September 23, 2016 KA Project No. 09616252

Mr. John Dahlman Tel: (206)769-6542
Sierra Construction
johnd@sierraind.com
Lynnwood, WA

RE: Letter Report for Testing and Inspection Services for:
Limited Soil Sampling and Analysis
Proposed CarMax Property located at:
21301 Highway 99
Lynnwood, WA

Dear Mr. Dahlman:

Krazan and Associates is providing this Letter Report in reference to limited sampling of soil at the proposed CarMax located at 21301 Highway 99 in Lynnwood, Washington. Preliminary sample collection was conducted by Krazan representative Mr. Jordan Kain on September 15, 2016 and confirmational sample collection was conducted by Krazan representative Mr. Andrew Joyce on September 19, 2016 in the "Pond Area". This sampling was performed in accordance with federal, state and local regulatory requirements, and was limited to areas defined by the client. Sample location and contaminants of concern (COC) analysis were directed by the contractor.

1.0 Analytical Results

1.1 Soil Analytical Results

The soil sampled from the preliminary sampling and identified as "Gray Sand Pocket" at the location referenced above exceeded Model Toxics Control Act (MTCA) limits set forth by Washington State Department of Ecology (WDOE) of 100 ppm of gasoline in soil and 2,000 ppm of diesel in soil. Confirmational soil samples taken from the four walls and the center of the excavation pit indicated non-detectable levels of all analytes including gasoline, diesel, and MTCA 5 metals. Although confirmational samples identified resulted in lower levels of contamination below MTCA action levels, it can be assumed that the spoils pile is within 2-1,000 ppm gasoline and 50-21,000 ppm diesel throughout the pile. This assumption is made due to the mixing of the soil during excavation along with the pockets of high gasoline and diesel concentration throughout the pile. Trace metals typically associated with petroleum contamination were also indicated at levels below MTCA action levels. The laboratory analytical report is provided in Appendix A.

2.1 Sampling Methodology

The preliminary soil sampling location was defined by the client as discreet samples taken from the odorous gray sand pocket, additional proximity gray sand pocket, and the stock pile material. The confirmational soil sampling location was defined by the client as discreet samples taken from the north, south, east, and west walls of the excavation along with one sample of the bottom of the excavation located at in the "Pond Area" at 21301 Highway 99 in Lynnwood, Washington. The samples were collected by carefully collecting each sample of soil from the above referenced location and placing the samples in a clean sample container. The sampling instrument was wiped clean before sampling with a clean moist cloth to decontaminate the tool and minimize the potential cross contamination from previous samples. Data pertinent to each sample (e.g., date, sample number, material description, and material category) was recorded on a chain of custody.

Laboratory Analysis

Three (3) discrete soil samples were collected from the site and tested for TPH-Diesel, TPD-Gasoline, BTEX, and RCRA-8 metals on September 15, 2016. Five (5) discrete soil samples were collected from the site and tested for TPH-Diesel, TPH-Gasoline, BTEX, and MTCA-5 metals on September 19, 2016. The samples were placed in an iced cooler and delivered to Friedman & Bruya Laboratories in Seattle, Washington, under chain-of-custody protocol for analysis. Freidman & Bruya Laboratories is a Washington State accredited laboratory. Laboratory analytical data reports and chain-of-custody forms are provided in Appendix B

2.2 Laboratory Sample Results

Table 1 includes the sample number, sample location, sample description, and contamination level.

Table 1 – Summary of Analytical Data – Preliminary Sampling from 9/15/16

Sample ID	Sample Location	Sample Material Description	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver
Gray Sand Pocket	Pond Area	Soil	**1,000**	**21,000**	<0.02	0.19	1.3	7.9	0.09	4.32	<1	0.38	0.07	<1	<1	<1
Proximity	10' West of "Gray Sand Pocket"	Soil	<2	<50	<0.02	<0.02	<0.02	<0.06	0.11	1.62	<1	0.33	0.09	<1	<1	<1
Stock Pile	Stock Piled Soil	Soil	14	<50	<0.02	<0.02	<0.02	<0.06	0.143	2.11	<1	0.39	0.43	<1	<1	<1

RCRA Cleanup Levels	NA	Soil	**100 ppm**	**2,000 ppm**	0.5	NA	NA	NA	2	100	1	**5**	5	0.2	1	5

Table 2 – Summary of Analytical Data – Confirmational Sampling from 9/19/16

Sample ID	Sample Location	Sample Material Description	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Arsenic	Cadmium	Chromium	Lead	Mercury
N-1	North Wall of Excavation	Soil	<2	<50	<0.02	<0.02	<0.02	<0.06	1.59	<1	7.72	1.17	<1
S-1	South Wall of Excavation	Soil	<2	<50	<0.02	<0.02	<0.02	<0.06	1.49	<1	13.2	1.62	<1
E-1	East Wall of Excavation	Soil	<2	<50	<0.02	<0.02	<0.02	<0.06	1.53	<1	7.94	1.28	<1
W-1	West Wall of Excavation	Soil	<2	<50	<0.02	<0.02	<0.02	<0.06	1.73	<1	11.1	1.52	<1
B-1	Bottom of Excavation	Soil	<2	<50	<0.02	<0.02	<0.02	<0.06	1.47	<1	8.14	1.01	<1
MTCA Cleanup Levels	NA	Soil	100 ppm	2,000 ppm	0.03	7	6	9	20	2	2,000	250	2

2.3 Conclusions

The preliminary soil samples obtained from the "Pond Area" located at 13509 21301 Highway 99 in Lynnwood, Washington exceeded the Resource Conservation and Recovery Act (RCRA) action level of 100 ppm of gasoline in soil and 2,000 ppm of diesel in soil by the Washington State Department of Ecology. The bottom of the excavation pit along with its four walls resulted in non-detectable levels of all analytes. This appears to indicate that no further remediation work is deemed necessary by Model Toxics Control Act (MTCA) regulations. Based on preliminary soil sample results, it can be assumed that portions of the spoils pile also exceed RCRA action limits of 100 ppm gasoline and 2,000 ppm diesel. This material should be removed as contaminated soil for proper disposal. According to chapter 173-340 of WAC of the *Model Toxics Control Act Regulation and Statute* handbook, Ecology's Toxics Cleanup Program must be notified within 90 days of discovery of a hazardous substance in soil.

LIMITATIONS

This survey and review of the subject property has been limited in scope to those areas defined by the client. This investigation is undertaken with the risk that visual observations and random sampling alone would not reveal the presence, full nature, and extent of Contaminants of Concern (COC). Krazan makes no representation as to the COC content of materials not sampled or that were inaccessible to our

inspector. The sample locations are approximate, and are based on field notes and diagrams of sample locations. The opinions presented herein apply to the site condition existing at the time of the investigation. Opinions and recommendations provided herein may not apply to future conditions that may exist at the site.

The findings presented in this report were based on field observations and sampling as defined by the client. Therefore, the data obtained are clear and accurate only to the degree implied by the sources and methods used. The information presented herein is based on professional interpretation using presently accepted methods with a degree of conservatism deemed proper as of the report date. We do not warrant that future technical developments cannot supersede such data.

This report is provided for the exclusive use of the client noted on the cover page and is subject to the terms and conditions in the applicable contract between the client and Krazan. The client is the only party to whom Krazan has explained the risks involved and has been involved in the shaping of the scope of services needed to satisfactorily manage those risks, if any, from the client's point of view. Any third party use of this report, including use by the Client's lender, prospective purchaser, or lessee will be subject to the terms and conditions governing the contractual work between the Client and Krazan. The unauthorized use of, reliance on, or release of the information contained in this report is strictly prohibited and will be without risk or liability to Krazan.

Laboratory analysis was conducted by a laboratory accredited under the guidance of the EPA. The results of the analyses are accurate only to the degree of care exercised by the independent laboratories and the representative nature of the samples obtained.

Krazan appreciates the opportunity to provide you with this information and trusts that you will find it useful. If you have any questions or if we may be of further assistance, please do not hesitate to contact our office at (425) 485-5519.

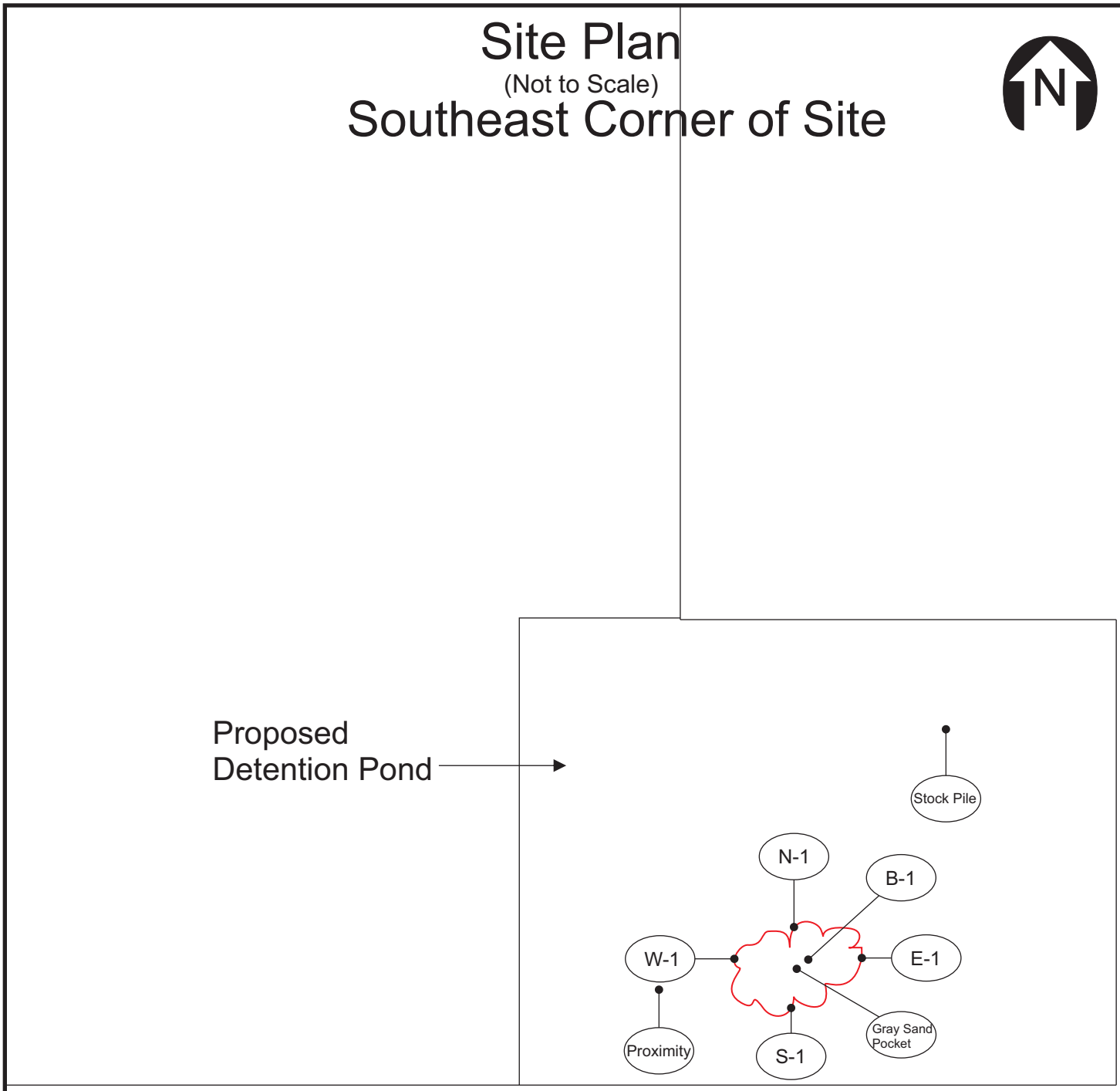
Respectfully submitted,
KRAZAN & ASSOCIATES, INC.

Jordan Kain
Environmental Technician
Krazan & Associate

Site Plan

(Not to Scale)

Southeast Corner of Site



Notes

Krazan & ASSOCIATES, INC.

Proposed CarMax- 21301 Highway 99 Lynnwood, Washington		
Date: September 2016		
Drawn By: JJK	Sample Locations	Project Number: 096-16252

FRIEDMAN & BRUYA, INC.

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

September 22, 2016

Steven Padilla, Project Manager
Krazan & Associates
4303 198th Street SW
Lynnwood, WA 98036

Dear Mr. Padilla:

Included are the results from the testing of material submitted on September 15, 2016 from the CarMax, PO 096-16252, F&BI 609261 project. There are 11 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Jordan Kain
KRZ0922R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 15, 2016 by Friedman & Bruya, Inc. from the Krazan & Associates CarMax, PO 096-16252, F&BI 609261 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Krazan & Associates
609261 -01	Gray Sand Pocket
609261 -02	Proximity
609261 -03	Stock Pile

The 200.8 silver matrix spike and laboratory control sample failed below the acceptance criteria. The data were flagged accordingly.

All other quality control requirements were acceptable.

Date of Report: 09/22/16
Date Received: 09/15/16
Project: CarMax, PO 096-16252, F&BI 609261
Date Extracted: 09/15/16
Date Analyzed: 09/15/16 and 09/17/16

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	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
Gray Sand Pocket 609261-01 1/5	<0.02 j	0.19	1.3	7.9	940	108
Proximity 609261-02	<0.02	<0.02	<0.02	<0.06	<2	79
Stock Pile 609261-03	<0.02	<0.02	<0.02	<0.06	14	81
Method Blank 06-1869 MB	<0.02	<0.02	<0.02	<0.06	<2	85

Date of Report: 09/22/16
Date Received: 09/15/16
Project: CarMax, PO 096-16252, F&BI 609261
Date Extracted: 09/15/16
Date Analyzed: 09/15/16

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_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 56-165)
Gray Sand Pocket 609261-01	21,000	<250	ip
Proximity 609261-02	<50	<250	110
Stock Pile 609261-03	<50	<250	102
Method Blank 06-1898 MB	<50	<250	97

Analysis For Total Metals By EPA Method 200.8

Client ID:	Gray Sand Pocket	Client:	Krazan & Associates
Date Received:	09/15/16	Project:	CarMax, PO 096-16252, F&BI 609261
Date Extracted:	09/15/16	Lab ID:	609261-01
Date Analyzed:	09/15/16	Data File:	609261-01.064
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.83
Barium	86.3
Cadmium	<1
Chromium	7.54
Lead	1.43
Mercury	<1
Selenium	<1
Silver	<1 jl

Analysis For Total Metals By EPA Method 200.8

Client ID:	Proximity	Client:	Krazan & Associates
Date Received:	09/15/16	Project:	CarMax, PO 096-16252, F&BI 609261
Date Extracted:	09/15/16	Lab ID:	609261-02
Date Analyzed:	09/15/16	Data File:	609261-02.065
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.21
Barium	32.3
Cadmium	<1
Chromium	6.52
Lead	1.80
Mercury	<1
Selenium	<1
Silver	<1 jl

Analysis For Total Metals By EPA Method 200.8

Client ID:	Stock Pile	Client:	Krazan & Associates
Date Received:	09/15/16	Project:	CarMax, PO 096-16252, F&BI 609261
Date Extracted:	09/15/16	Lab ID:	609261-03
Date Analyzed:	09/15/16	Data File:	609261-03.066
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	2.86
Barium	42.2
Cadmium	<1
Chromium	7.79
Lead	8.52
Mercury	<1
Selenium	<1
Silver	<1 jl

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Krazan & Associates
Date Received:	NA	Project:	CarMax, PO 096-16252, F&BI 609261
Date Extracted:	09/15/16	Lab ID:	I6-611 mb
Date Analyzed:	09/15/16	Data File:	I6-611 mb.022
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<5
Lead	<1
Mercury	<1
Selenium	<1
Silver	<1 jl

Date of Report: 09/22/16
Date Received: 09/15/16
Project: CarMax, PO 096-16252, F&BI 609261

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: 609183-03 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (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

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	96	69-120
Toluene	mg/kg (ppm)	0.5	96	70-117
Ethylbenzene	mg/kg (ppm)	0.5	96	65-123
Xylenes	mg/kg (ppm)	1.5	96	66-120
Gasoline	mg/kg (ppm)	20	105	71-131

Date of Report: 09/22/16
Date Received: 09/15/16
Project: CarMax, PO 096-16252, F&BI 609261

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 609245-01 (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	102	105	63-146	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	101	79-144

Date of Report: 09/22/16
Date Received: 09/15/16
Project: CarMax, PO 096-16252, F&BI 609261

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

Laboratory Code: 609078-17 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	4.87	70	81	70-130	15
Barium	mg/kg (ppm)	50	62.4	65 b	85 b	70-130	27 b
Cadmium	mg/kg (ppm)	10	4.39	89	101	70-130	13
Chromium	mg/kg (ppm)	50	12.1	87	97	70-130	11
Lead	mg/kg (ppm)	50	325	13 b	143 b	70-130	167 b
Mercury	mg/kg (ppm	10	<1	78	85	70-130	9
Selenium	mg/kg (ppm)	5	<1	70	77	70-130	10
Silver	mg/kg (ppm)	10	<1	69 vo	75	70-130	8

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	91	85-115
Barium	mg/kg (ppm)	50	100	85-115
Cadmium	mg/kg (ppm)	10	98	85-115
Chromium	mg/kg (ppm)	50	113	85-115
Lead	mg/kg (ppm)	50	102	85-115
Mercury	mg/kg (ppm)	10	97	85-115
Selenium	mg/kg (ppm)	5	85	85-115
Silver	mg/kg (ppm)	10	82 vo	85-115

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.

