NELSON GEOTECHNICAL
ASSOCIATES. INC.

17311-135th Ave. N.E. Suite A-500
Woodinville, WA 98072
(425) 486-1669
www.nelsongeotech.com

M E M O R A N D U M

DATE: March 1, 2024

TO: Jeff Moon – Moon Construction

FROM: Khaled M. Shawish, PE
Sarah L. Dunn, GIT

RE: Contaminated Soils Evaluation
Jiffy Lube Kirkland Repairs
12309 NE 85th Street
Kirkland, Washington
NGA File No. 14276B24

3.01.2024

INTRODUCTION

This memo documents the observations and conclusions of our contaminated soils evaluation for the Jiffy Lube repair project located at **12309 NE 85th Street in Kirkland, Washington.**

We previously prepared a geotechnical letter for this project dated April 5, 2023, regarding groundwater conditions and recommendations for drainage and foundation support. Development plans consist of underpinning the existing Jiffy Lube facility and installing drainage improvements. We have been providing construction monitoring services for the project on a part time basis since January 16, 2024.

On February 5, 2024 we were informed that during the planned excavations on the northwest corner of the structure, soils with a strong petroleum odor were encountered. We were requested to evaluate the soils in question. Our observations and findings are summarized in the following section.

SOIL EVALUATION

We visited the site on February 5, 2024, to evaluate suspected contaminated soils. Upon arrival we observed that a roughly 4.0-foot by 5.0-foot area on the northwest corner of the existing structure had been excavated down 8.0 feet below the existing ground surface. Excavation soils stockpiled on site, as well as the excavated area, were emitting a strong petroleum odor. The exposed soils consisted of light-brown, silty fine to coarse sand with gravel, as well as blue-gray, sandy silt with gravel present within an approximately 2.0-foot radius of the exposed foundation element.

While on site, we observed the contractor excavate a second pit on the southwest corner of the structure that extended roughly 6.0 feet below the existing ground surface. Soils exposed in this area consisted of light brown, silty sand with gravel. However, due to the strong odor already in the air, it was not possible to discern whether the soils in this area were also emitting an odor. We recommended that the site soils be tested for contaminants and the contractor agreed.

We returned to the site on February 6, 2024 and collected three samples. Two samples were collected within the excavation on the northwest side of the structure. The first sample was of the blue-gray soils roughly 4.0 feet below the existing ground surface, and the second was of the light-brown soils approximately 5.5 feet below the ground surface. The third sample was collected within the test pit on the southwest corner of the building, roughly 5.0 feet below the ground surface.

All three samples were taken to AM Test Laboratories and tested for Gasoline, Diesel, and Heavy Oils. The sample collected from the southwest corner of the structure and the sample of the light-brown soils on the northwest corner both tested negative for all three materials. However, the sample of the blue-gray soils from the northwest corner of the building tested positive for diesel and heavy oils. The laboratory test results are attached to this memo as **Appendix A**. We should note that heavy oil levels detected within the blue-gray soils exceeded the threshold for **Method A** cleanup as defined in the **Model Toxic Control Act (MTCA) Cleanup Regulations.** We recommend that an environmental consultant be retained to provide further guidance and recommendations for site cleanup.

We trust this memorandum should satisfy your needs at this time. Please contact us if you have any questions or require additional services.

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Appendix A Attached

APPENDIX A

AM Test Laboratories Results

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

Professional Analytical Services

Feb 16 2024
NELSON GEOTECHNICAL ASSOCIATES
17311 135TH AVE NE
#A500
WOODINVILLE, WA 98072
Attention: SARAH DUNN

Dear SARAH DUNN:

Enclosed please find the analytical data for your project.

The following is a cross correlation of client and laboratory identifications for your convenience.

CLIENT ID	MATRIX	AMTEST ID	TEST
TP1 BROWN	Soil	24-A002530	HCID
TP1 GREY-BLUE	Soil	24-A002531	HCID
TP2 BROWN	Soil	24-A002532	HCID

Your samples were received on Tuesday, February 6, 2024. At the time of receipt, the samples were logged in and properly maintained prior to the subsequent analysis.

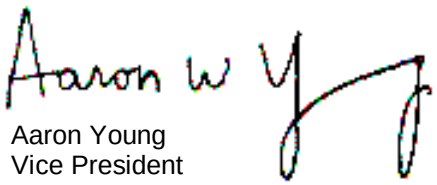
The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the Quality Control (QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Practical Quantitation Limits (PQL's), as opposed to the Method Detection Limits (MDL's).

If you should have any questions pertaining to the data package, please feel free to contact me.

Sincerely,



Aaron Young
Vice President

BACT = Bacteriological
CONV = Conventionals
MET = Metals
ORG = Organics
NUT=Nutrients
DEM=Demand
MIN=Minerals

Am Test Inc.
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www.amtestlab.com

Professional Analytical Services

ANALYSIS REPORT

NELSON GEOTECHNICAL ASSOCIATES
17311 135TH AVE NE
WOODINVILLE, WA 98072
Attention: SARAH DUNN
All results reported on an as received basis.

