	waste Oii	300 gai	June 7, 2010	,		
						a
1) SERVICE PROVIDE	R INFORMATION -	check the app	propriate boxes			
P	LEASE NOTE: INDI	VIDUALS PE	RFORMING US	T SERVICES MU	ST BE ICC CERTIFIED OR HA	AVE
	PASSED ANOTH	ER QUALIFY	ING EXAM APP	ROVED BY THE D	EPARTMENT OF ECOLOGY.	
1 1 1	Decommissioner	Rit	e Assessor			
Installer 🗸	Peconimissioner	P"	. 1880000			
Service Provider Con	nany Name			Contact Pers	son	
Filco Company				Nathan M	<b>l</b> ontgomery	
Certified Service Prov	vider Name			Contact Pho	ne Number	
Nathan Montgo				(206)54	7-8347	''
ICC Certification #	inci y			Contact Em	ail Address	
FOFOO 40				nate@filco	enviro.com	
2) SERVICE PROVIDE	R INFORMATION (F	REQUIRED IF	USING MORE T	HAN ONE PROVI	DER) - check the appropriate bo	exes
nstaller	Decommissioner		e Assessor			
Filco Company I	nc.			Nathan M		
Service Provider Con				Contact Per		
Nathan Montgo				(206) 54		
Certified Service Pro	vider Name			Contact Pho		
5050940				nate@filcoe	nviro.com	

Contact Email Address

ICC Certification #



# PERMANENT CLOSURE NOTICE

FOR UNDERGROUND STORAGE TANKS

UST ID #: \_\_\_\_\_

This notice certifies that permanent closure activities were performed and conducted in accordance with Chapter 173-360 WAC. Instructions are found on the back page.

	I. UST FACILITY	TRULY MEATER	<b>原語學系統</b>	II. OWNER/OF	ERATOR INFORM	ATION
Facility Compliance T	5A 182 181 19 18 18 18 18 18 18	DY A TOO WATER THE PARTY OF	) Owner/O		Michael & Mar	
USTID#: ~/A				Name: N		
Site Name: 8/6					57th Str	eet
Site Address: 8/6					State: W	
City: Seald					5 0758	
Phone: 206 5					6 egmail	
		III. CERTIFIED U	ST DECOMMI	SSIONER		
Company Name: F/	ILCO COM	IPANY	Service Pr	ovider Name:	Joshua t	filton
Address: POB	OX 3/2	28	Certification	on Type: IC	CC	
city: Seattle			3 Cert. No.:	814 5 449	Exp. Date: 2	2-12-2018
Provider Phone: 20					filioenviro.	
Provider Signature: /	11.1-14		> Date:	6.22	//	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	//		0	ما/	
		IV. TANK	INFORMATION			
TANK ID	TANK CAPACITY	LAST SUBSTANCE	INFORMATION		DD	CLOSURE DATE
	TANK CAPACITY	LAST SUBSTANCE STORED	INFORMATION			CLOSURE DATE
	TANK CAPACITY	LAST SUBSTANCE		CLOSURE METHO	DD	CLOSURE DATE
	1	LAST SUBSTANCE STORED	removal	CLOSURE METHO	ob change-in-service	
	1	LAST SUBSTANCE STORED	removal	CLOSURE METHO closed-in-place	change-in-service	
	1	LAST SUBSTANCE STORED	removal	CLOSURE METHO closed-in-place	change-in-service	
	1	LAST SUBSTANCE STORED	removal	CLOSURE METHO closed-in-place	change-in-service	
	1	LAST SUBSTANCE STORED	removal	CLOSURE METHO closed-in-place	change-in-service	
	1	LAST SUBSTANCE STORED heating oil Used oil	removal	CLOSURE METHO closed-in-place	change-in-service	
TANK ID	300	LAST SUBSTANCE STORED heating oil Used oil	removal    Control   Contr	CLOSURE METHO closed-in-place	change-in-service	6.21.2016
TANK ID	300	LAST SUBSTANCE STORED  heating oil Used oil  V. REQUIR	removal    Control   Contr	CLOSURE METHO closed-in-place	change-in-service	6 · 21·2016

DEPARTMENT OF
DEPARTMENT OF ECOLOGY

# SITE CHECK/SITE ASSESSMENT CHECKLIST

UST ID #:	
County:	

FOR UNDERGROUND STORAGE TANKS

This checklist certifies that site check or site assessment activities were performed in accordance with Chapter 173-360 WAC. Instructions are found on the last page.

I. UST FACILITY	II. OWNER/OPERATOR INFORMATION
Facility Compliance Tag #: N/A (residential)	Owner/Operator Name: Michael& Mary both Morris
UST ID#: N/A	Business Name: N/A
Site Name: 816 NE 57th Street	Address: 8/6 NE 57th Street
Site Address: 816 NE 57th Street	City: Seattle State: WA Zip: 98105
city: Scattle, WA 98105	Phone: 206 525 0758
Phone: 206 525 0758	Email: mary bethon 6 @gmail.com
III. CERTIFIED	SITE ASSESSOR
Service Provider Name: Jordin Buttenob	Company Name: FILCO COMPANY
Cell Phone: 206 2287393 Email: jordine filcoenviro, com	
Certification #: 8291441 Exp. Date: 11/21/201	6City: Seattle State: WA Zip: 98103
IV. TANK IN	IFORMATION
TANK ID TANK CAPACITY	LAST SUBSTANCE STORED  ASSESSMENT CONDUCTED
1 300 gallons	heating oil, used oil Sept. 7, 2016
	* 1
V. REASON FOR CONDUCTING SITE	CHECK/SITE ASSESSMENT (check one)
Release investigation following permanent UST system	closure (i.e. tank removal or closure-in-place).
Release investigation following a failed tank and/or line	e tightness test.
☐ Release investigation following discovery of contamina	ted soil and/or groundwater.
Release investigation directed by Ecology to determine	if the UST system is the source of offsite impacts.
UST system is undergoing a "change-in-service", which gasoline) to storing a non-regulated substance (e.g. wa	
☐ Directed by Ecology for UST system permanently closed	d or abandoned before 12/22/1988.
☐ Other (describe):	è

	VI. CHECKLIST		
	The site assessor must check each of the following items and include it in the report.		
	Sections referenced below can be found in the Ecology publication  Guidance for Site Checks and Site Assessments for Underground Storage Tanks.		
<u> </u>		YES	NO
1.	The location of the UST site is shown on a vicinity map.		
2.	A brief summary of information obtained during the site inspection is provided (Section 3.2)	X	
3.	A summary of UST system data is provided (Section 3.1)	×	
4.	The soils characteristics at the UST site are described. (Section 5.2)	×	
5.	Is there any apparent groundwater in the tank excavation?		X
6.	A brief description of the surrounding land use is provided. (Section 3.1)	×	
7.	The name and address of the laboratory used to perform analyses is provided. The methods used to collect and analyze the samples, including the number and types of samples collected, are also documented in the report. The data from the laboratory is appended to the report.	図	
8.	The following items are provided in one or more sketches:		
	Location and ID number for all field samples collected	Ø	
	If applicable, groundwater samples are distinguished from soil samples	×	
	Location of samples collected from stockpiled excavated soil	X	
	Tank and piping locations and limits of excavation pit	×	
	Adjacent structures and streets	×	
13	Approximate locations of any on-site and nearby utilities	[3]	
9.	If sampling procedures are different from those specified in the guidance, has justification for using these alternative sampling procedures been provided? (Section 3.4)	<b>B</b> ,	
10.	A table is provided showing laboratory results for each sample collected including; sample ID number, constituents analyzed for and corresponding concentration, analytical method, and detection limit for that method. Any sample exceeding MTCA Method A cleanup standards are highlighted or bolded.	IX,	
11.	Any factors that may have compromised the quality of the data or validity of the results are described.	×	
12.	The results of this site check/site assessment indicate that a confirmed release of a regulated substance has occurred. The requirements for reporting confirmed releases can be found in WAC 173-360-372.	×	
	VII. REQUIRED SIGNATURES		
	Signature acknowledges the Site Check or Site Assessment complies with UST regulations WAC 173-360-360 through	<i>395</i> .	
しっ	rdin Buttenob / Sute 6:22.	201	6
Prin	t or Type Name Signature of Certified Site Assessor Date		



## My Professional Information:

Last, First MI: Buttenob, Jordin C

Certified under this name: Jordin C Buttenob

City, State Zip: Seattle, WA 98133

Certification Type(s): UST Decommissioning(expires 11/21/2016)

Washington State Site Assessment(expires 11/21/2016)



# My Professional Information:

Last, First MI: Hilton, Joshua

Certified under this name: Joshua Hilton

City, State Zip: Monroe, WA 98272

Certification Type(s): UST Decommissioning(expires

02/12/2018)

#### Seattle Dept of Transportation Street Use Permits, 23rd Floor J0 Fifth Ave, Suite 2300 P O Box 34996 Seattle, WA 98124-4996

#### STREET USE PERMIT

Permit No.: 322839

□ Inspector Copy

Permittee Copy

☐ File Copy

Project ID:

High Impact Area: N

LOCATION

Address:

Details:

IMPACT Project ID: na

Estimated Project Completion Date: 09/23/2016

Inspector: Daniel Conn

Inspection District: UNIVERSITY

**Application Date:** 

9/23/16 10:40 am

Issue Date:

9/23/16 10:45 am

PARTIES (\* Primary Applicant)

816 NE 57TH ST

Role	Name	Address	Phone	From	То
*Contractor'S Ag	jenBUTTENOB, JORDIN	PO BOX 31228,,SEATTLE,WA,98103	(206)547-8347		
Permittee	FILCO CO. INC.	PO BOX 31228,,SEATTLE,WA,98103-	(206)547-8347		
24 Hour Contact	MONTGOMERY, NATHAN	PO BOX 31228,,SEATTLE,WA,98103	(206)547-8347		

#### **PERMITTED USES**

#### NE 57TH ST BETWEEN 8TH AVE NE AND ROOSEVELT WAY NE - NON-ARTERIAL

ON NE 57TH ST, BTWN 8TH AVE NE AND ROOSEVELT WAY NE

Use 44 Space A - Use of mobile crane, manlift, boom truck, pump truck, etc.

**Condition Description** 

Start Date 09/26/2016 - 4x30 sidewalk and planting strip closure - pedestrians routed to adjacent sidewalk.

Start Date	Duration	End Date	Sq. Ft	Issue Date	Ext.	Side of Street	Location Type	Closure Type	Peak Work OK	Day or Time Rstrctns
09/26/2016	30	10/26/2016	152	09/23/2016	N	NORTH	SIDEWALK	CLOSED		

Use 44 Space B - Use of mobile crane, manlift, boom truck, pump truck, etc.

**Condition Description** 

Start Date 09/26/2016 - 8x30 sidewalk and planting strip closure - pedestrians routed to adjacent sidewalk.

Start Date	Duration	End Date	Sq. Ft	Issue Date	Ext.	Side of Street	Location Type	Closure Type	Peak Work OK	Day or Time Rstrctns
09/26/2016	30	10/26/2016	240	09/23/2016	N	NORTH	PARKING LANE	CLOSED		

Use 47 Space A - Use of mobile crane, manlift, boom truck, pump truck, etc.

**Condition Description** 

Start Date 09/26/2016 -

Start Date	Duration	End Date	Sq. Ft	issue Date	Ext.	Side of Street	Location Type	Closure Type	Peak Work OK	Day or Time Rstrctns
09/26/2016	30	10/26/2016	152	09/23/2016	N	NORTH	SIDEWALK	INTERMITTENT CLOSURE		

Page 1 of 5 Friday, September 23, 2016

#### Seattle Dept of Transportation Street Use Permits, 23rd Floor 700 Fifth Ave, Suite 2300 P O Box 34996 Seattle, WA 98124-4996

#### STREET USE PERMIT

Permit No.: 322839

Project ID: IMPACT Project ID: na Estimated Project Completion Date: 09/23/2016

#### **CONDITIONS OF USE**

**USE 44:** 

Stand Man Lift, Crane, Boom Truck or Concrete Pumper in right-of-way while moving materials to private property per approved site plan.

USE 47:

Cross curb and walk with heavy equipment during construction on private property. Sidewalk to be planked to prevent damage.

#### FEES PAID AT THE COUNTER OR ONLINE

Description	Date	Amount	
ISSUANCE FEE - SIGNIFICANT	09/23/2016	\$305.00	
Totals:		\$305.00	

STREET	USE	INS	PEC	TOR
311/2	OOL	11.00		1011

Permittee

/1 O A

Daniel Conn

(206) 386-4504

Director Pe

#### **GENERAL REQUIREMENTS**

- 1. Nature of permit. This permit is issued according to Seattle Municipal Code ("SMC"), Chapter 15.04, for the use or occupancy of the public right of way in a manner consistent with the terms and conditions in this permit. This permit is wholly of a temporary nature, vests no permanent rights, and is revocable according to SMC Section 15.04.070.
- 2. Acceptance of terms, conditions, and requirements. The Permittee accepts the terms, conditions, and requirements of this permit and agrees to comply with them to the satisfaction of the Seattle Department of Transportation, Street Use Division ("Street Use"), or such other agency as may be designated by the City. The Permittee further agrees to comply with all applicable City ordinances, including but not limited to SMC Title 15, and all applicable state and federal laws.
- 3. Copy of permit. A copy of the issued permit and current approved plans shall be on site and available at all times.
- 4. Expiration of permit. This permit shall remain valid until revoked according to SMC Section 15.04.070; provided that the permit shall expire automatically if the authorized work does not begin within six months from the date the permit is issued. The Permittee is responsible for keeping the permit up to date including submitting updated plans for approval. The Permittee shall submit requests to update a permit in writing or in person, and all requests shall be made to Street Use in a timely manner; otherwise, the Permittee may lose access to requested schedule for continued work in the right of way.
- 5. Superiority of Street Improvement Permits. When a Street Improvement Permit exists, rights acquired under the Street Improvement Permit supersede those acquired under any other Street Use or Utility Permits. Work not approved under the Street Improvement Permit shall require separate Street Use or Utility Permits and Permittee shall obtain these permits in advance of work.
- 6. Compliance with technical requirements and standards. All work within the public right of way shall be performed and completed according to the current or subsequently-amended requirements in the following technical documents published by the City: Right-of-Way Improvements Manual; Street Tree Manual; Standard Specifications for Road, Bridge and Municipal Construction; Standard Plans for Municipal Construction; Street and Sidewalk Pavement Opening and Restoration Rule; and Traffic Control Manual for In-Street Work.
- 7. Scope of work. The Permittee shall stage equipment or materials and construct or install the improvements and infrastructure reflected in and in accordance with this permit and the City-approved construction plans. Any revisions, omissions, or additions to the scope of work shall be reviewed and approved by the City before implementation.
- 8. Street Use notification. Construction work may be completed in several phases: site preparation (installing traffic control, saw-cutting, etc.); ground breaking; restoration; and staging of equipment and materials. Before beginning any phase of work in the public right of way, the Permittee shall notify Street Use of each start date. The Permittee shall be responsible for notifying Street Use Job Start at (206-684-5270) or SDOTJobStart@seattle.gov a minimum of 2-business days before starting work and shall provide the following information:
  - Permit number;
  - Job-site address;
  - Start date: please specify if Job Start date is the same as the excavation or ground breaking date. If the dates are different, please provide both dates:
  - · Brief work description; and
  - · Job-site contact name and phone number.

Failure to notify Street Use Job Start shall result in a \$300 penalty or other amounts according to SMC Section 15.04.074. For Street Improvement Permits and Utility Major Permits, a preconstruction meeting is required before starting construction, and the assigned inspector shall be notified a minimum of 2-business days before required inspections. Construction or utility activity occurring with, but not approved under, a Street Improvement or Utility Major Permit shall be permitted under separate Street Use permits. The Permittee shall apply for and

#### Seattle Dept of Transportation Street Use Permits, 23rd Floor 700 Fifth Ave, Suite 2300 P O Box 34996 Scattle, WA 98124-4996

#### STREET USE PERMIT

Permit No.: 322839

Project ID:

IMPACT Project ID: na

Estimated Project Completion Date: 09/23/2016

obtain these Street Use permits in advance of work. Failure to do so may subject the Permittee to penalties and additional permit review charges may apply.

- 9. Underground and overhead utility notification. The Permittee shall notify the following entities, as applicable, 2-business days in advance:
  - Utility Underground Locate Center (811 or 1-800-424-5555) before ground disturbance; and
  - Seattle City Light (206-684-4911) if working within 10 feet of high-voltage lines.
- 10. Olympic Pipe Line Company notification. When work in the right of way occurs within 100 feet of an Olympic Pipe Line Company ("OPLC") pipeline, the Permittee shall coordinate the work with OPLC, which may include submitting detailed construction plans to OPLC. The Permittee shall notify OPLC's field coordinator 10-business days in advance of the work (425-981-2506) and an OPLC representative may be required to be onsite during the work.
- 11. **Public notification.** The Permittee shall notify all potentially affected residents and businesses at least 10-business days before starting work in the public right of way, including alleys. Notification methods and timelines, including when ongoing notification is needed, must comply with Street Use standards and requirements.
  - If a tree has been approved for removal, the Permittee shall post a "tree removal" public-notice placard at least 10-business days before starting work.
  - If an SDOT public notice comment period is required prior to permitting, the Permittee shall conduct the public notice outreach prior to commencement of the SDOT public notice comment period.
- 12. Alley notification. Where this permit authorizes work in an alley, the Permittee shall notify all potentially impacted property owners and businesses prior to any activity occurring in the alley, including and especially those property owners and businesses with tenants using the alley to access parking or for building ingress/egress or deliveries. The Permittee shall schedule work around waste-management-collection days. If this is not possible, the Permittee shall coordinate with waste management services to either provide intermittent alley access during waste pickup or to temporarily establish waste pickup at an alternate location. If an alley is to remain open during permitted work, a minimum 11-foot clear width is required for vehicular access. If an alley is closed to through traffic, the Permittee shall notify the nearest Seattle Fire Department fire station and the Seattle Police Department at the non-emergency numbers prior to commencing work.
- 13. Coordination of work. In performing work authorized by this permit, the Permittee shall coordinate with other contractors working in the public right of way to minimize impact to the public. Documented coordination agreements may be required prior to permit issuance and additional notification to the public may be required.
- 14. Hours of work. Work performed in the public right of way shall occur only during hours authorized under all applicable codes, regulations, rules, and permits.
- 15. Off-hours work. Work outside of normal working hours, 8:00 AM 5:00 PM Monday through Friday, is considered "off-hours work" and requires a minimum of 3-business days advanced notice to the Street Use Inspection Supervisor before the off-hours work commences. Off-hours work may also require a separately-approved traffic control plan. A minimum of two hours of inspection time shall be charged for off-hours inspections at the premium rate. A Stop Work order or Citation may be issued for failing to notify Street Use at least 3-business days before the off-hours work.
- 16. Inspection fees. The Permittee shall pay for City inspections of work authorized under this permit according to the current fee schedule established by SMC Section 15.04.074 and all other associated costs.
- 17. Billing. All fees and costs billed according to this permit shall be paid to the City of Seattle within 30-calendar days from the invoice date. Past due invoices may be subject to interest charges and may be sent to collections.
- 18. Deposits, charges, and future billings. The Permittee, also identified as the "Financially Responsible Party" on Street Use permit applications, is responsible and liable for all permit-related charges. If a deposit was made for estimated future Street Use services, any unused portion of the deposit shall be refunded to the Permittee. Any charges in excess of the deposit shall be billed to the Permittee on a monthly basis.
- 19. Corrective work. The Permittee is responsible for any additional costs incurred by the City resulting from temporary or corrective measures required to bring the work area into compliance with standards that apply, including but not limited to: temporary traffic control, requirements for temporary structures, temporary stabilization, and temporary restoration when the Permittee is not on site.
- 20. Indemnification. The Permittee agrees to defend, indemnify, and hold harmless the City of Seattle, its officials, officers, employees, and agents; against any liability, claims, causes of action, judgments, or expenses, including reasonable attorney fees; resulting directly or indirectly from any act or omission of the Permittee, its contractors, subcontractors, anyone directly or indirectly employed by them, and anyone for whose acts or omissions they may be liable; arising out of the Permittee's use or occupancy of the public right of way; and all loss by the failure of the Permittee to fully or adequately perform, in any respect, all authorizations or obligations under this Permit.
- 21. Insurance. The Permittee shall obtain and maintain in full force and effect, at its own expense, public liability insurance in an amount sufficient to protect the City from all potential claims and risks of loss from perils in connection with any activity that may arise from or be related to the Permittee's activity upon or the use or occupation of the public right of way allowed by the permit; and all claims and risks in connection with activities performed by the Permittee by virtue of the permission granted by the permit. The Permittee shall meet all other insurance requirements in SMC 15.04.045.

#### **EXISTING IMPROVEMENTS**

- 1. Costs of damage to City property and improvements. The Permittee shall be responsible for the costs of repairing any damage to City property or improvements, including street trees, resulting from work performed by or on behalf of the Permittee within the public right of way. Damage to street trees is assessed on the value of the tree according to SMC subsection 15.90.018.B.
- 2. Utility protection. The Permittee shall be responsible for checking locations and providing adequate protection for all utilities in the work area.

Printed: 10:46:14AM Friday, September 23, 2016 Page 3 of 5

#### Seattle Dept of Transportation Street Use Permits, 23rd Floor 700 Fifth Ave, Suite 2300 P O Box 34996 Seattle, WA 98124-4996

#### STREET USE PERMIT

Permit No.:

322839

Project ID:

IMPACT Project ID: na

Estimated Project Completion Date: 09/23/2016

3. Utility relocation. The Permittee shall be responsible for notifying affected utilities and requesting any necessary relocation.

- 4. Survey monuments. Before removing, destroying, disturbing, or covering a survey monument such that the survey point is no longer visible or readily accessible, the Permittee shall obtain a permit from the Department of Natural Resources according to Washington Administrative Code, Chapter 332-120.
- 5. Protecting, removing, and relocating existing improvements. The Permittee, at their own cost and expense, shall be responsible for coordinating the removal and relocation of existing improvements within the public right of way that their construction or permitted project may interfere with. These existing improvements include, but are not limited to trees, bike racks, newsstands, bike-share stations, signs, benches, artwork, and waste receptacles.
  - For bike-share stations, the Permittee shall contact the bike-share operator at least 30-calendar days before starting work in order to coordinate the removal and relocation of the bike-share station.
  - For all other existing improvements, the Permittee shall contact the improvement owner at least 10-business days before starting work to coordinate the temporary removal of the improvement.
  - For newsstands, the Permittee shall coordinate temporary relocation during the construction period by posting notice of upcoming
    construction projects at SeattleNewsstands.org at least 10-business days before starting work.

The Permittee shall be responsible for reinstalling the improvements or coordinating the reinstallation in their original location or at a reasonable alternative location approved by the existing improvement owner and meeting all applicable City requirements. The Permittee is further responsible for protecting all trees within the construction project area and shall contact Urban Forestry to disclose and describe any construction impacts to trees.

Failure to contact the improvement owners or Urban Forestry is cause for Street Use to revoke this permit.

- 6. Monorail system proximity requirements. The Permittee shall be responsible for coordinating with the Seattle Center when any work, deliveries, or loading/unloading will occur within 14 feet of a Monorail structure or 20 feet of a Monorail foundation or below-ground installation. The Permittee shall contact the Seattle Center at 206-905-2601 at least 10-business days before starting construction. Failure to do so is cause for permit revocation.
- 7. Monorail system proximity guidelines. Below grade: The restricted digging area includes a 45-degree cone extending outward and downward from the ground level of all monorail piers. Nearby excavations shall be monitored to assure footing stability. At- or above-grade: The piers above ground level cannot be moved, nor can any item like lighting or signage be attached to the piers without prior written consent from the Seattle Center Director. Piers shall not be painted. Landscaping shall not occur adjacent to piers or within 10 feet of a Monorail structure without prior written consent of the Seattle Center Director. Any construction activity in the area of the power rails shall follow OSHA guidelines for working around high voltage. Construction equipment shall be located and operated in awareness of and taking account of beam height and the train's 14-foot-operational envelope from each side of the beam. Contractors shall string warning lines from pier to pier under the beams as a guide. Spotters shall be employed when any construction activity occurs within 25 feet of the beams.

#### ENVIRONMENTAL PROTECTION

1. Best management practices required. The Permittee shall be responsible for protecting the public place, including but not limited to protecting existing street trees and green stormwater infrastructure, and controlling surface runoff, crosion and sediment at the construction site, as required by: the Stormwater Code, (SMC Title 22, Subtitle VIII); the Street and Sidewalk Use Code, (SMC Title 15); the Standard Specifications for Road, Bridge, and Municipal Construction; and Department of Planning and Development Director's Rule 21-2015/Seattle Public Utilities DWW 200, or successor rules or provisions. The site and the surrounding area shall generally be kept clean and free of construction debris or other material, including but not limited to mud, dust, rock, asphalt, and concrete. Waste materials shall be collected and disposed of at an appropriate disposal site. These materials shall be prevented from entering any part of the public sewer and storm drain system, and any surface waters.

#### TRAFFIC CONTROL REQUIREMENTS

- 1. Compliance with the Traffic Control Manual for In-Street Work. In order to provide safe and effective work areas and to ward, control, protect, and expedite vehicular and pedestrian traffic; signage for all construction within the public right of way shall comply with the City of Seattle Traffic Control Manual for In-Street Work, as amended. When required, the conditions on the traffic control plan shall supersede any conflicting provisions or requirements in the City of Seattle Traffic Control Manual for In-Street Work. A copy of the current City of Seattle Traffic Control Manual for
  - In-Street Work and the approved traffic control plan shall be on site at all times.

    \*Lanes to remain open during peak hours.\* Traffic lanes shall not be closed during the following peak hours: 6:00 AM-9:00 AM and 3:00
- 2. Lanes to remain open during peak hours. Traffic lanes shall not be closed during the following peak hours: 0.00 AM and 3.00 PM-7:00 PM in the Central Business District; and 7:00 AM-9:00 AM and 4:00 PM-6:00 PM for arterials elsewhere in the City, unless specifically noted on the approved traffic control plan.
- 3. Maintain access. Access to adjoining properties and businesses shall be maintained or accommodated during construction. Pedestrian access around construction sites shall be implemented and maintained per SDOT Director's Rule 10-2015, or successor rule.
- 4. Width of temporary traffic lanes. Temporary traffic lanes created during the permitted work shall be a minimum of 11 feet in width unless otherwise approved on the traffic control plan.
- 5. Working within restricted curb spaces. When the project impacts a restricted curb space, such as meters, pay stations, specific use and load zones; the Permittee shall obtain permission from SDOT Traffic Operations and reserve the spaces with the Traffic Operations Permit Counter (206-684-5086) before starting work.

6. Temporary No Parking signs and easels. In areas without parking pay stations or parking meters, or when Traffic Operations allows reserved

Printed: 10:46:14AM Friday, September 23, 2016 Page 4 of 5

# Seattle Dept of Transportation Street Use Permits, 23rd Floor 700 Fifth Ave, Suite 2300 P O Box 34996 Scattle, WA 98124-4996

#### STREET USE PERMIT

Permit No.: 322839

Project ID:

IMPACT Project ID: na

Estimated Project Completion Date: 09/23/2016

parking spaces to be controlled with Temporary No Parking signs, establishing a Temporary No Parking Zone requires placing type R7-T38 (T-38) or R7-T39 (T-39) easels and completing an online verification form in conformance with the Traffic Control Manual for In-Street Work. In high impact areas, the Central Business District, and in areas where construction projects are densely clustered (such as in City-designated "Construction Hubs"), additional requirements for establishing a Temporary No Parking Zone may apply.

7. Nighttime illumination. Four or more Type B warning lights of sufficient brilliance to be seen from 500 feet shall be maintained at all times

during the hours of darkness at the points of obstruction or excavation of any right of way.

8. Work in alleys. For work occurring in alleys that impedes vehicular access, including but not limited to egress, ingress, or through travel; "Street Closed" signs shall be placed at each end of the alley. Property owners adjacent to the alley shall be contacted, and their access concerns shall be addressed and mitigated if possible. This may require alternative work scheduling in the case of Solid Waste collection days and hours.

Printed: 10:46:14AM Friday, September 23, 2016 Page 5 of 5

			2	
-				
				ec.
				ec
				æ
				**



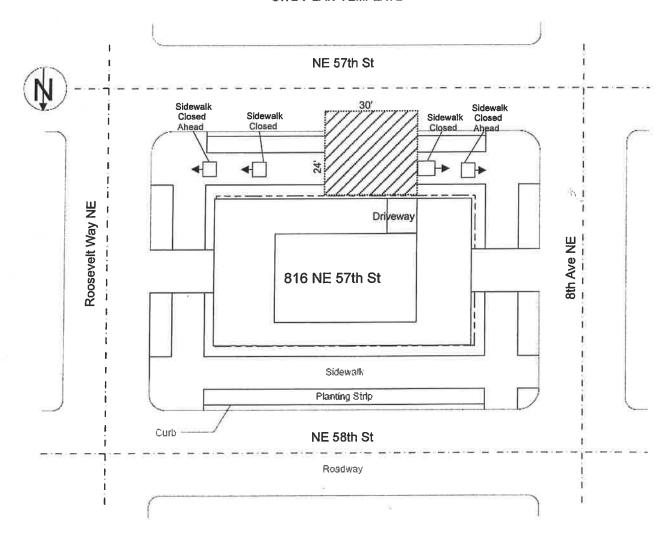
#### **Seattle Department of Transportation**

Street Use 700 Fifth Avenue, Suite 3700 PO Box 34996

Seattle, Washington 98124-4996

## SITE PLAN TEMPLATE

PERMIT NUMBER



Please clearly indicate the following:

- 1. Street Names
- 2. North Arrow
- 3. Exact location of work
- 4. Work zone (show dimensions)



Your Seattle Fire Department

6



#### APPLICATION FOR TEMPORARY PERMIT

Code 7908	Commercial Tank	Removal/Decom	/ /
Permit Fee: \$218.00	Т1	-C-X	Date Issued: 6/21/16 from site on the same day as permit is issued!
TO BE COMPLETED BY PE	RMIT APPLICANT	((s) must be removed t	rom site on the same day as permit is issued!
FIRM NAME FILE	o Company, Inc.		
MAILING ADDRESS PO	Box 31228		SUITE
CITY Sea	ttle	STATE WA	zip 98103
JOBSITE ADDRESS 816	NE 57th St		
CONTACT PERSON JOS	h Hilton	PHONE NUMBER	(206 )423-1092
Number of Tank(s): one	Tank Size(s): 300		Aboveground tank
Product(s) Previously Co.	ntained: Heating Oil		Underground tank
Removal (Marine Ch	emist inspection and certificate req	uired for all tanks regar	dless of size or contents)
Abandonment-in-Plac	:e (Marine Chemist certificate requ	nired for tanks previousl	y containing Class I flammable liquids
and/or unknowns)	ucted: No	Var (IF and a com-	arate hot work permit is required)
Hot work being condi	ided: V No	Yes (II yes, a sep	arate not work permit is required)
Permit applications may b	e submitted in person weekdays	from 8:00 a.m. to 5:00	p.m., or mailed to:
Seattle Fire Departme		pay with a Visa or Mas	ter Card: Fax or email this application
Fire Marshal's Office 220 Third Ave S. 2 <sup>nd</sup> I		N CALL US TO CONFIR (206) 386-1490 / Fax:	M RECEIPT AND MAKE PAYMENT
Seattle, WA 98104-2		all: permits@seattle.g	·
Call 386-1450	), 2, at least 24 hours prior to nee	eded inspection time	to arrange for an appointment.
			RE DEPARTMENT INSPECTION
, NO HOT WORK IS AL	LOWED ON A TANK SYSTEM	PRIOR TO ISSUANCE	OF THIS FIRE DEPARTMENT PERMIT!
Permission is hereby gran	ted to remove or decommission t	the tank(s) identified in	this permit in accordance with the attached
conditions, all noted spec		ole provisions of the	Seattle Fire Code, federal, state and local
			pervised, by an ICC certified individual (WAC 173-360-600
	The state of the s	and an analy on	טעטייטעייטון וווווווווווווווווווווווווווווווווו
FMO USE:	APPROV	ED BY:	

Inspector: J. WILLIAM Name of Marine/Chemist J. TRETTEVIK

Date: 10/2

SPD ID# 148

Certificate # 7,25 # 008504

Check No.: \_

Receipt No.: 5-26
Application ID#: 10

# COMMERCIAL TANK REMOVAL/DECOMMISSIONING PERMIT CONDITIONS

- 1. Two (2) portable fire extinguishers each having a minimum rating of 40 BC shall be on site within 50 feet of the operation. Fire extinguishers shall be inspected, approved and certified annually.
- Rope or ribbon barricades located at least 10 feet from the tank shall surround every outdoor storage tank removal or decommissioning operation or the operation shall be enclosed in a fenced yard.
- 3. "No Smoking" signs shall be posted in readily visible locations.
- 4. No hot work is allowed on a tank system prior to issuance of this permit and the tank is certified "Safe for Hot Work" by a Certified Marine Chemist. Hot work means any activities involving riveting, welding, burning, brazing, soldering, heating, chopping, grinding, ripping, drilling, cutting with a chop saw or "Sawzall", abrasive blasting, use of powder-actuated tools or similar spark-producing operations, crushing or mechanically shearing to facilitate opening for cleaning, disposal, scrapping for recycling purposes.
- A separate temporary Seattle Fire Department permit (Code 4913) or a validation number assigned in conjunction with an annual hot work permit (Code 4911 or 4912) is required prior to any hot work operations.
- Permits may cover multiple tanks located at the same address. If additional tanks are to be removed or abandoned at later dates, separate permits shall be obtained. Each address location requires a separate permit application regardless of whether multiple address locations are physically next to one another.
- Additional fees will be charged if inspectors are required to work other than normal business hours. (Normal business hours are Monday through Friday, 8:00 a.m. to 4:30 p.m.)
- 8. No excavation of an underground tank is permitted prior to inspection by the Seattle Fire Marshal's Office. Exception: Removal of the top layer of asphalt or concrete only with no removal of dirt, pea gravel or soil over the underground storage tank. Further excavation may be allowed by a Seattle Fire Department Special Hazards Unit Inspector prior to the initial inspection depending on conditions and if the tank has been inerted by a Marine Chemist who is present on site. The name of the inspector and the time permission was given shall be made available at time of inspection.
- Prior to inspection, to ensure tanks and connected piping are completely free of all flammable or combustible liquids, a
  receipt or certificate must be on site indicating the tanks have been pumped and rinsed by an approved company.
  Product and rinse water must be disposed of in an approved manner.
- 10. For tanks being decommissioned in place that previously contained Class I liquids, a Certified Marine Chemist certificate must be issued and available on site for inspection certifying that the tank has been properly inerted prior to filling.
- 11. No tank shall be filled prior to an inspection by the Seattle Fire Marshal's Office.
- 12. Tanks being decommissioned in place must be filled with a lean concrete mixture. Filling with foam is prohibited.
- 13. A Marine Chemist's certificate verifying the tank has been properly inerted or is otherwise certified "Safe for Hot Work" shall be issued and available on site for inspection for each underground and aboveground tank being removed regardless of the product previously contained.
- 14. If tanks are being removed the tanks' atmosphere must be inert using one of the following approved methods:
  - Dry ice (pellets or chunks of solid CO<sub>2</sub>). Minimum 40 lbs per 1000 gallons of tank capacity is recommended.
  - Compressed CO<sub>2</sub> gas in cylinders (Note: This method may only be performed by a Certified Marine Chemist).
  - Purging with air (gas-freeing) using Venturi tube apparatus, with proper bonding and grounding and after the tank has been pumped and rinsed by an approved company.
- 15. A maximum reading of less than 6% of oxygen must be obtained prior to the removal of the tanks if CO<sub>2</sub> or another inert gas, as approved by the Marine Chemist, is used to inert the tank or, a reading of 0% LEL must be obtained prior to removal of the tank if the air-purging (Venturi air moving devices) method is used.
- 16. All local, state and federal regulations for confined space entry shall be complied with prior to entering an underground storage tank.
- 17. Tanks with baffles to prevent movement of liquid must be certified gas-freed or inerted by a Certified Marine Chemist or a Petroleum Industry Safety Engineer regularly engaged in that business prior to removal.
- 18. Tanks being removed must be removed from the site and relocated to a remote, approved facility on the same day that the permit is issued.
- 19. During the hot work operations, digging, excavating, hauling or transport of petroleum storage tanks that have not been cleaned and gas-freed, tanks must be inerted to less than 6% oxygen. All openings are to be cap closed and secured except for one 1/8" hole drilled through a cap. These tanks are to be sprayed painted with "INERTED, DO NOT ENTER" or "INERTED WITH CO<sub>2</sub>, NOT SAFE FOR WORKERS".

MARINE (HEMIST CERTIFICATE SERIAL NO. P 008504

Page of

SOUND TESTING, INC. 206-932-0206 24 HOUR SERVICE

FILCO Survey Requested by	Vessel Owner or Agent	816 NE 57 TH ST				
U ST	UST					
HEATING DIL) X3	Type of Vessel	Specific Education of Aesse				
Last Three (3) Loadings	VI SUAL DZ LEY C	Time Survey Completed				
	SAFE FOR	2 ExCAUATION				
300gal. UST	SAPE FOR	TRANSPORT				
	02 = 7%	5 LEC = 0 6 5 2 1 ppm 50 ppm + loom				
	7HC = 4	oo pour + loon				
In the event of physical or atmospheric changes affer	ecting the STANDARD SAFETY DESIGNATIONS a	ssigned to any of the above spaces, this certificate is				
voided; spaces not listed on the Certificate are	not to be entered unless authorized on another stop all work and contact the undersigned Marine C	Certificate and/or maintained in accordance with themist. Unless otherwise stated on the Certificate, all competent person in support of work prior to entry or				

recommencement of work:

QUALIFICATIONS: Transfer of ballast, cargo, fuel, or manipulation of valves or closure equipment tending to after conditions in pipelines, tanks, or compartments subject to gas accumulation, unless specifically approved on this Certificate, requires inspection and a new Certificate for spaces so affected. All lines, vents, heating coils, valves, and similar enclosed appurtenances shall be considered "not safe" unless otherwise specifically designated. Movement of the vessel from its specific location voids the Certificate unless shifting of the vessel within the facility has been specifically authorized on this Certificate.

STANDARD SAFETY DESIGNATIONS: (partial list, paraphrased from NFPA 306)

ATMOSPHERE SAFE FOR WORKERS: In the compartment or space so designated (a) the oxygen content of the atmosphere is at least 19.5 percent and not greater than 22 percent by volume; (b) the concentration of flammable materials is below 10 percent of the lower explosive limit; (c) any toxic materials in the atmosphere associated with cargo, fuel, tank coatings, inerting mediums, or fumigants are within permissible concentrations at the time of the inspection.

NOT SAFE FOR WORKERS: In the compartment or space so designated, entry is not permitted

ENTER WITH RESTRICTIONS: In the compartment or space so designated, entry for work is permitted only if conditions of proper protective equipment, or clothing, or time, or all of the aforementioned, as appropriate, are as specified.

SAFE FOR HOT WORK: In the compartment or space so designated (a) the oxygen content of the atmosphere is not greater than 22 percent by volume; (b) the concentration of flammable materials in the atmosphere is less than 10 percent of the lower explosive limit; (c) the residues, scale, or preservative coatings are cleaned sufficiently to prevent the spread of fire and are not capable of producing a higher concentration than permitted by (a) or (b); (d) all adjacent spaces, containing or having contained flammable or combustible materials shall be sufficiently cleaned of residues, scale, or preservative coatings to prevent the spread of fire, or they are inerted. Ship's fuel tanks, lube tanks, or engine room or fire room bilges, or other machinery spaces, are treated in accordance with the Marine Chemist's requirements.

SAFE FOR LIMITED HOT WORK: In the compartment or space so designated (a) portions of the space meet the requirements for Safe for Hot Work and Partial Cleaning, as applicable, or (b) the space is inerted, adjacent spaces meet the requirements for Safe for Hot Work, and hot work is restricted to specific locations; (c) portions of the space shall meet the requirements for Safe for Hot Work, as applicable, and the nature or type of hot work is limited or restricted.

NOT SAFE FOR HOT WORK: In the compartment or space so designated, hot work is not permitted

CHEMISTS ENDORSEMENT. This is to certify that I have personally determined that all spaces in the foregoing list are in accordance with NFPA 306 Control of Gas Hazards on Vessels and have found the condition of each to be in accordance with its assigned designation.

"The undersigned acknowledge preceipt of this Certificate under NFPA 306 and understands conditions and limitations under which it was based, and the requirements for maintaining its validity."

This Certificate is based on conditions existing at the time the inspection herein set forth was completed and is issued subject to compliance with all qualifications and instructions.

Signed Signed Testing I

SOUND TESTING, INC. Certificate No.

206-932-0206 24 HAUB SERVICE

Printed in U.S.A.

POSTING COPY

Signed

STRAIGHT BILL OF LADING - SHO NOTICE: Shippers of hazardous materials must enter		Date	(-J)	20	Bill c	of Lading No	0	
response telepho. a number under "Emergency Respo	nse Phone Number.	ř.		2 6				
Memorandum	Land C	1 econ	1 3	Salutio		•		
	(Name of		0					
TO: Consignee Mad Vir C	₩	FROM: Shipper	FI	Co				
Street 1516 5 Graham 57	-	Street	816.	NIS	744	5		
Destination	Zip Code	Origin	Sign	146		ip Code		
Route:	Vehicle No.		SCAC			Emergency F Phone Numb		
Shipping Units +HM Kind of Packaging, Description of Ar Special Marks and Exceptions	ticles Commodities requiring spe stowing must be so marked a ordinary care. See Section 2(s	and packaged as to er	sure safe tra	nsportation with	Weight (Subject Correction	to Rat	e or Class	CHARGES
200 gallons allu	atte							
				8 1 3		1)		
*If the shipment moves between two ports by a REMI		c.o.p.		C.D.D. FEE:		TOTAL		
*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading C.O.D state whether weight is "carrier's or shipper's weight". ADD:	. TO:	Amt. \$	- 1	PREPAID [	\$	CHARGE	S: \$	
Note-Where the rate is dependent on value, shippers are r	equired to Subject to Section	7 of the condition	s if this shi	oment is to be o	delivered to the	(086)-947/10000		EIGHT CHARGES
state specifically in writing the agreed or declared value of the	property. recourse on the c	onsignor, the cons	ignor shall	sign the followir	ng statement.		Chook	Appropriate Box:
The agreed or declared value of the property is hereby specific by the shipper to be not exceeding	charges	Hot make delivery	Us una ani	pinelic wiologs	paymone or n	oigns and an o	☐ Fr	reight prepaid
\$per	_		(Signatur	e of Consignor)				ollect
RECEIVED, subject to the classifications and lawfully filed and condition of contents of packages unknown), marked, consider comporation in possession of the property under the contract destination. It is mutually agreed as to each carrier of all or a rety, that every service to be performed hereunder shall be subthe date hereof, if this is a rail or a rail-water shipment or [2] the terms and conditions of the said bill of lading, set forth in shipper and accepted for himself and his assigns.	ariffs in effect on the date of taned, and destined as indicated agrees to carry to its usual py of, said property over all or sect to all the terms and condition the applicable motor carrier the classification or tariff which						ood order, exce his contract as enother carrier interested in el m Freight Class y certifies that tifitions are her	pt as noted (contents; meaning any person on the route to said I or any of said propsifications in effect on the is familiar with all reby agreed to by the
Mark with "RG" if appropriate to designate Hazardous Materials as de Transportation Regulations governing the transportation of natardous ma an optional method for identifying hazardous materials on Bills of Lading Code of Federal Regulations. Also when shipping hazardous materials, the prescribed in section 172. 204(a) of the Federal Regulations, as indicated unless a specific exception from the requirement is provided in the Regula	terials. The use of this column is ser 172.201(a)(1) (iii) of Title 49 shipper's certification statement is on the Bill of Lading does apply.	The format and con- pany interpretation 172, Subpart C-Shi- tions 172,201 (Ha Proper shipping na- and subsidiary class	of requirement oping Papers tardous Mate ne, hazardou (es)	ts as described in Such description i rial Table) and Se a class, UN identi	49 Code of Fedi consists of the fo ctions 172,202	trail Hagulations flowing per Sec- and 172,203:	or damage may be as	by limitation for loss in this shipment oplicable. See 49 es Code, Sections (A) and (B).
SHIPPER / BOYLES				-155				
PER /	AND THE PROPERTY OF THE PROPER		- 5	1,50	e-	nameda Cancina	cartifies emana	ancy company informs
This is to certify that the above named materials are marked, and labeled, and are in proper condition for t applicable regulations of the U.S. Department of Transp	ransportation according to the	attended to the state of the state of	allable and /	or coming har th	a LIS Tananto	nent of Iranspor	tation emergen	ency response informa- icy response guidebook der, except as noted.