609261 Jordan Kain / Steven Padilla

SAMPLE CHAIN OF CUSTODY

ME 09-15-16 BI / VSI

Report To

Company Krazan

Address

City, State, ZIP

Phone Email jordanKain@Krazan.com StevenPadilla@Krazan.com

SAMPLERS (signature) Jordan Kain

PROJECT NAME: LarMax

PO #: 096-16252

REMARKS

INVOICE TO

Page # 1 of 1

TURNAROUND TIME
- ☐ Standard Turnaround
- ☑ RUSH 24 hrs
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Archive Samples
- ☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	RCRA-8 metals				Notes
Gray Sand Pocket	01 A-B	9/15/16		Soil	2	X	X	X	X				X				
Proximity	02	"		"	2		X	X	X				X				
Stock Pile	03	"		"	2		X	X	X				X				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Jordan Kain	Jordan Kain	Krazan	9/15/16	2:30
Received by: [signature]	[illegible]	FGBr	↓	↓
Relinquished by:				
Received by:				

Samples received at 2 °C

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282

FRIEDMAN & BRUYA, INC.

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

September 22, 2016

Steven Padilla, Project Manager
Krazan & Associates
4303 198th Street SW
Lynnwood, WA 98036

Dear Mr. Padilla:

Included are the results from the testing of material submitted on September 19, 2016 from the CarMax No. 7250, PO 096-16252, F&BI 609315 project. There are 13 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Jordan Kain
KRZ0922R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 19, 2016 by Friedman & Bruya, Inc. from the Krazan & Associates CarMax No. 7250, PO 096-16252, F&BI 609315 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Krazan & Associates
609315 -01	N-1
609315 -02	S-1
609315 -03	E-1
609315 -04	W-1
609315 -05	B-1

All quality control requirements were acceptable.

Date of Report: 09/22/16
Date Received: 09/19/16
Project: CarMax No. 7250, PO 096-16252, F&BI 609315
Date Extracted: 09/19/16
Date Analyzed: 09/19/16

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	Toluene	Ethyl Benzene	Total Xylenes	Gasoline Range	Surrogate (% Recovery) (Limit 50-150)
N-1 609315-01	<0.02	<0.02	<0.02	<0.06	<2	80
S-1 609315-02	<0.02	<0.02	<0.02	<0.06	<2	81
E-1 609315-03	<0.02	<0.02	<0.02	<0.06	<2	80
W-1 609315-04	<0.02	<0.02	<0.02	<0.06	<2	79
B-1 609315-05	<0.02	<0.02	<0.02	<0.06	<2	75
Method Blank 06-1909 MB	<0.02	<0.02	<0.02	<0.06	<2	81

Date of Report: 09/22/16
Date Received: 09/19/16
Project: CarMax No. 7250, PO 096-16252, F&BI 609315
Date Extracted: 09/19/16
Date Analyzed: 09/19/16

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_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 56-165)
N-1 609315-01	<50	<250	93
S-1 609315-02	<50	<250	93
E-1 609315-03	<50	<250	93
W-1 609315-04	<50	<250	100
B-1 609315-05	<50	<250	87
Method Blank 06-1940 MB	<50	<250	100

Analysis For Total Metals By EPA Method 200.8

Client ID:	N-1	Client:	Krazan & Associates
Date Received:	09/19/16	Project:	CarMax No. 7250, PO 096-16252
Date Extracted:	09/19/16	Lab ID:	609315-01
Date Analyzed:	09/19/16	Data File:	609315-01.067
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.59
Cadmium	<1
Chromium	7.72
Lead	1.17
Mercury	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	S-1	Client:	Krazan & Associates
Date Received:	09/19/16	Project:	CarMax No. 7250, PO 096-16252
Date Extracted:	09/19/16	Lab ID:	609315-02
Date Analyzed:	09/19/16	Data File:	609315-02.068
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.49
Cadmium	<1
Chromium	13.2
Lead	1.62
Mercury	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	E-1	Client:	Krazan & Associates
Date Received:	09/19/16	Project:	CarMax No. 7250, PO 096-16252
Date Extracted:	09/19/16	Lab ID:	609315-03
Date Analyzed:	09/19/16	Data File:	609315-03.069
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.53
Cadmium	<1
Chromium	7.94
Lead	1.28
Mercury	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	W-1	Client:	Krazan & Associates
Date Received:	09/19/16	Project:	CarMax No. 7250, PO 096-16252
Date Extracted:	09/19/16	Lab ID:	609315-04
Date Analyzed:	09/19/16	Data File:	609315-04.070
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.73
Cadmium	<1
Chromium	11.1
Lead	1.52
Mercury	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	B-1	Client:	Krazan & Associates
Date Received:	09/19/16	Project:	CarMax No. 7250, PO 096-16252
Date Extracted:	09/19/16	Lab ID:	609315-05
Date Analyzed:	09/19/16	Data File:	609315-05.071
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	1.47
Cadmium	<1
Chromium	8.14
Lead	1.01
Mercury	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Krazan & Associates
Date Received:	NA	Project:	CarMax No. 7250, PO 096-16252
Date Extracted:	09/19/16	Lab ID:	I6-617 mb
Date Analyzed:	09/19/16	Data File:	I6-617 mb.029
Matrix:	Soil	Instrument:	ICPMS2
Units:	mg/kg (ppm) Dry Weight	Operator:	SP

Analyte:	Concentration mg/kg (ppm)
Arsenic	<1
Cadmium	<1
Chromium	<5
Lead	<1
Mercury	<1

Date of Report: 09/22/16
Date Received: 09/19/16
Project: CarMax No. 7250, PO 096-16252, F&BI 609315

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: 609301-01 (Duplicate)

Analyte	Reporting Units	Sample Result (Wet Wt)	Duplicate Result (Wet Wt)	RPD (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

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	mg/kg (ppm)	0.5	94	69-120
Toluene	mg/kg (ppm)	0.5	92	70-117
Ethylbenzene	mg/kg (ppm)	0.5	92	65-123
Xylenes	mg/kg (ppm)	1.5	91	66-120
Gasoline	mg/kg (ppm)	20	100	71-131

Date of Report: 09/22/16
Date Received: 09/19/16
Project: CarMax No. 7250, PO 096-16252, F&BI 609315

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 609311-03 (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	118	112	63-146	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	5,000	121	79-144

Date of Report: 09/22/16
Date Received: 09/19/16
Project: CarMax No. 7250, PO 096-16252, F&BI 609315

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

Laboratory Code: 609260-01 x2 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	mg/kg (ppm)	10	6.18	75	84	70-130	11
Cadmium	mg/kg (ppm)	10	<2	95	98	70-130	3
Chromium	mg/kg (ppm)	50	25.9	91	96	70-130	5
Lead	mg/kg (ppm)	50	7.65	90	91	70-130	1
Mercury	mg/kg (ppm	10	<2	95	94	70-130	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	mg/kg (ppm)	10	96	85-115
Cadmium	mg/kg (ppm)	10	96	85-115
Chromium	mg/kg (ppm)	50	106	85-115
Lead	mg/kg (ppm)	50	100	85-115
Mercury	mg/kg (ppm)	10	99	85-115

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.

609315

SAMPLE CHAIN OF CUSTODY

ME 09-19-16 VSI / BTI

Report To Steven Padilla

Company Krazan

Address

City, State, ZIP

Phone Email steven.padilla@krazan.com

SAMPLERS (signature)

PROJECT NAME: Carmax #7250

PO #: 096-16252

REMARKS

INVOICE TO

Page # of

TURNAROUND TIME
- ☐ Standard Turnaround
- ☑ RUSH 24 hr.

Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Archive Samples
- ☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	MTCA-5 metals				Notes
N-1	01A-C	9-19-16	9:30am	Soil	3		X	X	X				X				
S-1	02	9-19-16	9:30am		3		X	X	X				X				
E-1	03	9-19-16	9:35am		3		X	X	X				X				
W-1	04	9-19-16	9:35am		3		X	X	X				X				
B-1	05	9-19-16	9:40am		3		X	X	X				X				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Andrew Joyce	Krazan	9-19-16	10:50am
Received by:	Phan Phan	FBT	9-19-16	10:50
Relinquished by:				
Received by:				

Samples received at 18 °C

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282