Date Received: 02/06/24
Date Reported: 2/16/24

AMTEST Identification Number **24-A002530**
Client Identification **TP1 BROWN**
Sampling Date **02/06/24, 08:34**

NWTPH-HCID (Soil)

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Fuel Type	None				NWTPH-Dx	AS	02/16/24
Gasoline	< 20	mg/Kg		20.	NWTPH-HCID	AS	02/16/24
Diesel	< 25	mg/Kg		25.	NWTPH-HCID	AS	02/16/24
Heavy Oil	< 50	mg/Kg		50.	NWTPH-HCID	AS	02/16/24

Surrogates

ANALYTE	% RECOVERY	LIMITS	DATE
Bromofluorobenzene	109. %	50.0 - 150.	2/16/24
2-Fluorobiphenyl	116. %	50.0 - 150.	2/16/24

AMTEST Identification Number **24-A002531**
Client Identification **TP1 GREY-BLUE**
Sampling Date **02/06/24, 08:35**

NWTPH-HCID (Soil)

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Fuel Type	Oil				NWTPH-Dx	AS	02/16/24
Gasoline	< 20	mg/Kg		20.	NWTPH-HCID	AS	02/16/24
Diesel	1600	mg/Kg		25.	NWTPH-HCID	AS	02/16/24
Heavy Oil	17000	mg/Kg		50.	NWTPH-HCID	AS	02/16/24

Surrogates

ANALYTE	% RECOVERY	LIMITS	DATE
Bromofluorobenzene	0.0 %	50.0 - 150.	2/16/24
2-Fluorobiphenyl	0.0 %	50.0 - 150.	2/16/24

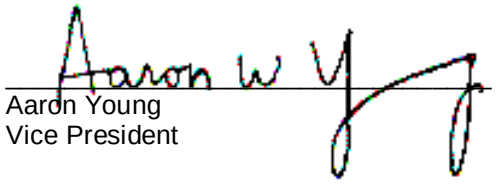
AMTEST Identification Number **24-A002532**
Client Identification **TP2 BROWN**
Sampling Date **02/06/24, 08:38**

NWTPH-HCID (Soil)

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Fuel Type	None				NWTPH-Dx	AS	02/16/24
Gasoline	< 20	mg/Kg		20.	NWTPH-HCID	AS	02/16/24
Diesel	< 25	mg/Kg		25.	NWTPH-HCID	AS	02/16/24
Heavy Oil	< 50	mg/Kg		50.	NWTPH-HCID	AS	02/16/24

Surrogates

ANALYTE	% RECOVERY	LIMITS	DATE
Bromofluorobenzene	115. %	50.0 - 150.	2/16/24
2-Fluorobiphenyl	116. %	50.0 - 150.	2/16/24



Aaron Young
Vice President

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Professional Analytical Services

QC Summary for sample numbers: 24-A002530 to 24-A002532

STANDARD REFERENCE MATERIALS

ANALYTE	UNITS	TRUE VALUE	MEASURED VALUE	RECOVERY
Gasoline	mg/Kg	200	190	95.0 %
Diesel	mg/Kg	400	430	108. %
Heavy Oil	mg/Kg	400	380	95.0 %

BLANKS

ANALYTE	UNITS	RESULT
Gasoline	mg/Kg	< 20
Diesel	mg/Kg	< 25
Heavy Oil	mg/Kg	< 50
Bromofluorobenzene	%	114.
2-Fluorobiphenyl	%	115.

AMTEST LABORATORIES

AmTest Chain of Custody Record

13600 NE 126th PL, Suite C, Kirkland, WA 98034
Ph (425) 885-1664 Fx (425) 820-0245
www.amtestlab.com

Chain of Custody No. [illegible]

Client Name & Address:	Invoice To:
Nelson Geotechnical Associates (NGA) 17311 135th Ave NE #A500 Woodinville, WA 98072	
Contact Person: Sarah Dunn	Invoice Contact:
Phone No: 425-486-1669 ext. 1006	PO Number:
Fax No:	Invoice Ph/Fax:
E-mail: sarah@nelsongeotech.com	Invoice E-mail:
Report Delivery: (Choose all that apply) Mail / Fax / (Email) / Posted Online	Data posted to online account: YES / NO Web Login ID:
Special Instructions:	
Requested TAT: **(Rush must be pre-approved by lab)** Standard RUSH (5 Day / 3 Day / 48 HR / 24 HR)	Temperature upon Receipt: 8.8°C

Project Name: / Project Number:						Analysis Requested										
AmTest ID	Client ID (35 characters max)	Date Sampled	Time Sampled	Matrix	No. of containers	Gas	Diesel	Heavy oil								QA/QC
2530	TP1 brown	2/6/24	8:34 am		1											
2531	TP1 grey-blue	2/6/24	8:35 am		1											
2532	TP2 brown	2/6/24	8:38 am		1											

Collected/Relinquished By:	Date	Time	Received By:	Date	Time
Sammie McElwain	2/6/24	9:05 am	KH	2/6/24	915
Relinquished By:	Date	Time	Received By:	Date	Time
Relinquished By:	Date	Time	Received By:	Date	Time

COMMENTS: